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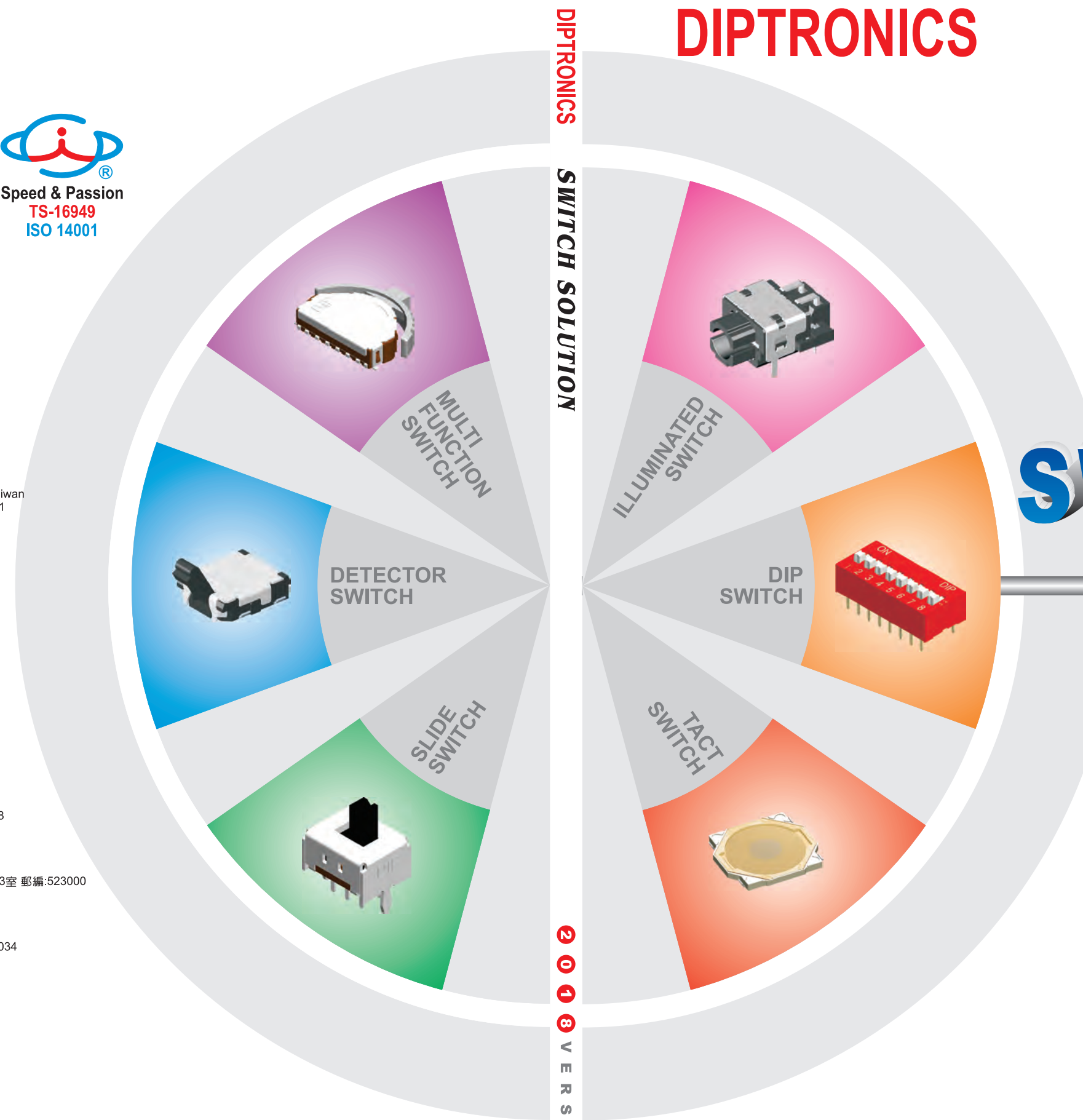
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DIPTRONICS



SWITCH SOLUTION

3000 / 2017.10

DIPTRONICS

SWITCH SOLUTION

2018 VERSION

2018 VERSION

DIPTRONICS MANUFACTURING INC.

A Worldwide Leading Switch Manufacturer



塑造學習、挑戰和分享的環境，不斷成長，
成為全球最佳電子零組件廠之一

To build a learning, challenging, and sharing environment to be
one of the best component manufacturers in the world.



圓達實業股份有限公司於1985年在台灣創立，專業研發製造各類程式開關、觸動開關、旋轉開關、微動開關、滑動開關、複合功能開關及LED開關等多項產品，並取得TS 16949 及 ISO-14001認證，產品行銷海內外超過 50 餘國。

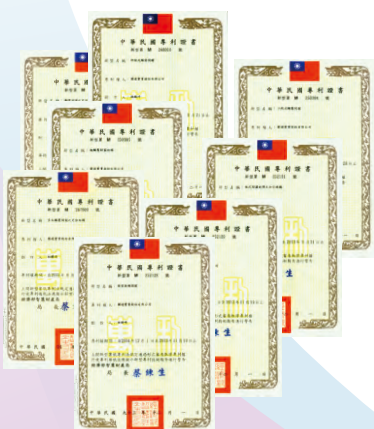
33年來，經由不斷地垂直整合，圓達逐步發展出強而有力的核心競爭優勢。從原物料購入到完成品供應給客戶，所有生產製程（包含產品研發、電鍍、LED封裝、模具及設備加工、金屬沖壓、塑膠射出、自動化設備製作組裝等）都在廠內完成。

圓達的產品可廣泛使用在IOT相關產業：（雲端裝置、智能家居、汽車業、家電業、健康醫療產品業、工控安全系統及通訊業等）。今日，不僅 Siemens、ABB、Bosch、LG、Samsung、Honeywell、HP、TOSHIBA 等各產業大廠，全球近乎60%的NB產業，都使用圓達生產的開關。

秉持著「卓越與學習、創新與挑戰、團隊與熱忱」的經營理念，圓達將持續專注本業，研發新技術，並積極投入帶LED結合開關、智慧型手機開關的開發，及提供更迅速、更多樣的開關產品來滿足客戶需求。



專利證書(中國)
Patent Certificate(China)



專利證書(台灣)
Patent Certificate(Taiwan)

Diptronics Manufacturing Inc., founded in 1985, is a TS16949 and ISO14001 certified manufacturer specializing in DIP, Tact, Rotary, Slide, Detector, Multi-functional, Micro and Illuminated switch manufacturing. Five major production sites were established in China and one in Vietnam since 1993—Zhuhai, Jiangsu, Jiangxi, Hunan, Zhongshan, and Hanoi. With complete production lines, from raw materials to finished products including press, injection, plating, mold processing, LED bonding, and automatic machine assembling are integrated in house. Diptronics can therefore offer customers timely delivery with superior quality. Our switches are exported to more than 50 countries worldwide.

Diptronics switches can be widely used in IOT applications, such as cloud device, smart home, automotive, white goods, health care products, industry, security telecommunication..., etc. Today, Diptronics switches account for about 60% of global notebook market switch demand. In line with market expectation, Diptronics is one of a few companies in the industry that has in-house assembly line for both LED bonding and LED switches.

Diptronics continues to focus on the switch business and commits to develop new technologies for smart phone, automotive and Illuminated switches. Our goal is to release a variety of switch products for our customers to fulfill the fast changing market demand.

SPEED & PASSION

MANAGING CONCEPT

DISTINCTION INNOVATION PASSION



我們的競爭優勢:

◎ 產品線

- 「指撥開關」產量全球第一。
- 「輕觸開關」產量全球第三。
- 「滑動開關、偵測開關、複合式開關」產量為全球前五大。

◎ 國際認證

取得TS-16949、ISO14001，所有產品皆符合無鉛、無鹵規範要求。

◎ 核心競爭力

- ※ 擁有垂直整合之核心技術力（產品研發、電鍍、模具及設備加工、金屬沖壓、塑膠射出、自動化設備製作組裝等），可因應客戶客製化需求，少量多樣化，快速交貨。
- ※ 專業經營團隊，長期穩定持續成長，迎接各種挑戰。

◎ 全球唯一

自製生產LED燈及開關，並將兩者結合成爲生產LED開關的專業製造廠。

Diptronics Strengths

◎ Product Capacity:

- Dip switches—Top 1 sales volume worldwide
- Tact switches—Top 3 sales volume worldwide
- Slide/Detector/Multi-functional switches—top 5 sales volume worldwide

◎ Quality Assurance:

TS16949 & ISO14001 certified and all of our products are RoHS & Halogen free compliant.

◎ Integration of core competence:

- ※ Expertise in complete in-house production with vertical integration. We uphold the spirit of “speed” and “passion” by serving fast delivery with product variety.
- ※ Professional R&D team for constant growth and different challenges.

◎ LED Integration:

Diptronics is one of a few companies that has LED and switch integration with in-house assembly line.

● 3C / IT Industry

- Cloud Devices
- Automobile Industry
- White Goods
- Medical Devices
- Automatic Home Appliances

產品應用 Application



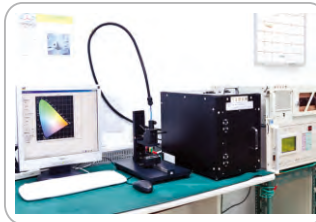
Dropping Tester



Plating Facility



LED Assembly Center



LED-38T Optic-Electrical Tester
LED Angle Tester



LED Array Spectrometer



SEM (Scanning Electron Microscopy)
EDS (Energy dispersive spectroscopy)



Press M/C



Optical Projection Grinding Machines



Automated Production Equipment



LED FT-IR



Plastic Injection Machines



CNC Milling Machines

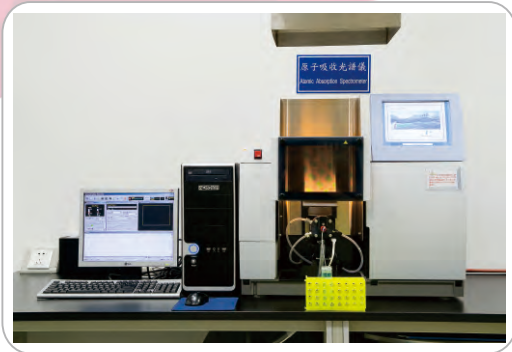


Wire-cut Electrical Discharge Machines



Precision Electric Discharge Machines

RoHS & HALOGEN FREE SUPPORT



AAS Testing Equipment



Hand-held Elemental Analyzer

所有圖達產品皆符合RoHS規範

- ◎ 為確保產品符合RoHS及特殊客戶要求，公司引進AAS驗證設備，掌控進料及製程之品質。
- ◎ 隨時收集國際法規之要求，即時修訂公司內部之文件進行管控。
- ◎ 「綠色採購」在圖達採購流程中，零件承認時必定請廠商提供 RoHS 檢測報告，經品保單位審核通過後始可使用；同時要求供應商每年提供RoHS更新驗證報告及定期稽核供應商RoHS管制。
- ◎ 為因應新一波的綠色電子浪潮「無鹵素（Halogen-free）」2009年1月份起，陸續導入無鹵素材料。

Diptronics RoHS Implement

- ◎ Is equipped with AAS validating devices for RoHS implementation.
- ◎ Regularly updates internal documentation with worldwide RoHS regulation.
- ◎ Produces green products with only RoHS qualified suppliers and consistently conducts factory audit for RoHS control.
- ◎ Uses Halogen Free raw material since January, 2009 to promote a green Earth.



LEAD-FREE SOLDERING

ITEM	LEAD-FREE SOLDERING CONDITION
Hand Soldering	350°C±10°C /5sec max.
Wave Soldering	Pre-Heat 100°C/60sec 260°C±5°C /5sec
Reflow Soldering	



RoHS COMPLIANT

- ※ The limit value that we declare.
 - Pb<100ppm
 - Cd<75ppm
 - Hg<2ppm
 - Cr6<2ppm
 - PBB<Not Detected
 - PBDE<Not Detected
- ※ Start from January 2005



HALOGEN FREE

- Br<900ppm
- Cl<900ppm
- Br+Cl<1500ppm

- ※ Start from 2009

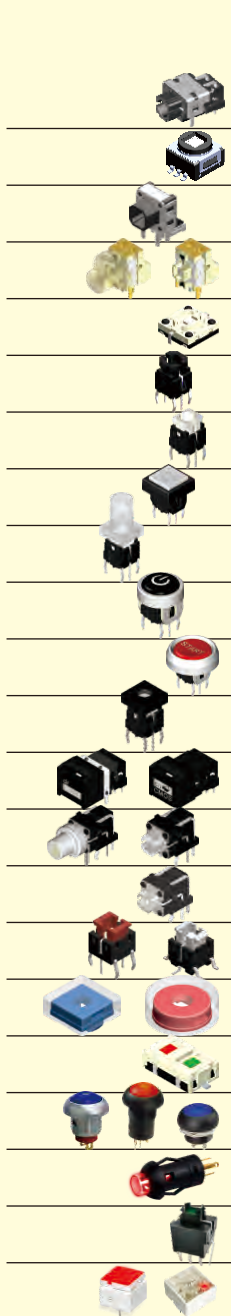
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APPLICATION

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A

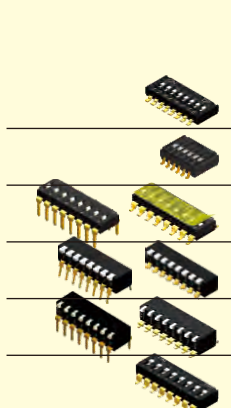
ILLUMINATED SWITCH



Series	Contact Type	Features	Dimensions(mm)	Page
MLF NEW	Silver	Right Angle (SMT)	8.8x4.8	A-01
ML9 NEW	Silver	SMT	8.0x8.4	A-02
MLC	Silver	Right Angle	6.8x7.7	A-03
ML3	Gold / Silver	Right Angle	4.5x6.2	A-04
ML4	Silver	SMT	4.9x4.9	A-06
ML5	Silver	Through Hole	6x6	A-07
ML6-H0	Silver	Through Hole	6x6	A-08
ML6-H1	Silver	Through Hole	6x6 / Cap:10x10	A-09
ML6-H2	Silver	Through Hole	6x6 / Cap:Ø5.5	A-10
ML6-H4	Silver	Through Hole	6x6 / Cap:Ø10	A-11
ML6-H5	Silver	Through Hole	6x6 / Cap:Ø14	A-12
ML6-H6	Silver	Through Hole	6x6 / Cap:7.5x7.5	A-13
ML8	Silver	Right Angle	8.7x9.6	A-14
TL(L)A(G)-7	Silver	Right Angle	7x7.4	A-16
TLR-7	Silver	Right Angle	6.5x7.4	A-18
TL(L)(M)-6	Silver	Through Hole & SMT	6.1x6.1	A-19
KTL		Cap Accessories for TLL-6	Square:□10.2 / Round:Ø10.2	A-21
TML-3	Silver	SMT	6.8x4.1	A-22
ZPA		Wiring	Ø12	A-23
ZPBL		Wiring	Ø5.4	A-28
ZPSD		Through Hole	8.5x7.5	A-29
ZKS		Through Hole	15x15	A-30

B

DIP SWITCH



Series	Contact Type	Features	Dimensions(mm)	Page
DHN(F)	Gold	Half Pitch (H:1.6mm)	2,4,6,8,10	B-01
DHA	Gold	Half Pitch (H:2.2mm)	2,4,6,8,10,12	B-03
E(M)(I)(S)(J)	Gold	End Stackable	1-10 , 12	B-04
NP(I)(M)	Gold	Piano	2,4,6,8,10	B-07
EP(I)(M)	Gold	End Stackable Piano	2,4,6,8,10	B-09
D(M)(J)(L)	Gold	SMT	1-10 , 12	B-11

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B

DIP SWITCH

Series	Contact Type	Features	Dimensions(mm)	Page
NDI	Gold	Through Hole	1-10 , 12	B-13
NDS	Gold	Through Hole	1-10 , 12	B-14
NDP	Gold	Piano	2-10, 12	B-15
NDA	Gold	Right Angle	2-10, 12	B-16
SIP	Gold	Single in Line	2,4,6,8,10	B-17
TII, TIM	Gold	Tri-State Low Profile	4,5,8,9,10	B-19
TDS	Gold	Tri-State	8,9,10	B-21

C

ROTARY CODED SWITCH

Series	Contact Type	Features	Dimensions(mm)	Page
RB	Gold	Rotary 10x10 Sealed	8, 10, 16	C-01
KRB		Cap Accessories for RB	Short/Long Spindle & Segment Wheel	C-03
SV3A-4	Gold	Rotary 10x10	4	C-04
R(H)(V)(M)(S)	Gold	Rotary 10x10	10, 16	C-05
RJ	Gold	Rotary 7x7	10, 16	C-08
R7	Gold	Rotary 7x7	10, 16	C-10

D




TACT SWITCH

Series	Contact Type	Features	Dimensions(mm)	Page
TL()-A1	Silver	Sealed	10x10	D-01
TL()-A2	Silver	Sealed	10x10	D-03
TL()-B1	Silver	Sealed	10x10	D-05
TL()-B344	Silver	Sealed	10x10	D-07
DTSA-2	Silver	Right Angle	13.1x14.7	D-09
DTSM-2	Silver	SMT	12.0x12.0	D-11
DTS(G)(P)-2	Silver	Through Hole & Ground Terminal	12.0x12.0	D-13
DTS(G)-6	Gold / Silver	Through Hole & Ground Terminal	6.2x6.2	D-16
DTS(M)(J)-6	Gold / Silver	SMT & J SMT	6.2x6.2	D-18
DTSA-6	Gold / Silver	Right Angle	7.4x7.1	D-21
T7A	Silver	Double Layers Right Angle	7.3x9.66	D-24

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D














TACT SWITCH

	Series	Contact Type	Features	Dimensions(mm)	Page
	T7B NEW	Silver	SMT	7.5x7.0	D-25
	DTST-6	Silver	Radial Taping	6.2x6.2	D-26
	KTSC-(6)(2)		Cap for 6x6/12x12 Tact Switch	Round / Square	D-27
	DTS()W-2	Silver	Sealed	12.0x12.0	D-28
	T6W	Gold / Silver	Long Travel SMT Sealed	6.2x6.2	D-31
	DTSHW-6	Gold / Silver	Sealed	6.2x6.3	D-33
	DTS(G)MW-6	Gold / Silver	Sealed	6.2x6.3	D-35
	DTSJW-6	Gold / Silver	Sealed	6.2x6.3	D-37
	DTSJW()-6	Gold / Silver	Sealed	6.2x6.3	D-39
	DTSYHL-6	Silver	Thinner Type Pitch 4.0mm	6.2x6.2	D-40
	DTS(G)ZML-6	Silver	Thinner Type Pitch 4.5mm	6.2x6.0	D-41
	DTS(G)(L)(F)-6	Silver	Thinner Type Pitch 4.0mm	6.2x6.4	D-43
	TA3	Gold / Silver	Right Angle (SMT)	6.3x6.18 / 7.11	D-45
	TA-6	Silver	Right Angle (SMT)	6.1x6.6	D-47
	T1A	Silver	H:0.60mm	2.8x1.9	D-49
	T1B NEW	Silver	H:0.55mm	2.6x1.6	D-50
	T1D NEW	Silver	H:0.55mm	(2.2x1.3)	D-51
	T3AL	Silver	H:0.45mm / 0.65mm	2.6x3.0	D-52
	T3BL	Silver	H:0.35mm	3.7x3.7	D-53
	T3C	Silver	H:0.60mm	3.0x2.0	D-54
	T4BJ	Silver	H:0.55mm	4.8x4.8	D-55
	TJ-4	Silver	H:0.55 mm	4.4x4.4	D-56
	T()E-5	Gold / Silver	H:0.8 mm / H:1.5mm	5.2x5.2	D-57
	T6H	Gold / Silver	Through Hole, Right Angle, SMT	7.4x7.4 / 8.0x8.0	D-59
	1188	Silver	Side Push	3.5x7.0	D-61
	TA(C)(2)-3	Silver	Side Push	3.95x7.3 / 4.65x7.0	D-63
	TAF	Silver	Side Push	3.3x4.5	D-66
	MTA2	Silver	Side Push	1.8x4.5	D-67
	TCD	Silver	PCB Sealed Type Side Push	1.7x4.5	D-68

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D

TACT SWITCH

	Series	Contact Type	Features	Dimensions(mm)	Page
	TCE	Silver	Side Push	1.65x3.8	D-69
	T1C NEW	Silver	Side Push Mid-mount	2.8x1.95	D-70
	TCF	Silver	Side Push Mid-mount	2.9x4.5	D-71
	TCH	Silver	Side Push Mid-mount	4.5x2.2	D-72
	T6L	Silver	Long Travel	5.9x6.0	D-73
	LTL-6	Silver	Long Travel	6.2x6.2	D-74
	DTS(M)-3	Silver	Through Hole & SMT	3.5x6.0	D-75
	TAE	Gold / Silver	Thinner (H:2.5mm)	3.8x6.0	D-77
	T(M)(J)G-325	Silver	Thinner (H:2.5mm)	3.7x6.0	D-78
	IPT	Gold / Silver	Side / Vertical Push	2.8x3.8	D-79
	MPT	Silver	Side / Vertical Push	2.9x3.9	D-80
	PT	Silver	Side / Vertical Push	3.5x4.7	D-81
	TBF	Silver	Side / Vertical Push	2.9x3.5	D-83
	TBE	Silver	Vertical Push	2.7x3.0	D-85

E



SLIDE SWITCH

	Series	Contact Type	Poles-Positions	Stroke	Page
	SL6	Silver	2-2	2.0mm	E-01
	LSS	Silver	1-2, 2-2	2.0mm	E-02
	SD12	Gold	1-3	1.5mm	E-05
	SS3	Gold	1-2	2.0mm	E-06
	SS4	Gold	1-3	2.0mm	E-08
	MSS(3)(4)	Gold	1-2, 1-3	1.5mm	E-10
	MSS(6)(14)	Gold	2-2, 1-4	1.5mm	E-11
	SC12P	Silver	1-2	2.5mm	E-12
	SSS	Gold / Silver	1-2	2.7mm	E-13
	NSS	Gold / Silver	1-3	2.0 / 4.0mm	E-14
	S2S	Gold / Silver	1-2, 1-3	1.5mm	E-16

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F

DETECTOR SWITCH

	Series	Contact Type	Features	Operation Direction	Page
	KTE NEW	Gold	5.4x13 mm	Vertical	F-01
	ELH	Silver	3.3x3.5 mm	Horizontal	F-02
	ELU NEW	Silver	3.6x4.2 mm	Vertical	F-03
	DTE	Silver	4.15x5 mm	Horizontal	F-04
	FTE	Gold / Silver	4.0x5.55 mm	Horizontal	F-05
	HTE	Gold / Silver	5.6x5.7 mm	Horizontal	F-07
	TE-MR	Silver	4.7x6 mm	Horizontal	F-08
	TE	Silver	3.9x6.5 mm (H: 8.4 / 10.7 mm)	Vertical	F-10
	JTE	Silver	3.5x4.7 mm	Vertical	F-12
	ATE	Silver	4.5x4.7 mm (H:3.8 / 5.3 mm)	Vertical / Horizontal	F-13
	BTE	Silver	2.8x3.5 mm	Vertical	F-14
	CTE	Silver	2.98x3.5 mm	Vertical	F-15
	TU	Silver	3.6x4.2 mm	Vertical	F-16
	TU-D	Silver	3.6x4.2 mm	Vertical	F-17

G

MULTI FUNCTION SWITCH

	Series	Contact Type	Features	Dimensions(mm)	Page
	M2D	Silver	Double Action / H:0.6mm	4.1x4.3	G-01
	M2P	Silver	Double Action & Lever	7.0x7.0	G-02
	PL3	Silver	Push & Lever	11.8x11.8	G-03
	PL	Silver	Push & Lever	11.3x9.3	G-05
	MT(4)(5)	Silver	4-Direction (& Center Push)	7.7x7.4	G-09
	SRM	Silver	8-Direction	11x11.5	G-11
	TT5	Silver	5-Direction	9.3x9.3	G-12

APPLICATION

Smart Wearable



Power/Camera Button/Volume Button

Tact Switch



Double Action Type Tact Switch:



Function Button

Tact Switch



Mute Button

Slide Switch:



Cloud Devices



Function Setup Key

Dip Switch:



Power Key

Illuminated Switch:



Tact Switch:



Rotary Switch:



Detector Switch:



APPLICATION

Automobile Industry



Blue Tooth Headset

Tact Switch:



Illuminated Switch:



GPS

Slide Switch:



Push Lever Switch:



Tact Switch:



Audio Equipment

Tact Switch:



Illuminated Switch:



4-directional Switch

Steering Wheel

Tact Switch:



IT Industry



Remote Controller

Tact Switch:



Dip Switch:



Slide Switch:



Push Lever Switch:



Walkie-talkie

Tact Switch:

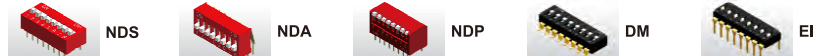


LCD Panel

Tact Switch:

Mother Board/Modem/Nettop

Dip Switch:



Illuminated Switch:



APPLICATION

3C Industry



Double Action Type Tact Switch:



4-directional Switch:



Tact Switch:



Tact Switch:



Detector Switch:



Illuminated Switch:



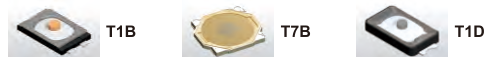
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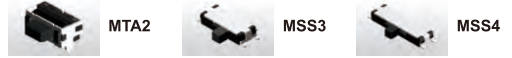
Slide Switch



Detector Switch:



Slide Switch



Slide Switch:



White Goods



I-Robot

Tact Switch:



Coffee Machine

Illuminated Switch:



Tact Switch:



Upright Oven

Tact Switch:



Washing Machine

Washable Tact Switch:



Illuminated Switch:



Vacuum

Tact Switch:



APPLICATION

Medical Devices



Fever Thermometer

Tact Switch:

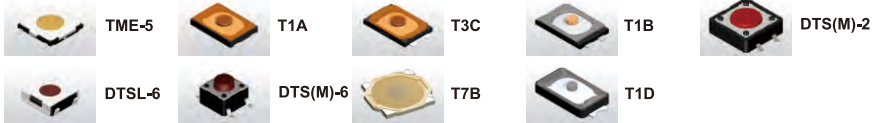


Illuminated Switch:



Blood Pressure Gauge

Tact Switch:



Illuminated Switch:



Digital Thermometer

Tact Switch:



Dip Switch:



Electric Toothbrush

Tact Switch:



Detector Switch:



Illuminated Switch:



Automatic Home Appliances



Security System

Detector Switch:



Rotary Switch:



Automatic Curtain

Dip Switch:



Tact Switch:



Slide Switch:



Automatic Garage Door

Dip Switch:



Tact Switch:



APPLICATION

Security

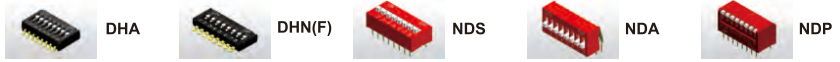


Smoker Detector

Tact Switch:



Dip Switch:



Rotary Switch:



GAS Alarm

Slide Switch:



Detector Switch:



Industrial Control Field



Tact Switch:



Slide Switch:



Rotary Switch:

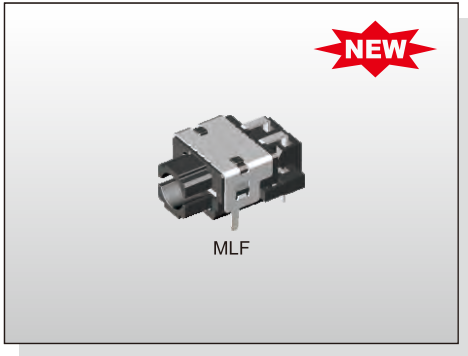


Dip Switch:



Illuminated Switch:





MLF

FEATURES

- ※Horizontal operation
- ※Various LED colors
- ※Mid-mount type

APPLICATION

- ※Server, desktop
- ※Communication apparatus
- ※IPC

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	200±70gf
Travel	1.5mm
Operating Life	100, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

MLF-3 **QR**

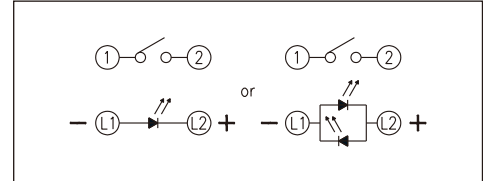
Operation Force:
200gf

Package:
Tape & Reel

Halogen Free

LED Color:
=Without LED
AW=Amber/White

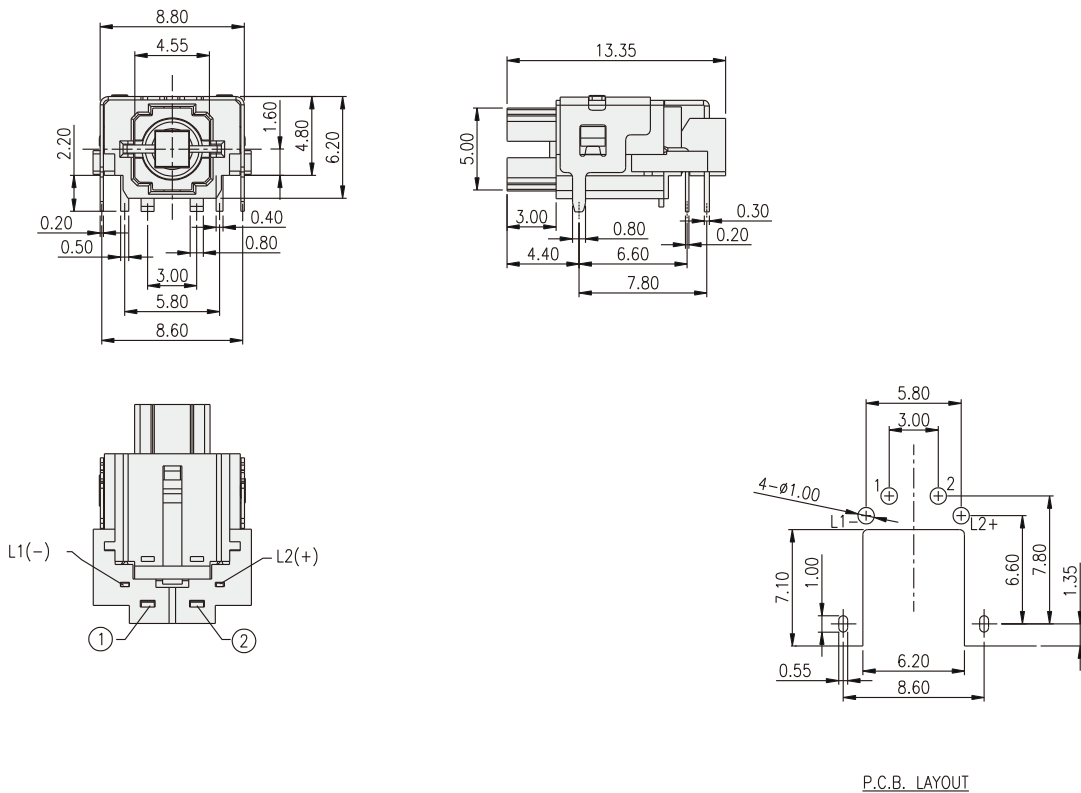
CIRCUIT



PACKAGE

<Tape & Reel>
570 pcs.

MLF



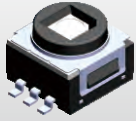
P.C.B. LAYOUT

ILLUMINATED SWITCH ML9 SERIES

**Tact Switch
Illuminated**



NEW



ML9

FEATURES

- ※ Various LED options
- ※ 300,000 operation life cycles

APPLICATION

- ※ Automotive
- ※ Network equipment
- ※ Telecommunications
- ※ Medical equipment
- ※ Industrial controls

SPECIFICATION

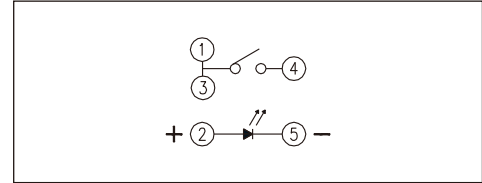
Contact Rating	50mA, 32V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	400±100gf
Travel	0.45mm
Operating Life	300,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-55°C ~ +85°C

HOW TO ORDER

ML9 - M **QR**

- S.M.T.
- =Without Post
P=With Post
- Operation Force:
4=400gf
- Package:
Tape & Reel
- Halogen Free
- LED Color:
=Without LED
B=Blue
G=Green
R=Red
W=White
O=Orange

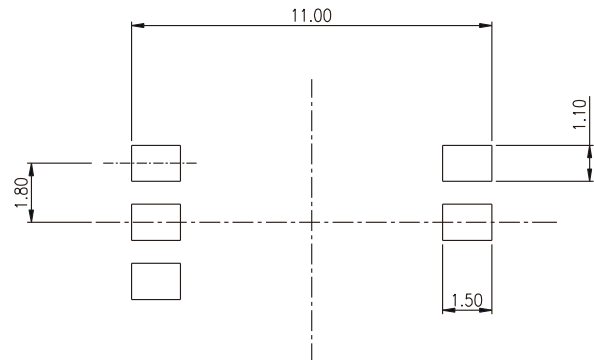
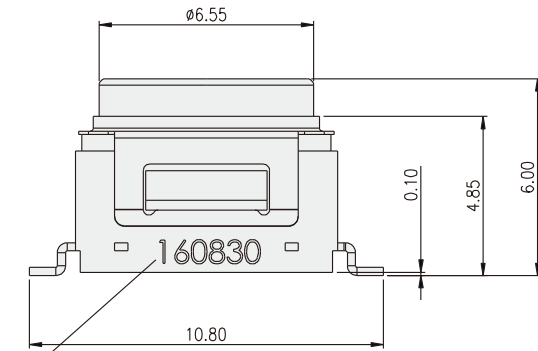
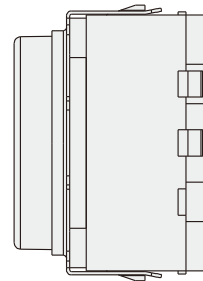
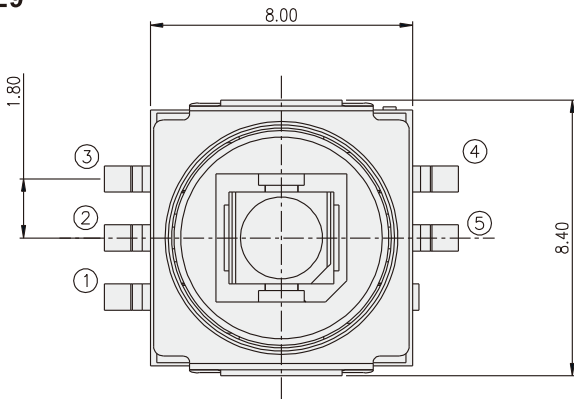
CIRCUIT



PACKAGE

<Tape & Reel>
650 pcs.

ML9



P.C.B. LAYOUT

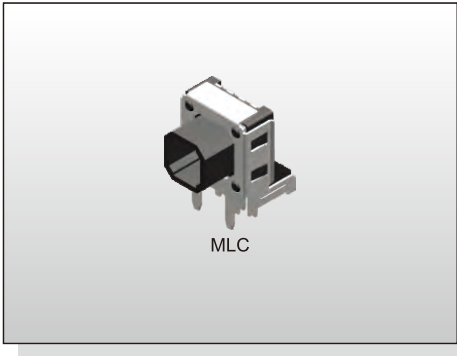
Date code: YYMMDD

ILLUMINATED SWITCH MLC SERIES

Tact Switch
Illuminated



ILLUMINATED SWITCH



MLC

FEATURES

- ※Horizontal operation
- ※Various LED colors
- ※Long operation life

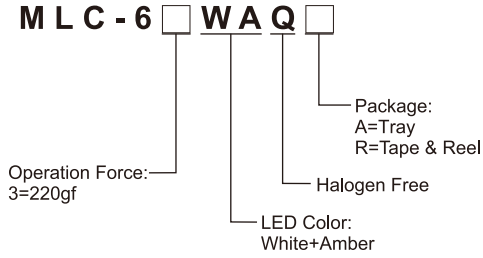
APPLICATION

- ※Automotive
- ※Server
- ※Laptop, IPC

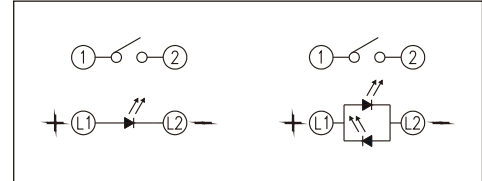
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	220±50gf
Travel	0.25mm
Operating Life	100, 000 cycles
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



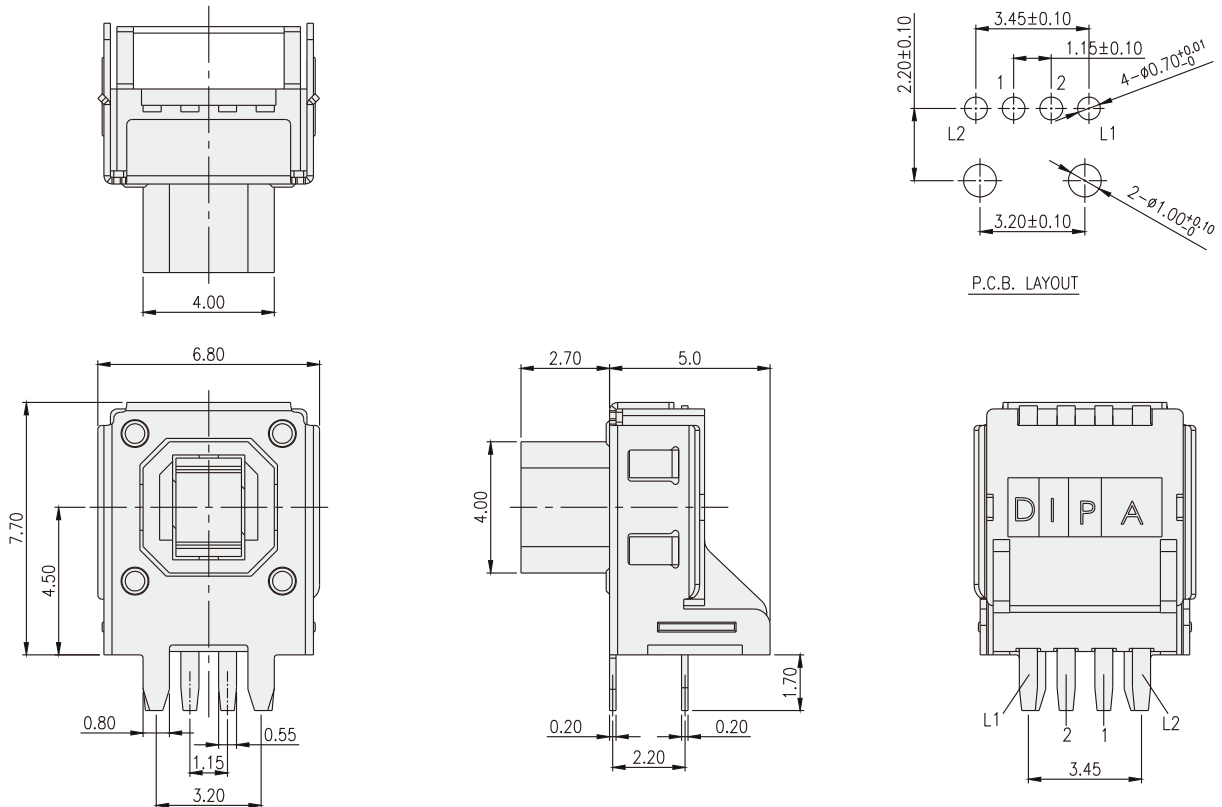
CIRCUIT

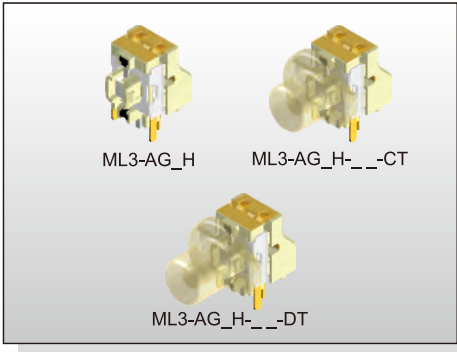


PACKAGE

<Tray>
200 pcs.
<Tape & Reel>
350 pcs.

MLC





FEATURES

- ※ Compact size, extra thin
- ※ Dual LEDs
- ※ Focused light

APPLICATION

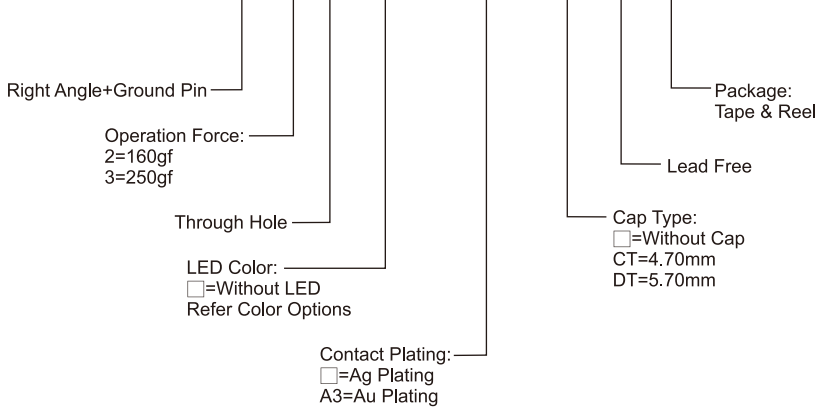
- ※ Server
- ※ Testing Instrument
- ※ Telecommunication

SPECIFICATION

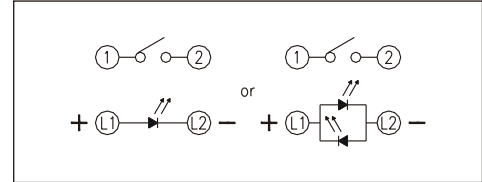
Contact Rating	50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, 250±100gf
Travel	0.2mm
Operating Life	50,000 cycles for 250gf 100,000 cycles for 160gf
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

ML3-AG H - - - - - V - R



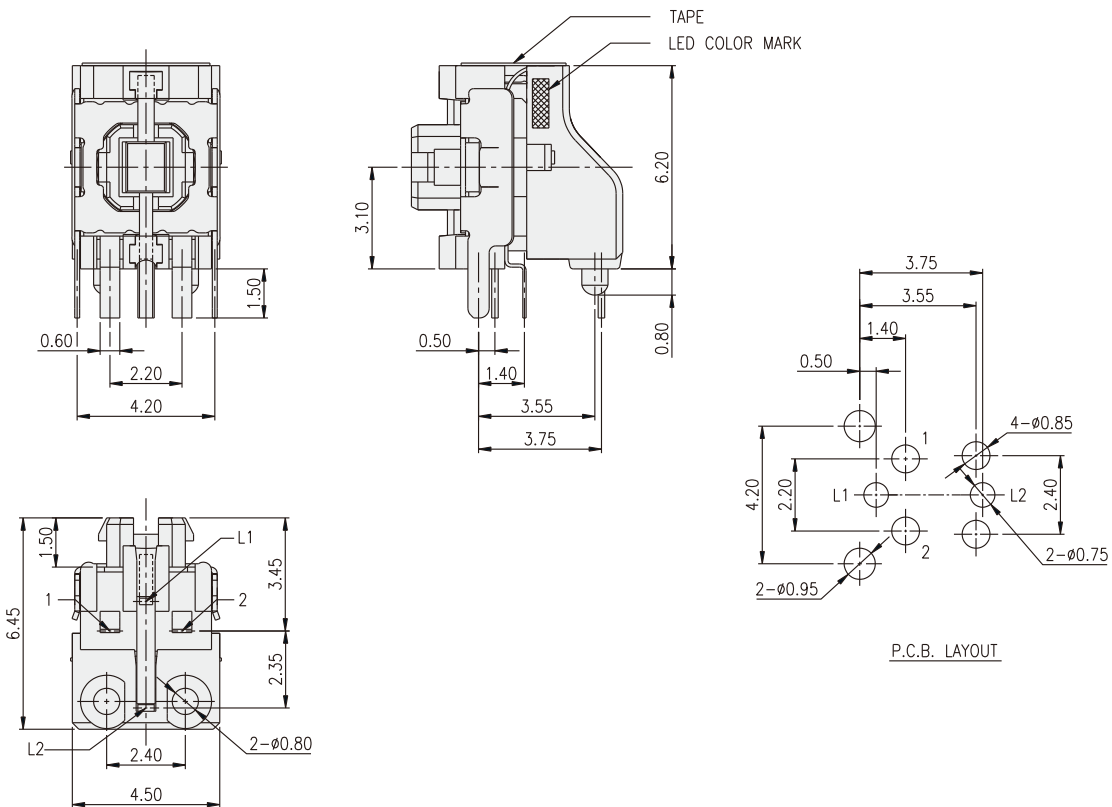
CIRCUIT



PACKAGE

Without Cap: 600 pcs/reel
With Cap: 300 pcs/reel

ML3



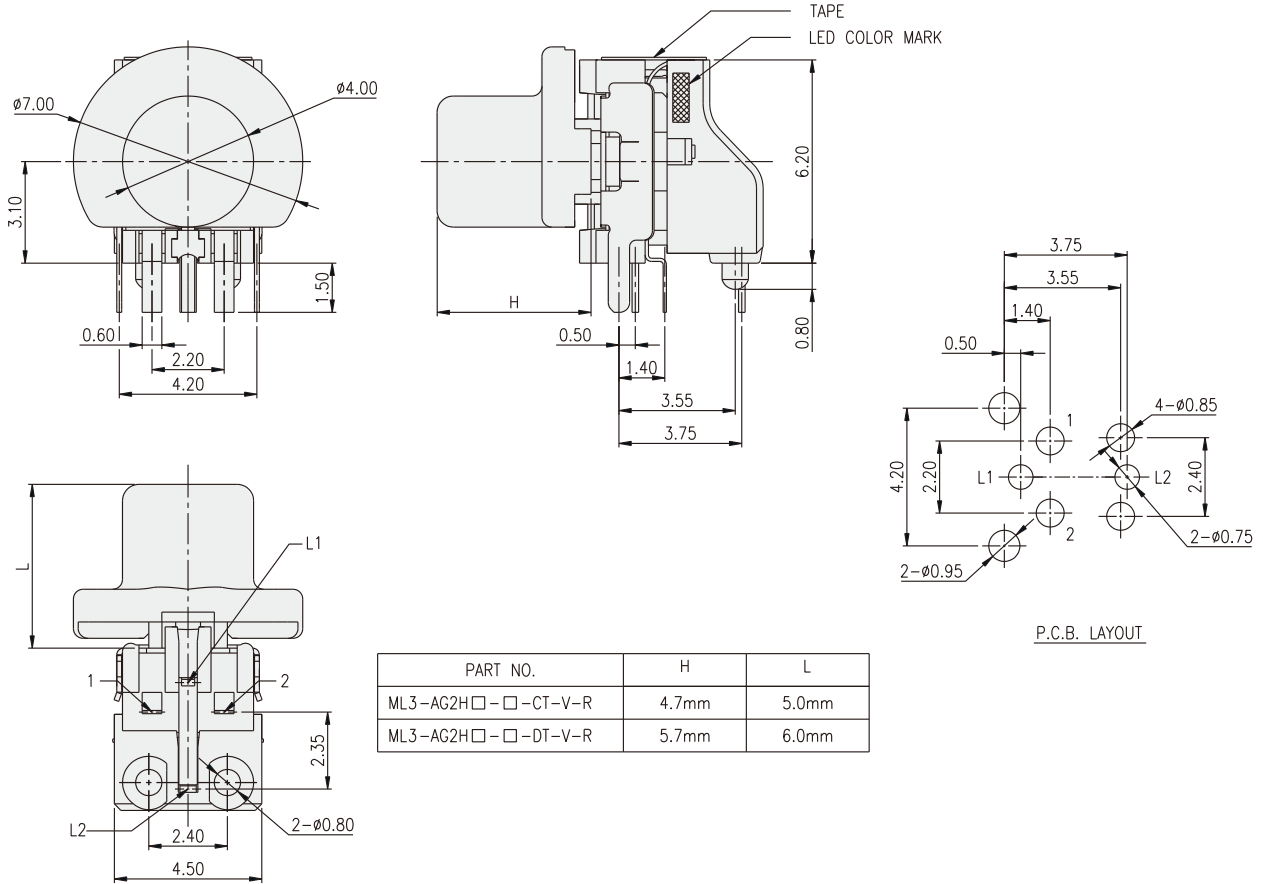
ILLUMINATED SWITCH
ML3 SERIES

Tact Switch
Illuminated



ILLUMINATED SWITCH

ML3-AG2H



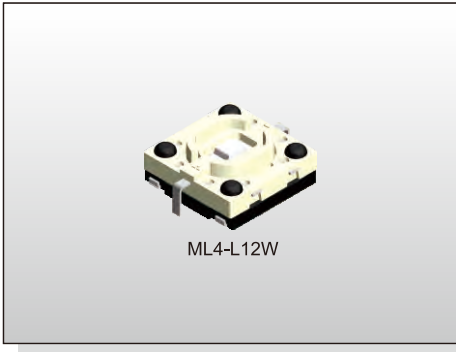
PART NO.	H	L
ML3-AG2H□-□-CT-V-R	4.7mm	5.0mm
ML3-AG2H□-□-DT-V-R	5.7mm	6.0mm

LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)		Forward Voltage V_F (V)		View Angle $2 \cdot \theta_{1/2}$ (Degree)
			Typ.	Max.	Typ.	Max.	
B	Blue	470	50	50	3.0	3.6	140°
PB	Blue	470	70	70	3.0	3.6	
PG	Pure Gree	520	160	160	3.2	3.6	
G	Yellow Green	570	30	30	2.0	2.3	
Y	Yellow	590	60	60	2.0	2.3	
A	Soft Orange	605	50	50	2.0	2.3	
R	Red	630	60	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	350	3.0	3.6	

ILLUMINATED SWITCH ML4 SERIES

Tact Switch
Illuminated



FEATURES

- ※ Compact size 4.9x4.9 with LED
- ※ Ultra-thin: a height of 2.0mm

APPLICATION

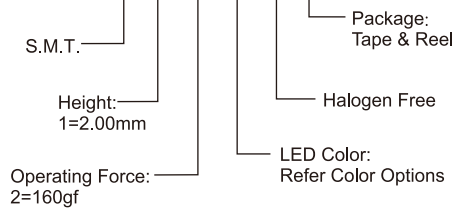
- ※ NB, Monitor
- ※ Portable device
- ※ Tablet

SPECIFICATION

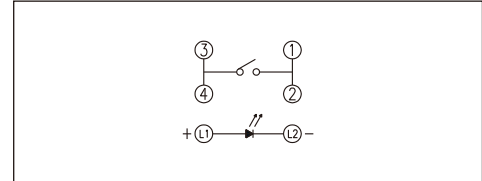
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.25mm
Operating Life	1,000, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

ML4-L □ □ QR



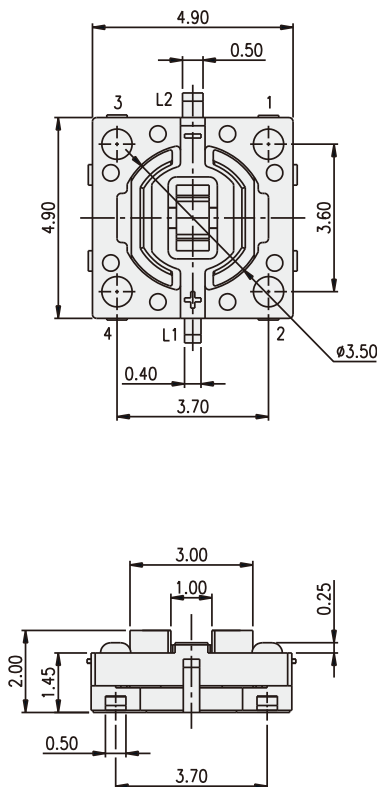
CIRCUIT



PACKAGE

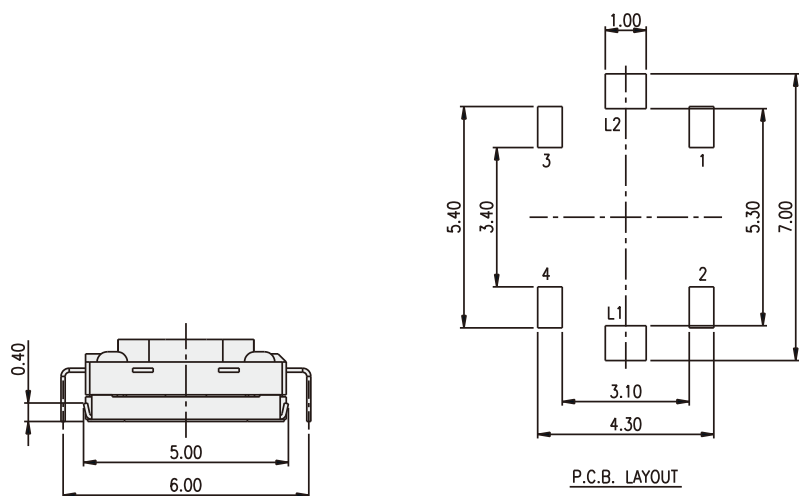
<Tape & Reel>
2500 pcs.

ML4



LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)		Forward Voltage V_f (V)		View Angle $2\cdot\theta_{1/2}$ (Degree)
			Typ.	Max.	Typ.	Max.	
B	Blue	470	100		3.0	3.6	120°
G	Green	570	30		2.05	2.4	
R	Red	605	50		1.9	2.4	
W	Cold White	X:0.30 / Y:0.30	150		3.0	3.6	

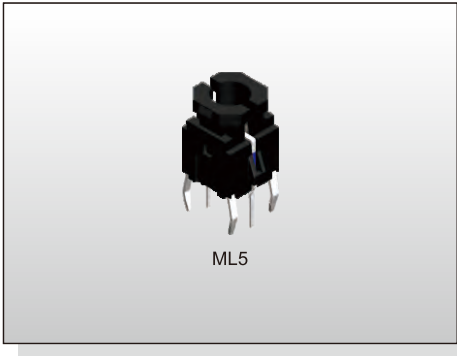


ILLUMINATED SWITCH ML5 SERIES

Tact Switch
Illuminated



ILLUMINATED SWITCH



ML5

FEATURES

- ※Silicone structure for low noise
- ※Long travel
- ※Options of differen LED color

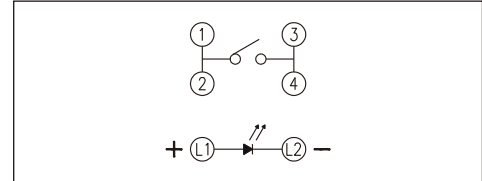
APPLICATION

- ※Audio device
- ※Office equipment
- ※Communication apparatus

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	200±70gf
Travel	1.2mm
Operating Life	50, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

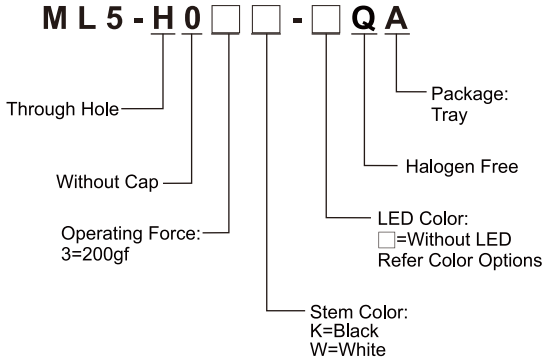
CIRCUIT



PACKAGE

<Tray>
140 pcs.

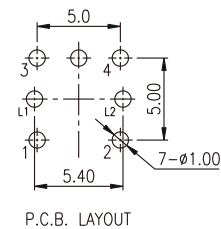
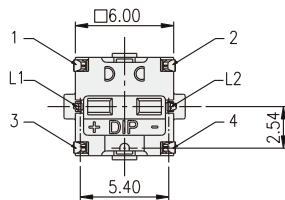
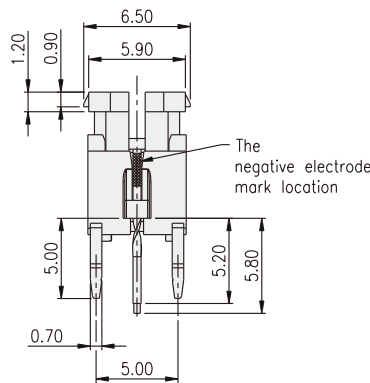
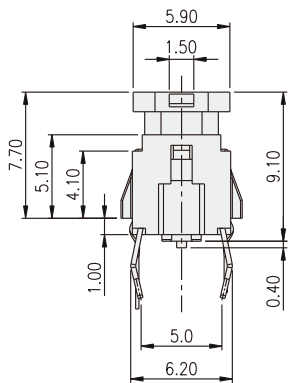
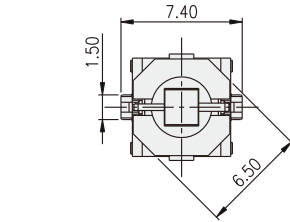
HOW TO ORDER



ML5

LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)		Forward Voltage V_F (V)		View Angle $2-\theta_{1/2}$ (Degree)
			Typ.	Max.	Typ.	Max.	
B	Blue	470	80		3.0	3.6	140°
PG	Pure Gree	520	160		3.2	3.6	
G	Yellow Green	570	30		2.0	2.3	
Y	Yellow	590	60		2.0	2.3	
A	Soft Orange	605	50		2.0	2.3	
R	Deep Red	640	25		2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350		3.0	3.6	



ILLUMINATED SWITCH ML6-H0 SERIES

Tact Switch
Illuminated



FEATURES

- ※ Customized cap options
- ※ Bi-color LED available
- ※ Long operating life

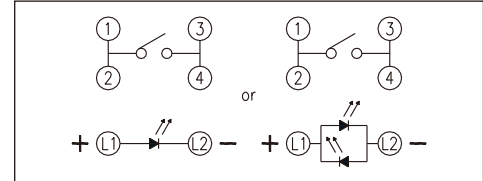
APPLICATION

- ※ Sever, modem, data storage
- ※ Audio module
- ※ Office equipment

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, 180±50gf
Travel	0.25mm
Operating Life	300, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

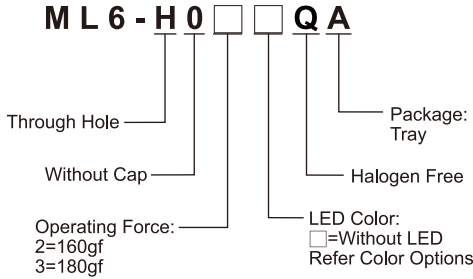
CIRCUIT



PACKAGE

<Tray>
140 pcs.

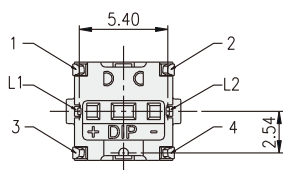
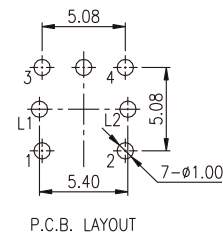
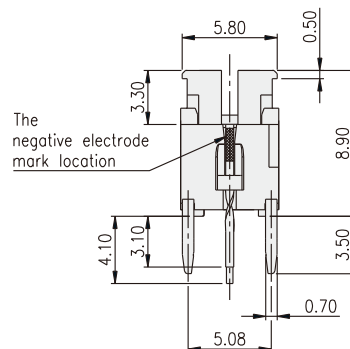
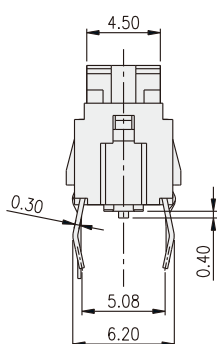
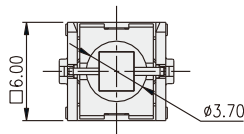
HOW TO ORDER



ML6-H0

LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_F (V)		View Angle $2-\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Gree	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	

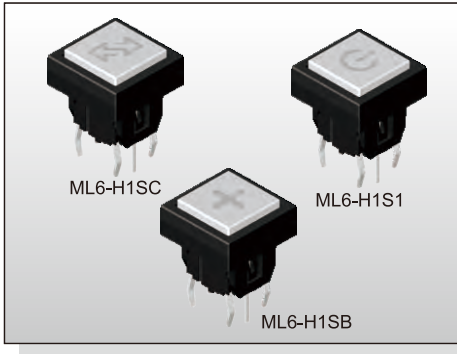


ILLUMINATED SWITCH ML6-H1 SERIES

Tact Switch
Illuminated



ILLUMINATED SWITCH



FEATURES

- ✘ Customized cap options
- ✘ Bi-color LED available
- ✘ Long operating life

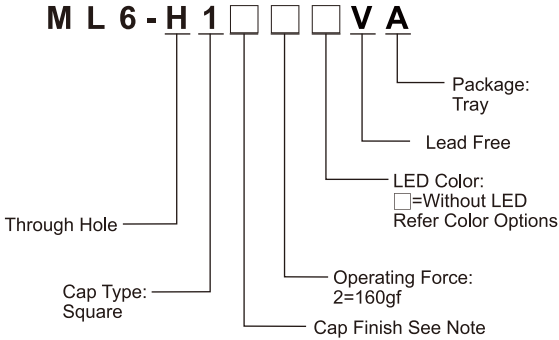
APPLICATION

- ✘ Sever, modem, data storage
- ✘ Audio module
- ✘ Office equipment

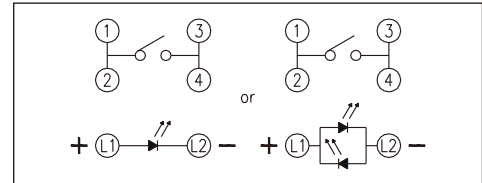
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.25mm
Operating Life	300,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



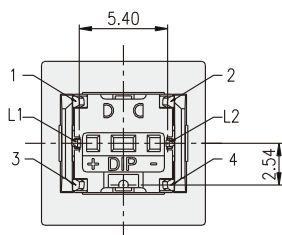
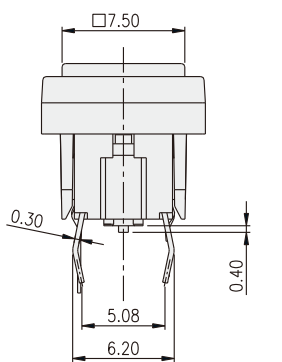
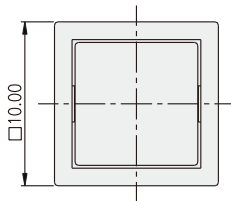
CIRCUIT



PACKAGE

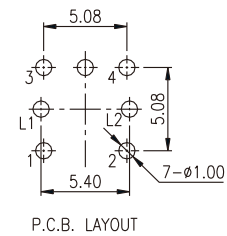
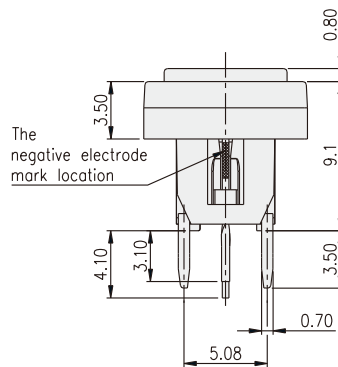
<Tray>
100 pcs.

ML6-H1



LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Green	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	

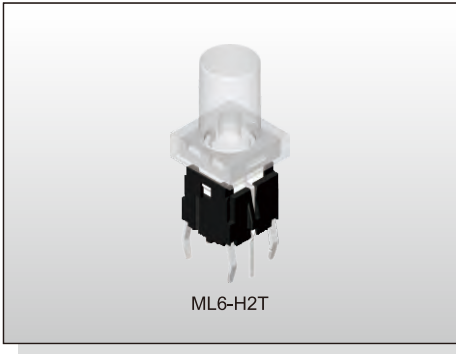


Note :

	CAP	
	Mark	Color
S1		Silver
S2	Reset	Silver
SA	-	Silver
SB	+	Silver

ILLUMINATED SWITCH ML6-H2 SERIES

Tact Switch
Illuminated



FEATURES

- ✧ Customized cap options
- ✧ Bi-color LED available
- ✧ Long operating life

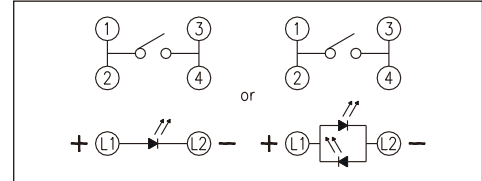
APPLICATION

- ✧ Sever, modem, data storage
- ✧ Audio module
- ✧ Office equipment

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.25mm
Operating Life	300, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

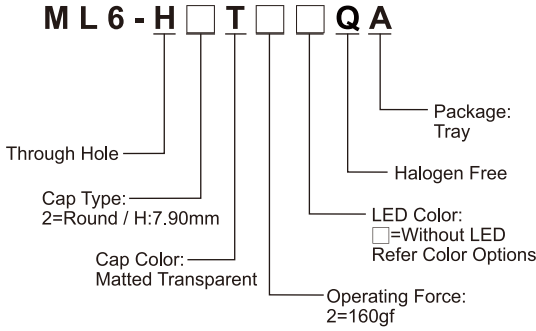
CIRCUIT



PACKAGE

<Tray>
100 pcs.

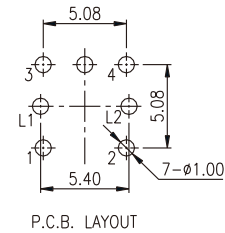
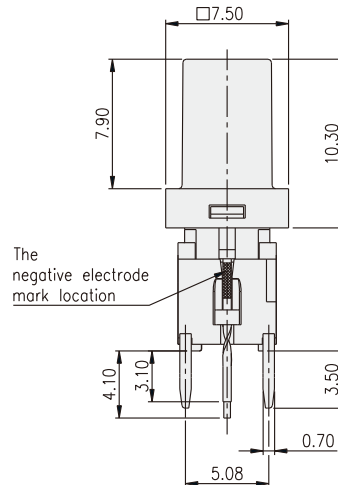
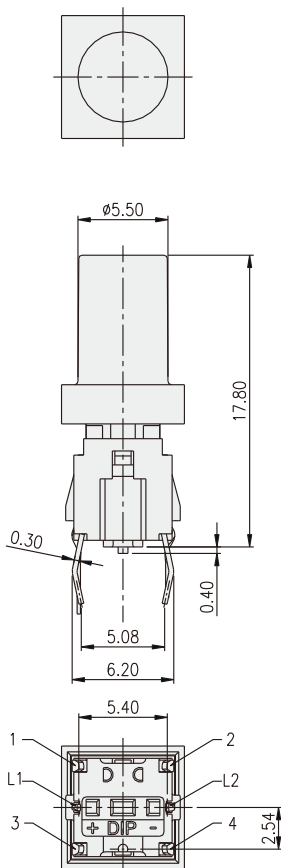
HOW TO ORDER



ML6-H2

LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2-\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Green	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	



ILLUMINATED SWITCH ML6-H4 SERIES

Tact Switch
Illuminated



ILLUMINATED SWITCH



FEATURES

- ※ Customized cap options
- ※ Bi-color LED available
- ※ Long operating life

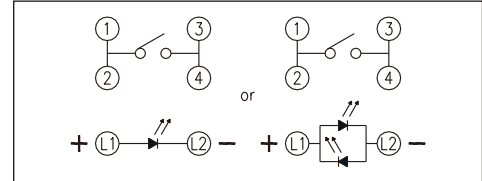
APPLICATION

- ※ Sever, modem, data storage
- ※ Audio module
- ※ Office equipment

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.25mm
Operating Life	300,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

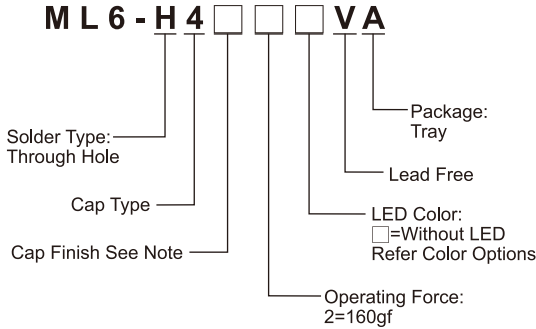
CIRCUIT



PACKAGE

<Tray>
100 pcs.

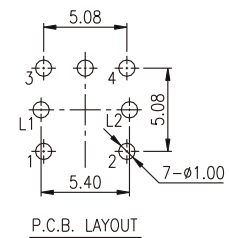
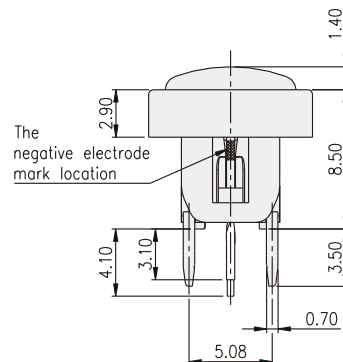
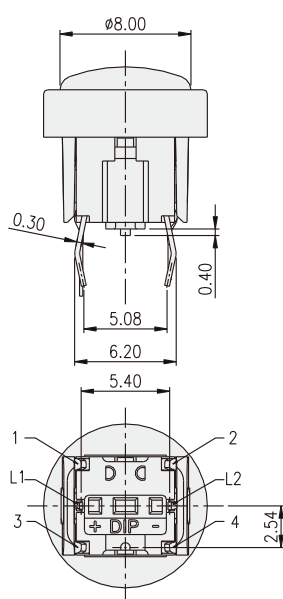
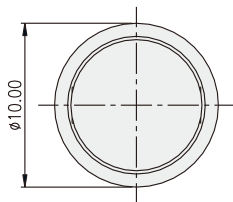
HOW TO ORDER



ML6-H4

LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2-\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Gree	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	



NOTE :

	CAP	
	MARK	COLOR
S1		SILVER
K1		BLACK
S3	RESET	SILVER
K3		BLACK
SA	-	SILVER
KA		BLACK

ILLUMINATED SWITCH ML6-H5 SERIES

Tact Switch
Illuminated



FEATURES

- ※ Customized cap options
- ※ Bi-color LED available
- ※ Long operating life

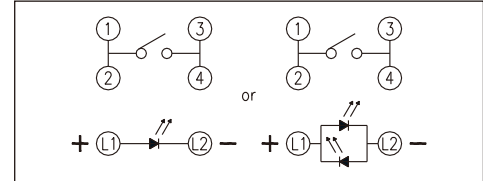
APPLICATION

- ※ Sever, modem, data storage
- ※ Audio module
- ※ Office equipment

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.25mm
Operating Life	300, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

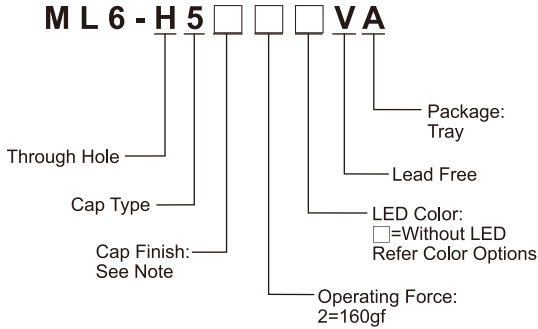
CIRCUIT



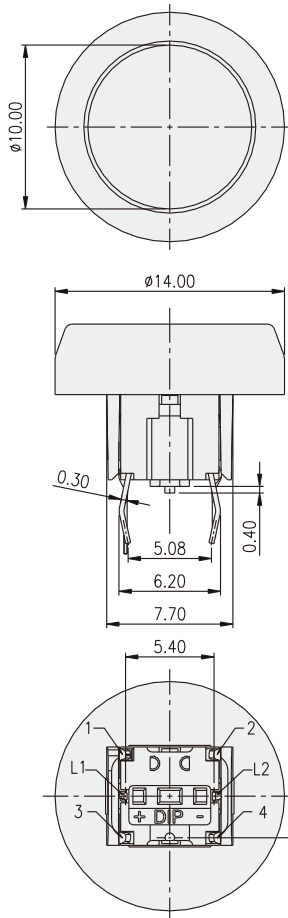
PACKAGE

<Tray>
100 pcs.

HOW TO ORDER

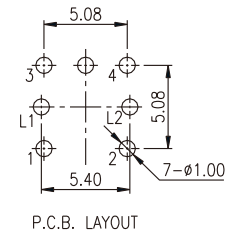
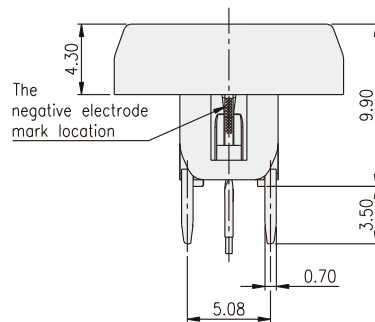


ML6-H5



LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2\cdot\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Green	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	



NOTE :

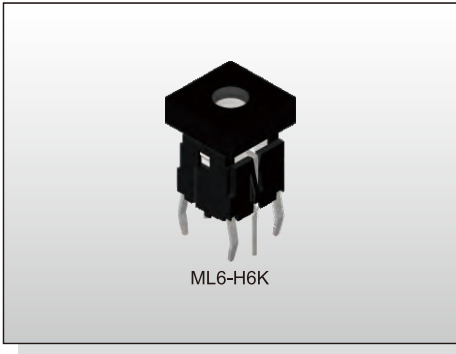
	CAP	
	MARK	COLOR
R4	START	RED

ILLUMINATED SWITCH ML6-H6 SERIES

Tact Switch
Illuminated



ILLUMINATED SWITCH



FEATURES

- ※ Customized cap options
- ※ Bi-color LED available
- ※ Long operating life

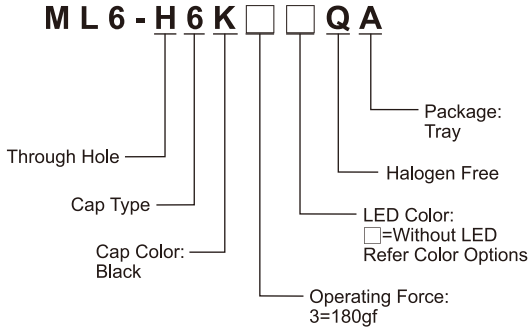
APPLICATION

- ※ Sever, modem, data storage
- ※ Audio module
- ※ Office equipment

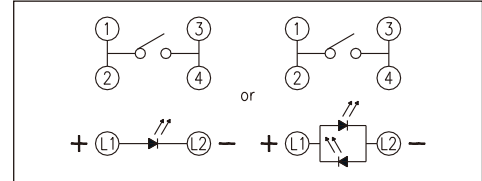
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	180±50gf
Travel	0.25mm
Operating Life	300, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT



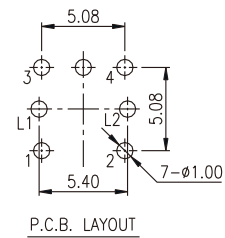
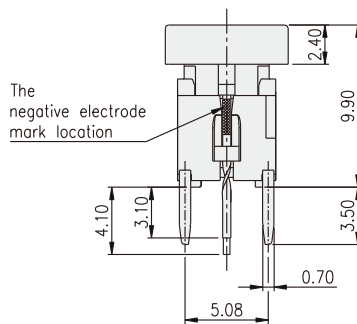
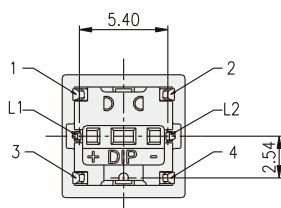
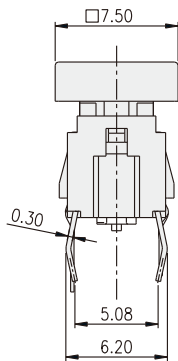
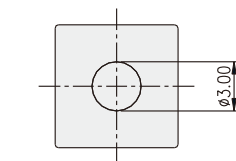
PACKAGE

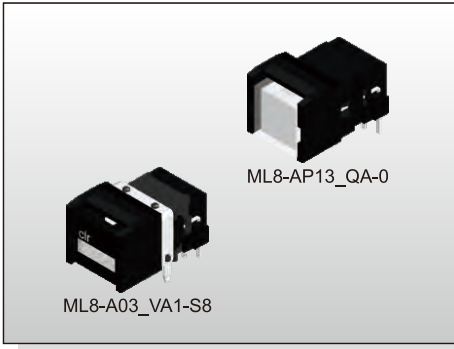
<Tray>
100 pcs.

ML6-H6

LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Gree	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	





FEATURES

- ※Push to lock option
- ※Long stroke
- ※Options of different cap color & mark

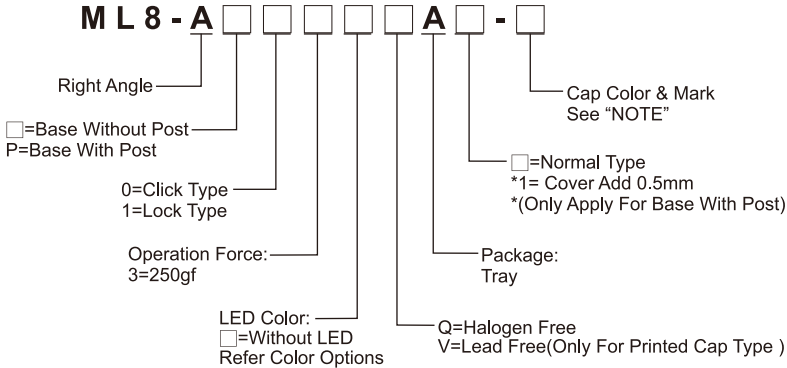
APPLICATION

- ※Audio device
- ※Office equipment
- ※Communication apparatus

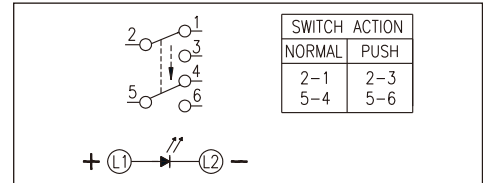
SPECIFICATION

Contact Rating	0.1A, 30V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	250±100gf
Travel	1.5mm
Operating Life	10, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



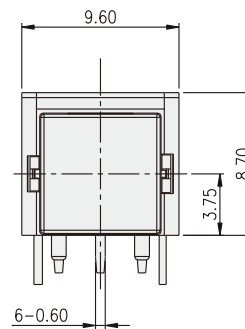
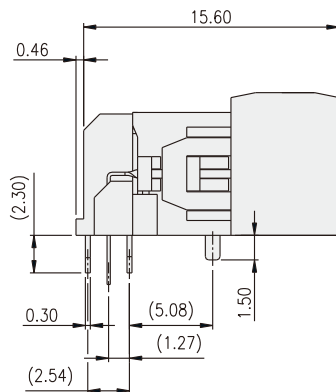
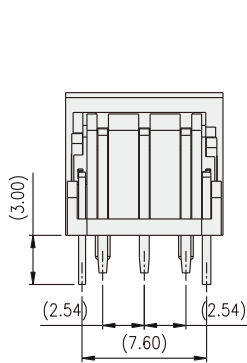
CIRCUIT



PACKAGE

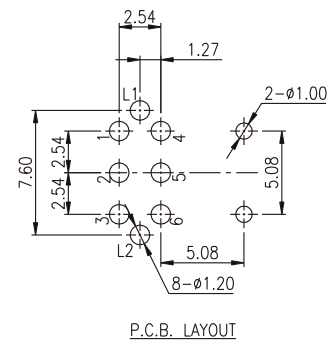
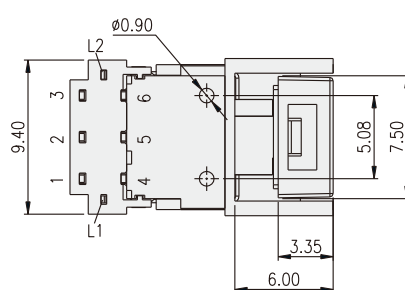
<Tray>
120 pcs.

ML8-AP13



NOTE :

	CAP	
	Mark	Color
0	Cap no mark	Transparent
K1		Black
K5		Black
K6		Black
K7		Black
S8		Silver
K9		Black



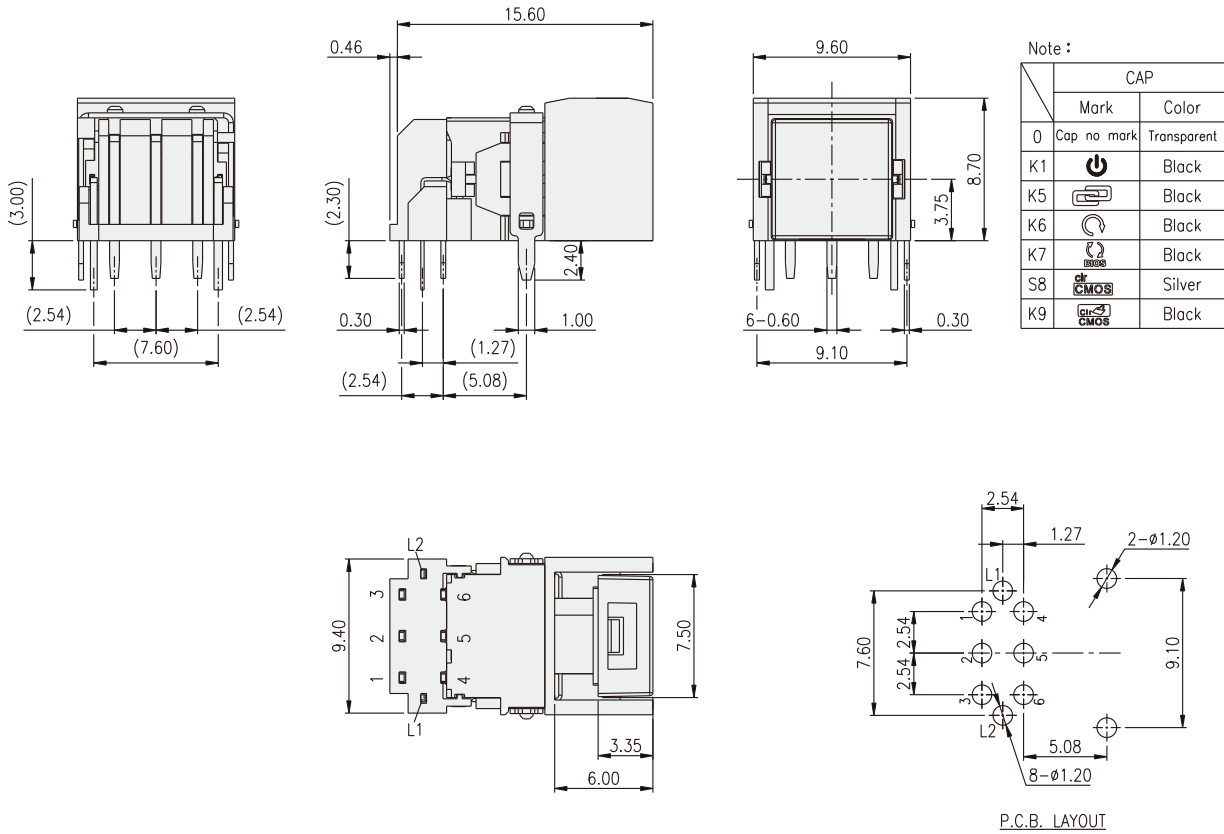
ILLUMINATED SWITCH
ML8 SERIES

Tact Switch
Illuminated



ML8-A03

ILLUMINATED SWITCH

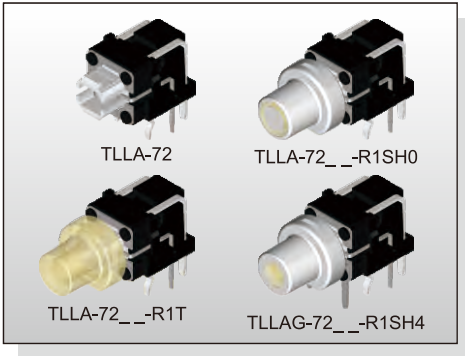


LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2-\theta_{1/2}$ (Degree)
				Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
PG	Pure Gree	520	160	3.2	3.6	
G	Yellow Green	570	30	2.0	2.3	
Y	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Deep Red	640	25	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	

ILLUMINATED SWITCH TL(L)A(G)-7 SERIES

**Tact Switch
Illuminated**



FEATURES

- ※Horizontal operation
- ※Various LED colors
- ※Options of different cap color & mark

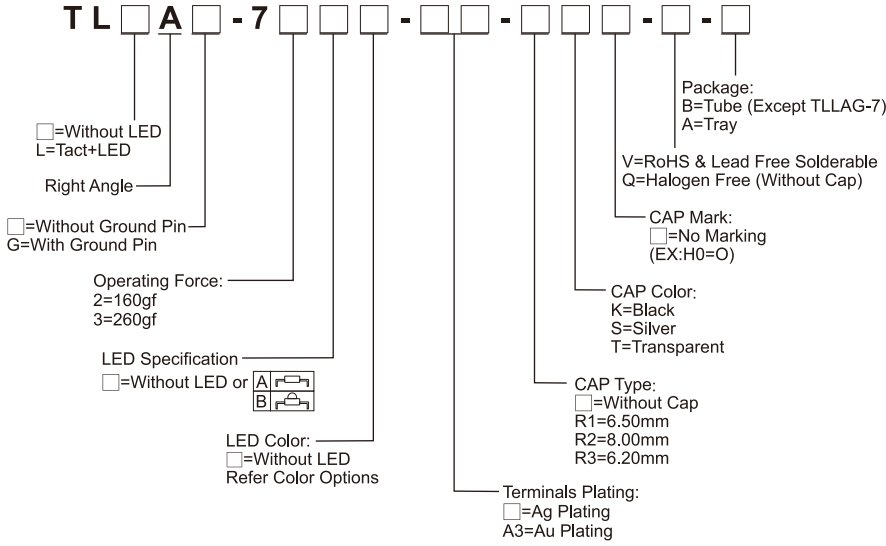
APPLICATION

- ※Automotive
- ※Server
- ※Laptop, IPC

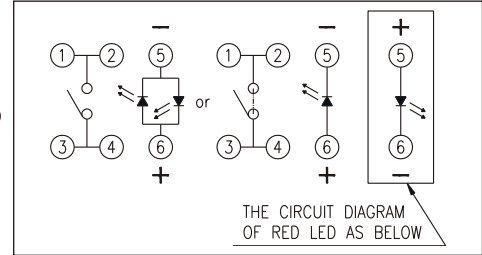
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf / 260±50gf
Travel	0.2mm
Operating Life	500, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



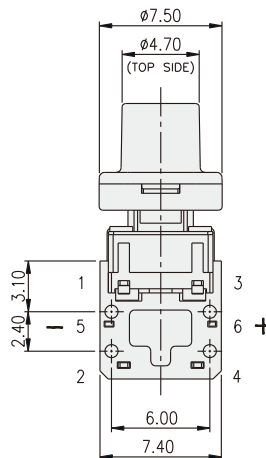
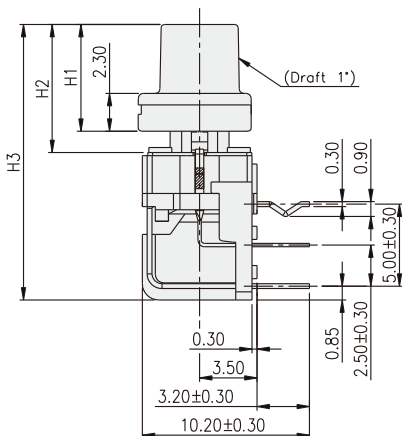
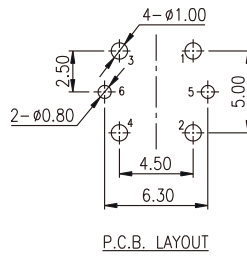
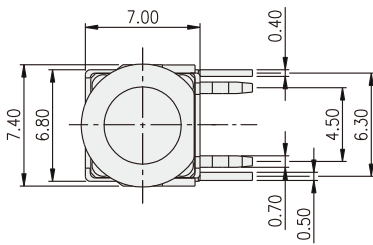
CIRCUIT



PACKAGE

- <Tray>
TL(A)-7□-A: 100 pcs.
- <Tube>
TL(A)-7□-B: 64 pcs.

TLLA-72□□-R□



PART NO.	H1	H2	H3
TLLA-7□□□-□-R1□	6.50	7.80	16.80
TLLA-7□□□□-□-R2□	8.00	9.30	18.30
TLLA-7□□□□-□-R3□	6.20	7.50	16.50

NOTE :

	CAP MARK
H0	
H1	
H2	
H3	
H4	
H7	
H8	
H9	
HA	
HB	
HC	

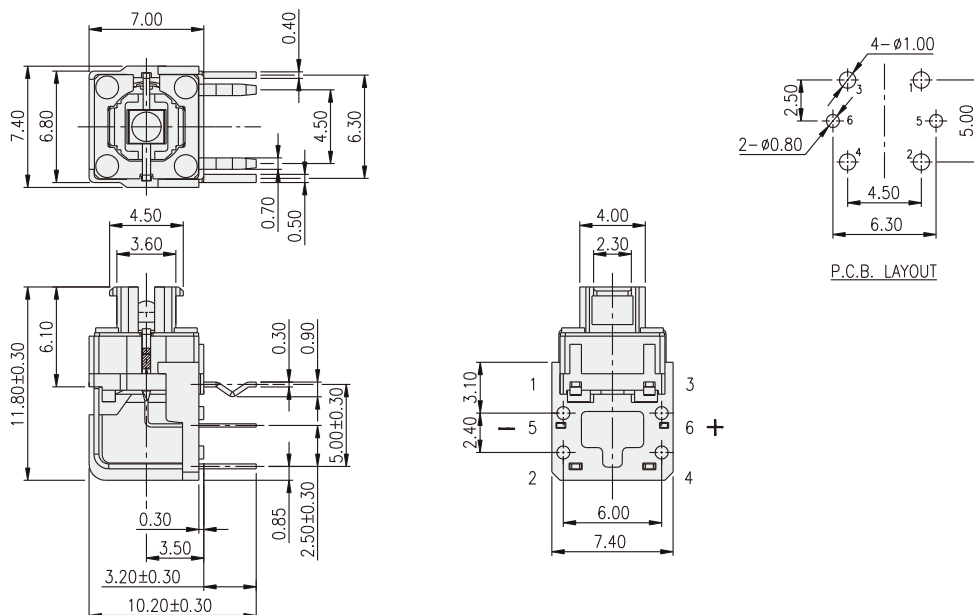
ILLUMINATED SWITCH TL(L)A(G)-7 SERIES

Tact Switch
Illuminated

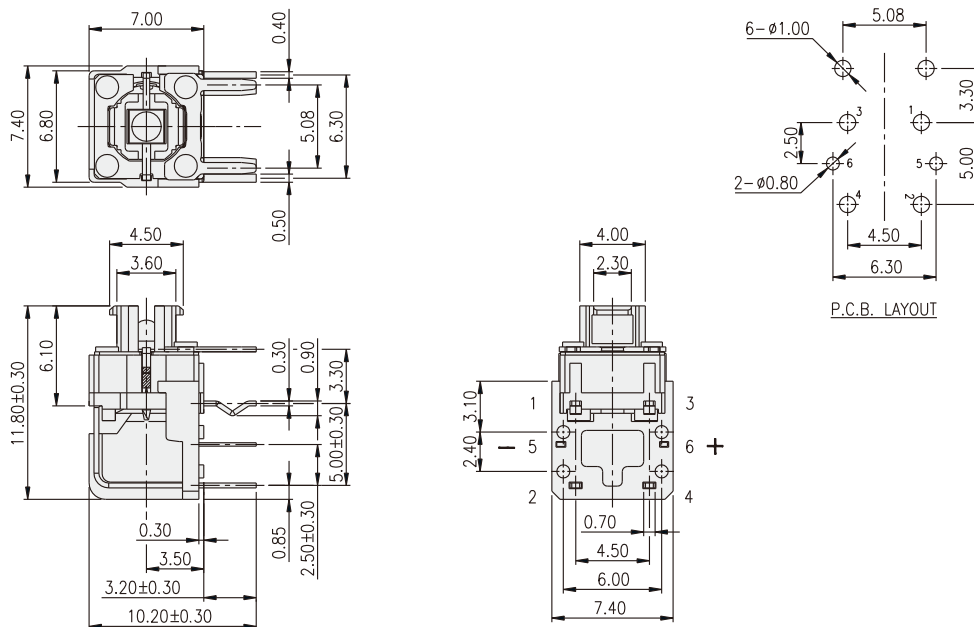


ILLUMINATED SWITCH

TLLA-72



TLLAG-7

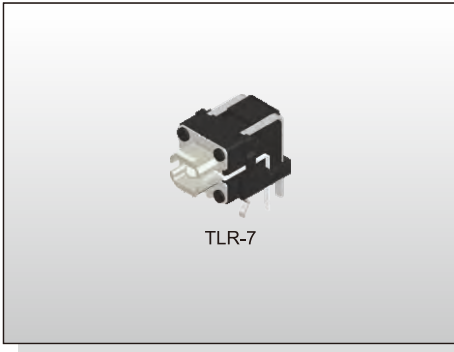


LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)		Forward Voltage V_f (V)		View Angle $2\theta_{1/2}$ (Degree)	
			Typ.		Typ.	Max.	A	B
			A	B				
B	Blue	470	70	1100	3.0	3.6	140°	30°
PG	Pure Gree	520	160	2500	3.2	3.6		
G	Yellow Green	570	30	550	2.0	2.3		
Y	Yellow	590	60	1500	2.0	2.3		
A	Soft Orange	605	50	1500	2.0	2.3		
R	Deep Red	640	25	800	2.0	2.3		
W	Cold White	X:0.30 / Y:0.30	350	550	3.0	3.6		

ILLUMINATED SWITCH TLR-7 SERIES

Tact Switch Illuminated



FEATURES

- ※Horizontal operation
- ※Various LED colors

APPLICATION

- ※Automotive
- ※Server
- ※Laptop, IPC

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf / 260±50gf
Travel	0.2mm
Operating Life	500, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

TLR-72 - QA2

Operating Force:
160±50gf

LED Viewing Angle:
A=140°
B=30°

LED Color:
□=Without LED
Refer Color Options

CAP Mark:
□=No Marking
(EX:H0=O)

CAP Color:
K=Black
S=Silver
T=Transparent

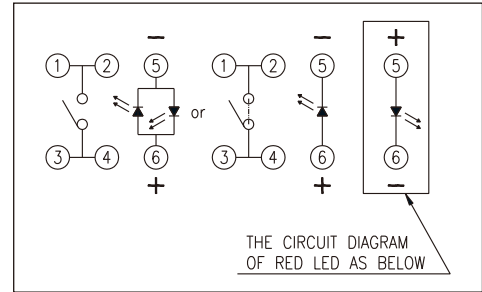
CAP Type:
□=Without Cap
R1=6.50mm
R2=8.00mm
R3=6.20mm

Stem Type:
4.50mm

Package:
Tray

Halogen Free

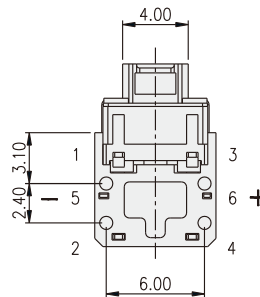
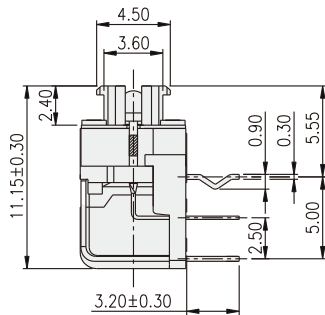
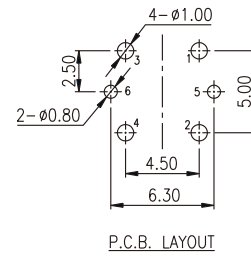
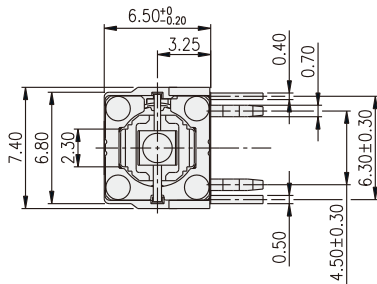
CIRCUIT



PACKAGE

<Tray>
100 pcs.

TLR-7



LED Color Options:

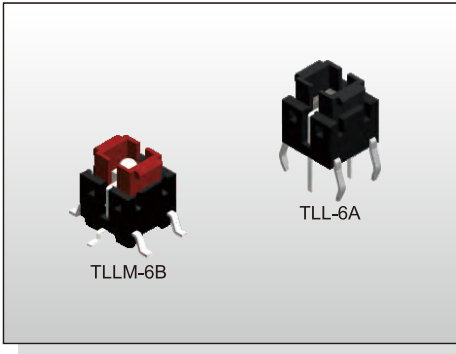
Part No.	Color	Dominant Wavelength λ_d Typ.(nm)	Luminous Intensity I_v (mcd)		Forward Voltage V_f (V)		View Angle $2-\theta_{1/2}$ (Degree)	
			Typ.		Typ.	Max.	A	B
B	Blue	470	70	1100	3.0	3.6	140°	30°
PG	Pure Gree	520	160	2500	3.2	3.6		
G	Yellow Green	570	30	550	2.0	2.3		
Y	Yellow	590	60	1500	2.0	2.3		
A	Soft Orange	605	50	1500	2.0	2.3		
R	Deep Red	640	25	800	2.0	2.3		
W	Cold White	X:0.30 / Y:0.30	350	550	3.0	3.6		

ILLUMINATED SWITCH TL(L)(M)-6 SERIES

Tact Switch Illuminated



ILLUMINATED SWITCH



FEATURES

- ※ Super bright LED
- ※ Various LED colors
- ※ Options of different cap color

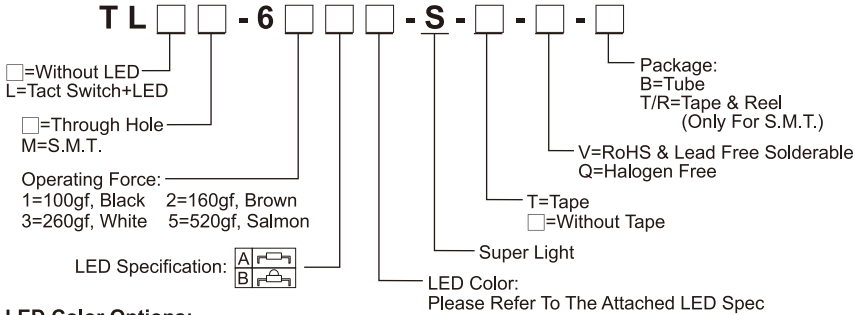
APPLICATION

- ※ Server
- ※ Laptop, IPC
- ※ Set-top box

SPECIFICATION

Contact Rating	50mA, 12V DC	
Contact Resistance	100mΩ max.	
Insulation Resistance	100MΩ min. 500V DC	
Dielectric Strength	250V AC/1 minute	
Operating Force	100±50gf	TL(L)-61
	160±50gf	TL(L)-62
	260±50gf	TL(L)-63
	520±130gf	TL(L)-65
Travel	0.2mm	
Operating Life	200,000 cycles for 520/260gf 500,000 cycles for 160/100gf	
Operating Temp.	-25°C ~ +70°C	
Storage Temp.	-30°C ~ +80°C	

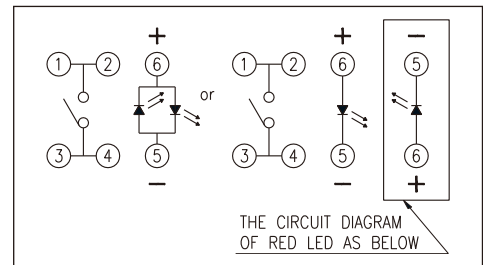
HOW TO ORDER



LED Color Options:

Part No.	Color	Dominant Wavelength λ _d Typ.(nm)	Luminous Intensity I _v (mcd)		Forward Voltage V _f (V)		View Angle 2-θ _{1/2} (Degree)	
			A	B	Typ.	Max.	A	B
B	Blue	470	70	1100	3.0	3.6	140°	30°
PG	Pure Gree	520	160	2500	3.2	3.6		
G	Yellow Green	570	30	550	2.0	2.3		
Y	Yellow	590	60	1500	2.0	2.3		
A	Soft Orange	605	50	1500	2.0	2.3		
O	Red Orange	620	80	3000	2.0	2.3		
R	Red	630	60	1000	2.0	2.3		
W	Cold White	X:0.30 / Y:0.30	350	550	3.0	3.6		

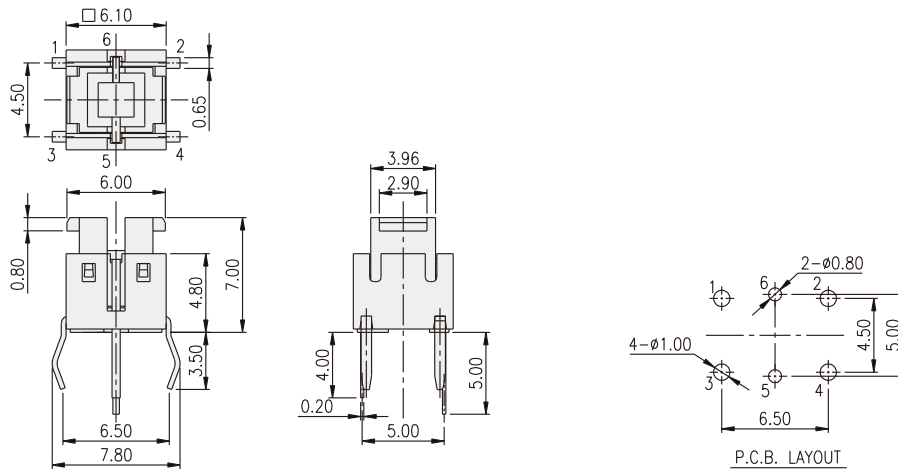
CIRCUIT



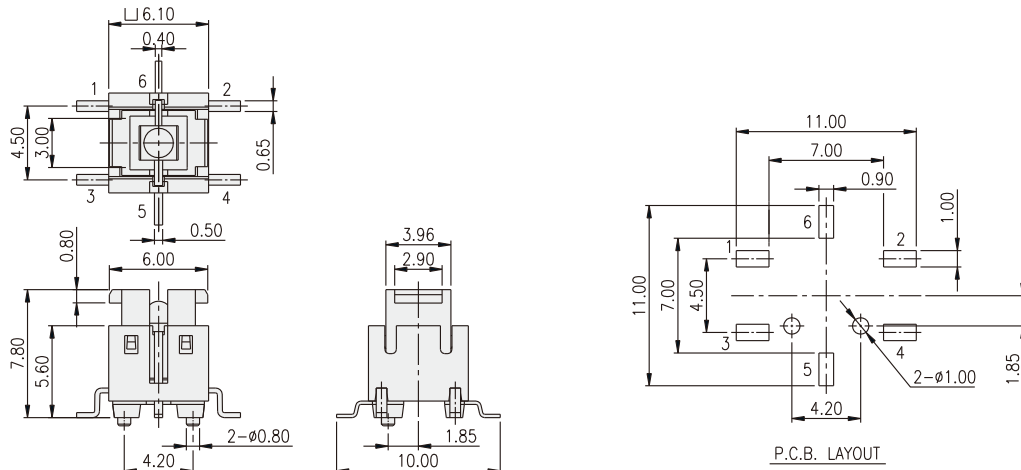
PACKAGE

- <Tube>
75 pcs. (Only for TLL-6)
- <Tape & Reel>
450 pcs. (Only for TLLM-6)

TLL-6 □ A

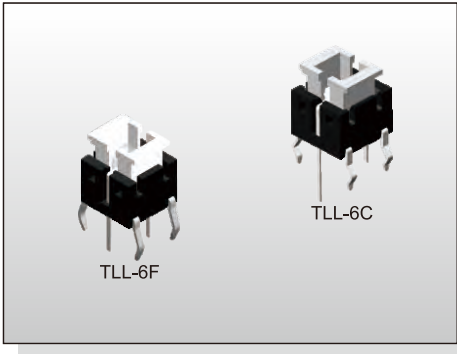


TLLM-6 □ B



ILLUMINATED SWITCH TL(L)(M)-6 SERIES

**Tact Switch
Illuminated**



FEATURES

- ※ Super bright LED
- ※ Various LED colors
- ※ Options of different cap color

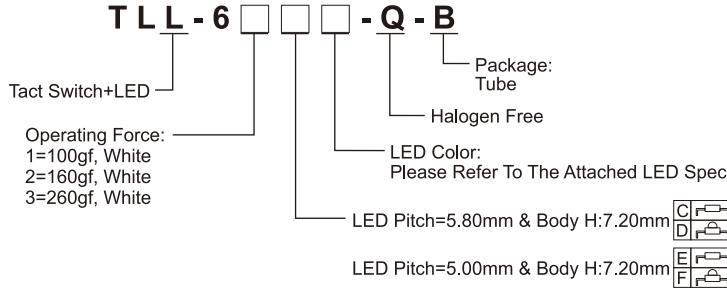
APPLICATION

- ※ Server
- ※ Laptop, IPC
- ※ Set-top box

SPECIFICATION

Contact Rating	50mA, 12V DC	
Contact Resistance	100mΩ max.	
Insulation Resistance	100MΩ min. 500V DC	
Dielectric Strength	250V AC/1 minute	
Operating Force	100±50gf	TL(L)-61
	160±50gf	TL(L)-62
	260±50gf	TL(L)-63
Travel	0.2mm	
Operating Life	200,000 cycles for 260gf	
	500,000 cycles for 160/100gf	
Operating Temp.	-25°C ~ +70°C	
Storage Temp.	-30°C ~ +80°C	

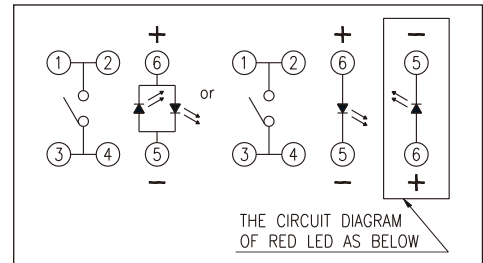
HOW TO ORDER



LED Color Options:

Part No.	Color	Dominant Wavelength λ _d Typ.(nm)	Luminous Intensity I _v (mcd)		Forward Voltage V _f (V)		View Angle 2-θ _{1/2} (Degree)	
			Typ.	Typ.	Typ.	Max.	C, E	D, F
B	Blue	470	70	1100	3.0	3.6	140°	30°
PG	Pure Gree	520	160	2500	3.2	3.6		
G	Yellow Green	570	30	550	2.0	2.3		
Y	Yellow	590	60	1500	2.0	2.3		
A	Soft Orange	605	50	1500	2.0	2.3		
O	Red Orange	620	80	3000	2.0	2.3		
R	Red	630	60	1000	2.0	2.3		
W	Cold White	X:0.30 / Y:0.30	350	550	3.0	3.6		

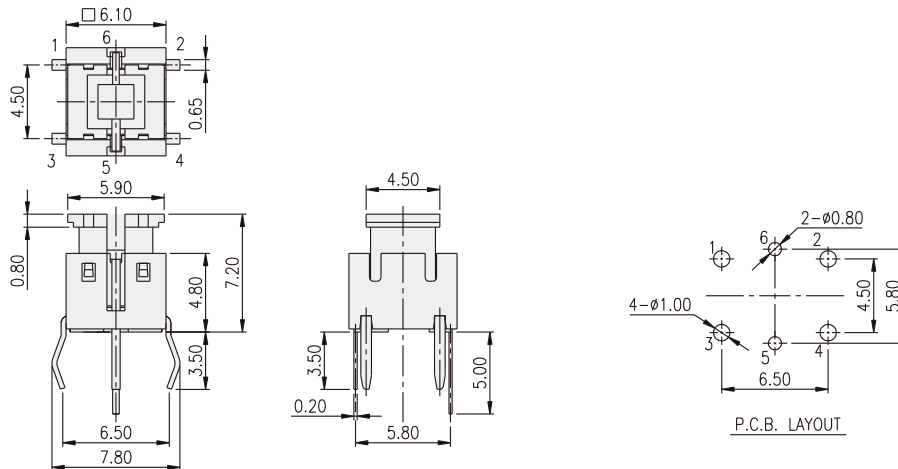
CIRCUIT



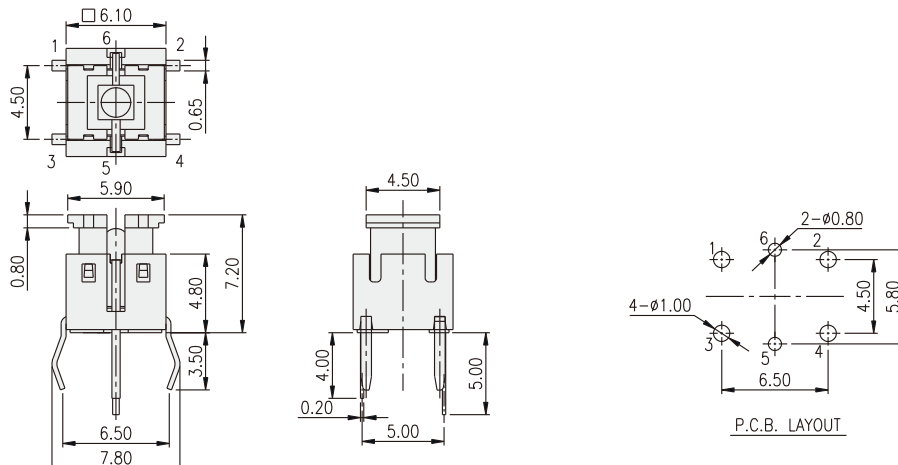
PACKAGE

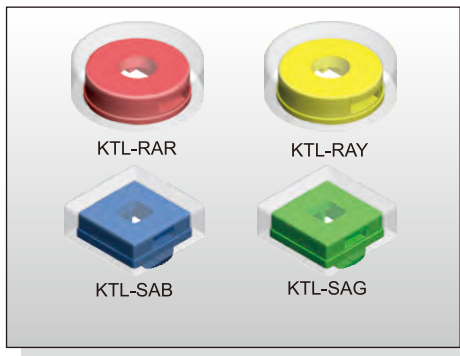
<Tube>
75 pcs.

TLL-6□C



TLL-6□F





HOW TO ORDER

KTL - [] A []

R=Round
S=Square

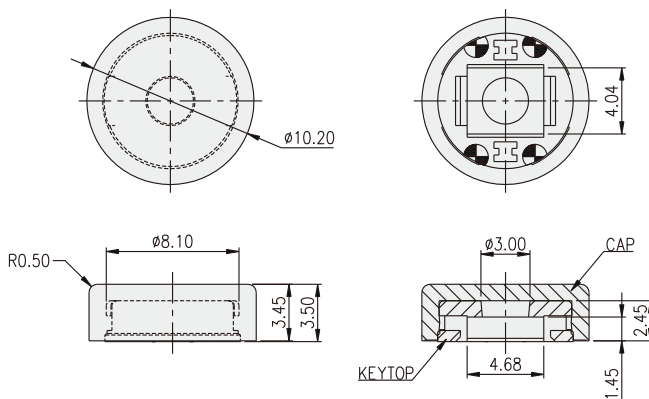
Color:
Y=Yellow
B=Blue
R=Red
I=Ivory
K=Black
G=Green
S=Salmon

Round 10.20mm or
Square 10.20mm

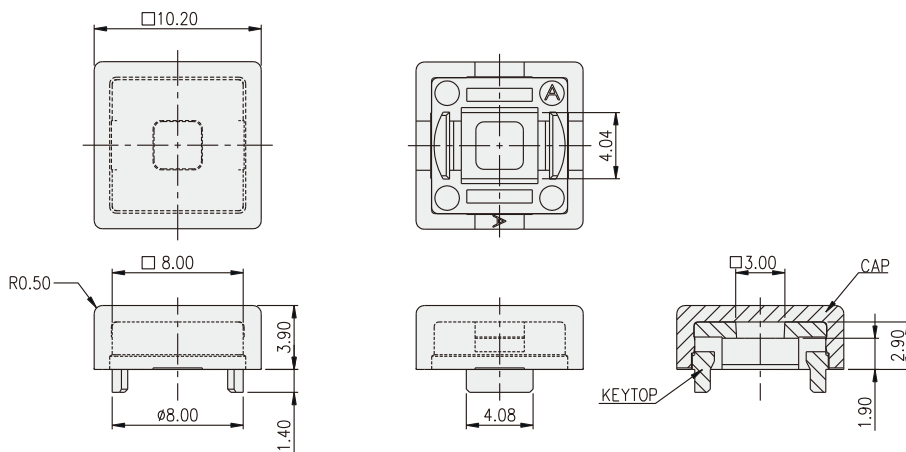
PACKAGE

<Bag>
500 pcs.

KTL-RA

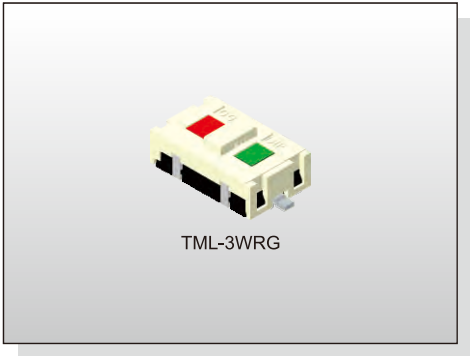


KTL-SA



ILLUMINATED SWITCH TML-3 SERIES

Tact Switch
Illuminated



TML-3WRG

FEATURES

- ※ Compact size
- ※ Bi-color LED light
- ※ Sharp click feeling

APPLICATION

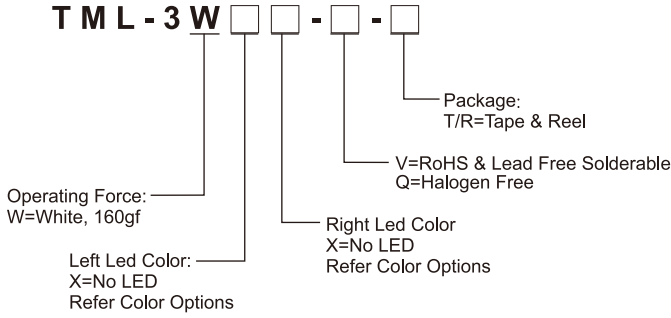
- ※ Testing equipment
- ※ Industrial device
- ※ Automation

SPECIFICATION

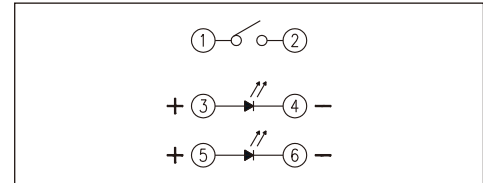
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160+80/-30gf
Travel	0.2mm
Operating Life	50,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

T M L - 3 W



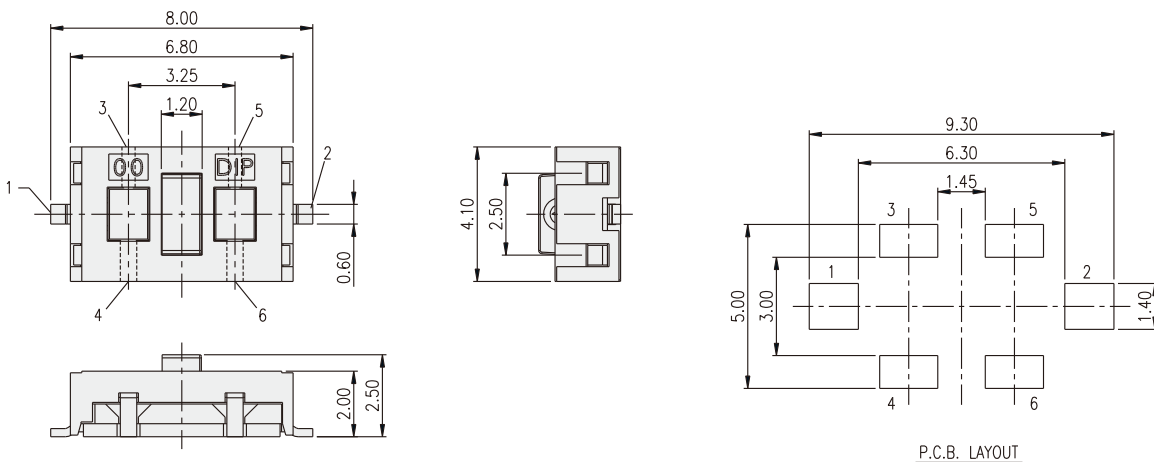
CIRCUIT



PACKAGE

<Tape & Reel>
3000 pcs.

TML-3



LED Color Options:

Part No.	Color	Dominant Wavelength λ_p Typ.(nm)	Luminous Intensity I_v (mcd)	Forward Voltage V_f (V)		View Angle $2\cdot\theta_{1/2}$ (Degree)
			Typ.	Typ.	Max.	
B	Blue	470	70	3.0	3.6	140°
G	Yellow Green	570	30	2.0	2.3	
O	Yellow	590	60	2.0	2.3	
A	Soft Orange	605	50	2.0	2.3	
R	Red	630	60	2.0	2.3	
W	Cold White	X:0.30 / Y:0.30	350	3.0	3.6	

ILLUMINATED SWITCH ZPA SERIES

Sub-Miniature Pushbutton Switches Illuminated



ILLUMINATED SWITCH



FEATURES

- ❖ Do not have wear and damage problem by pressed contact structure
- ❖ Shock resistant switch, withstands harsh environments, Available in aluminum and plastic housings

APPLICATION

- ❖ Lighting, Computer peripherals
- ❖ Communication
- ❖ Medical equipment.
- ❖ IPC, Marine

SPECIFICATION

Contact Rating	400mA 32VAC-100mA 50VDC-125mA 125VAC	ZPA S6/S7
	500mA 48VAC-200mA 50VDC-200mA 250VAC	ZPA L6
Contact Resistance	100mA 24VDC	ZPA L6
	2A 125VAC	
Insulation Resistance	50mΩ max.	
Dielectric Strength	1GΩ min. 500VDC	
Operating Force	1,000VAC rms.	
	1,500VAC rms. for metal material.	
Travel	2N~5N	
	1.5mm	ZPA S6/S7
Operating Life	2.5mm	ZPA L6
	500,000 cycles	ZPA S6/S7
Operating Temp.	200,000 cycles(100mA, 24VDC)	ZPA L6
	10,000 cycles(2A, 125VAC)	
	-30°C ~ +85°C	

HOW TO ORDER

Z P A [] [] - [] [] - [] [] - [] [] - [] [] - [] [] - [] [] - [] [] - [] [] - **L** - []

S6=SP Off-Mom
S7=SP On-Mom(Without LED)
L6=SP Off-On

Bushing:
B1=Snap-in
B2=Threaded Bushing
B3=Snap-in
D1=Square Threaded Bushing(die-casting)
D2=Threaded Bushing(die-casting)
B6=Square Threaded Bushing(plastic case)

Terminations:
M1=Solder Lug
M4=PC Through Hole(ZPAS6 Only)
M3=8.20 Solder Lug(ZPAS6 Only)
L1=Wire

Cap Color:
1=White
2=Black
3=Red
4=Orange
5=Yellow
6=Green
7=Blue

Led Color:
1=White
3=Red
5=Yellow
6=Green
7=Blue

Additional Hardware

Cap Color:
1=White
2=Black
3=Red
4=Orange
5=Yellow
6=Green
7=Blue

Contact Material:
C=Gold Over Silver

Seal:
E=EPOXY(std)
A=Sealed

S=RoHS & Lead Free Solderable
F=Halogen Free+RoHS

CIRCUIT

Model No.	POS.1	POS.2
PAL6	OFF	ON
Term. Comm.	OPEN	1-3
SCHEMATIC		

PACKAGE

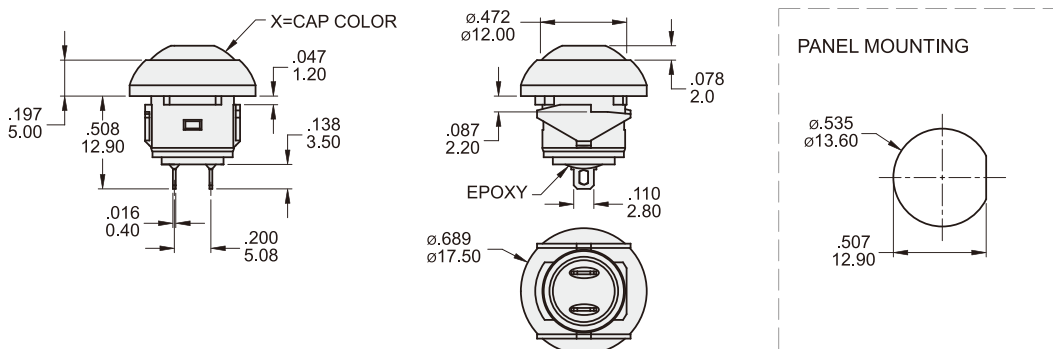
<Tray>
50 pcs.

SWITCH FUNCTION

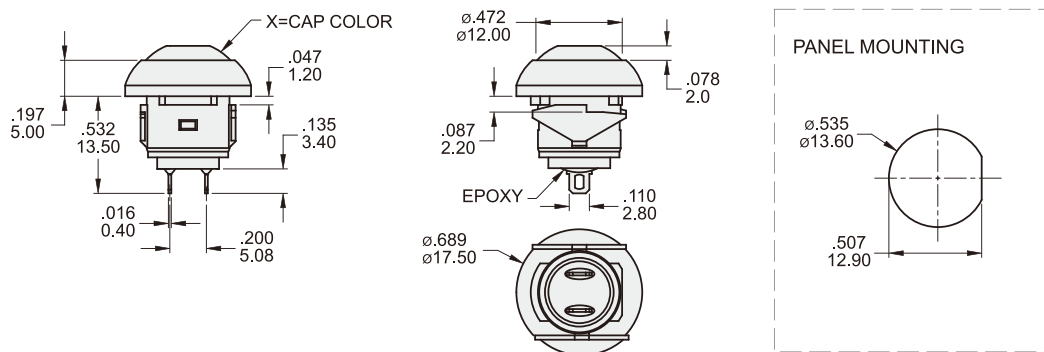
NO. POLES	MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS		SCHEMATIC
		POS.1	POS.2	POS.1	POS.2	
SP	ZPAS6	OFF	MOM	OPEN	1-3	
SP	ZPAS7	ON	OFF(MOM)	1-3	OPEN	
SP	ZPAL6	OFF	ON	OPEN	1-3	

MOM=MOMENTARY

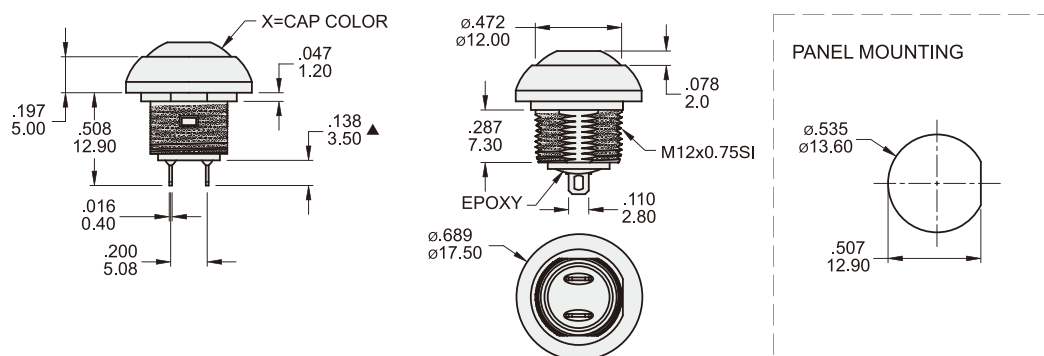
ZPAS6B1M1CESX-5



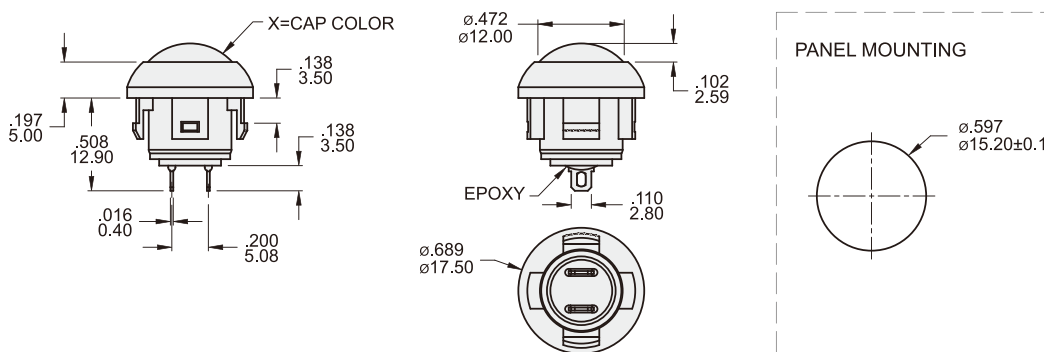
ZPAS7B1M1CESX-5



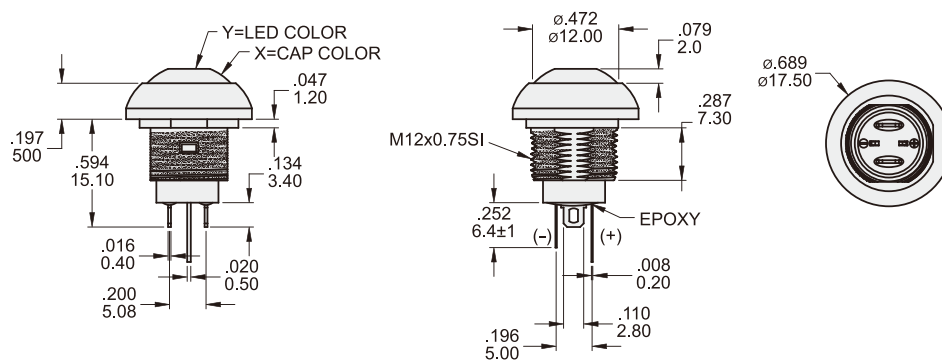
ZPAS6B2M1CESX-5



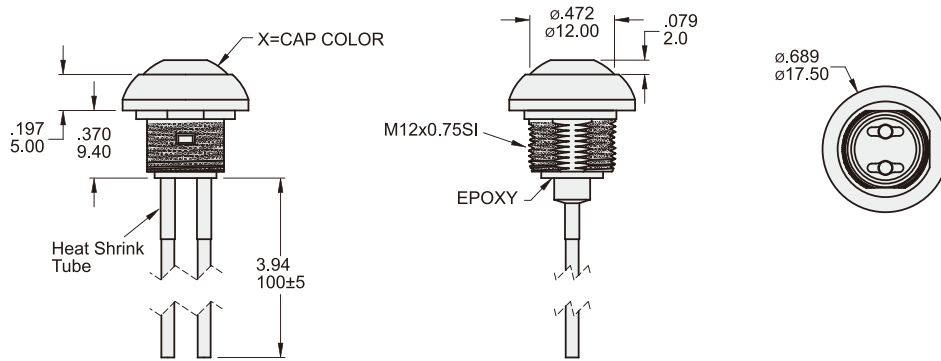
ZPAS6B3M1CESAX-5



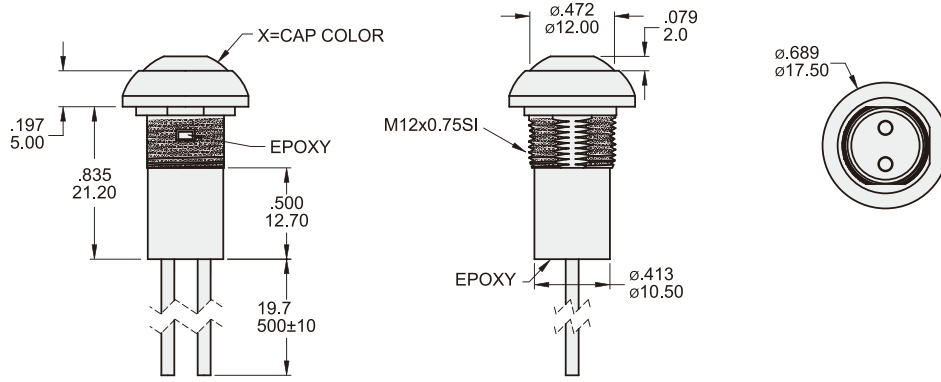
ZPAS6B2M1CESX-5LY



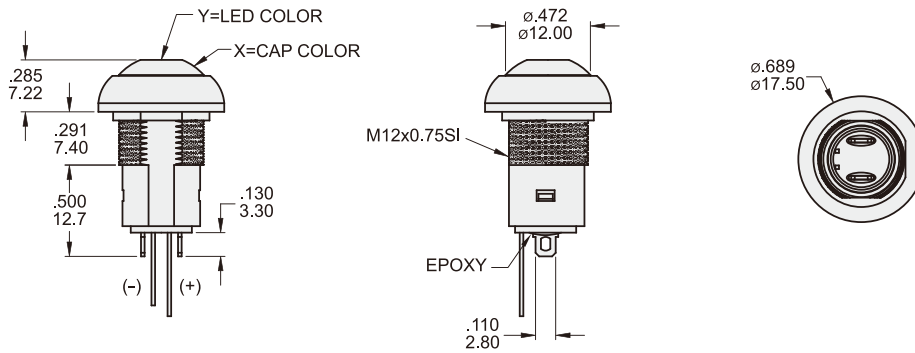
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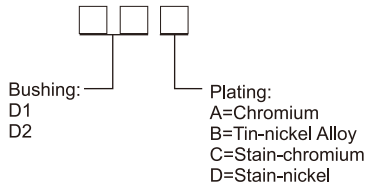
ZPAS6B2L1CASX-5



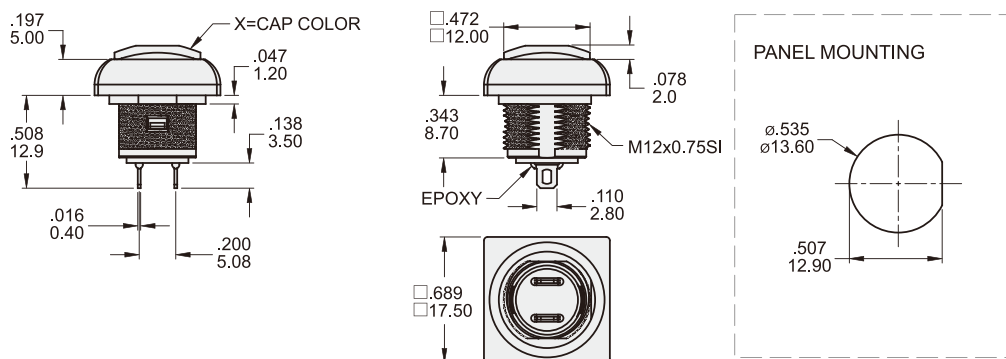
ZPAL6B2M1CESX-5LY



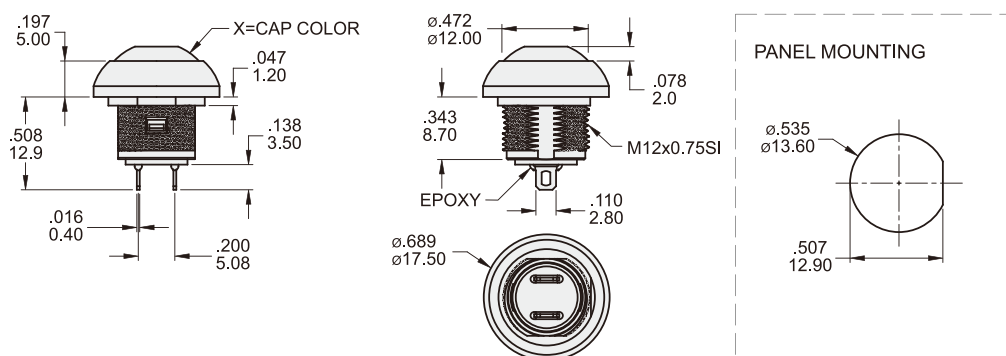
SWITCH FUNCTION



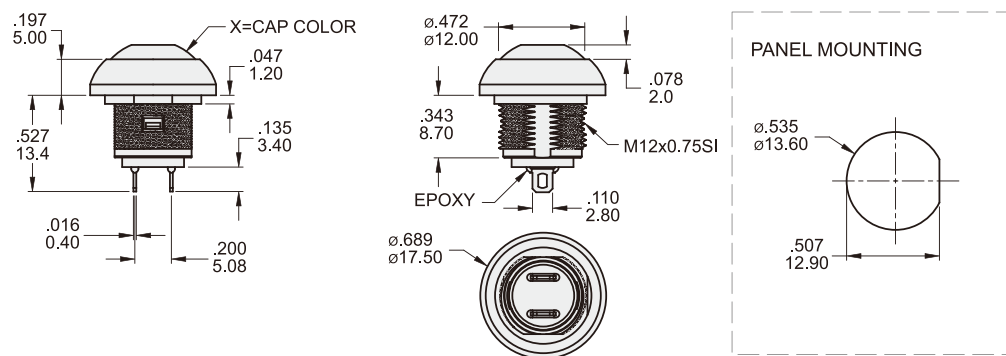
ZPAS6D1M1CESX-5



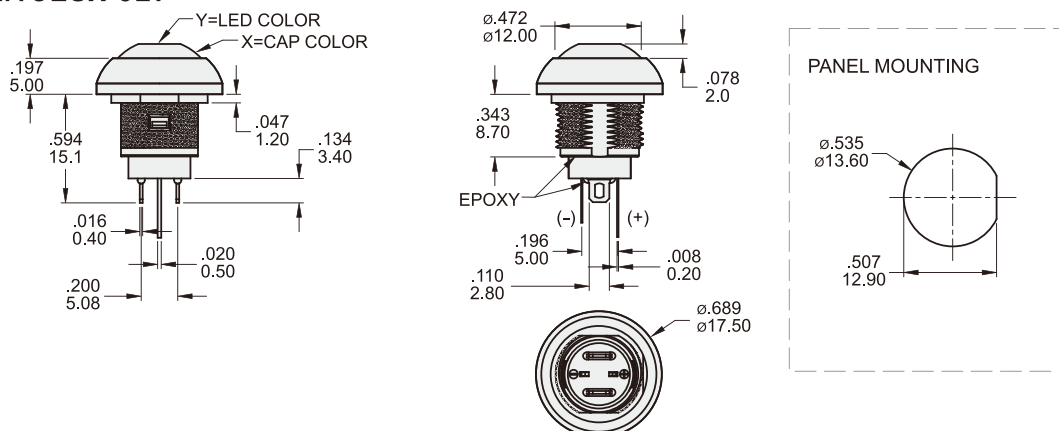
ZPAS6D2M1CESX-5



ZPAS7D2M1CESX-5

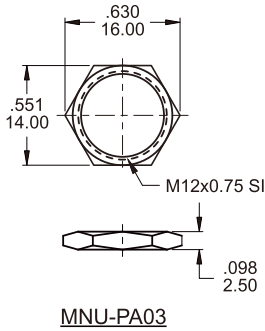


ZPAS6D2M1CESX-5LY

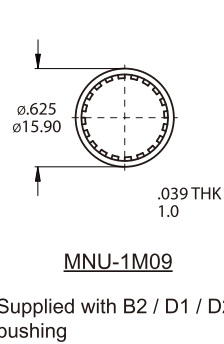


HARDWARE

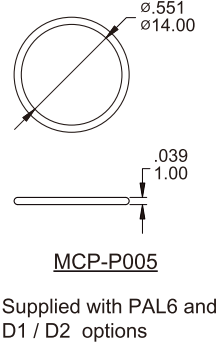
M12 NUT



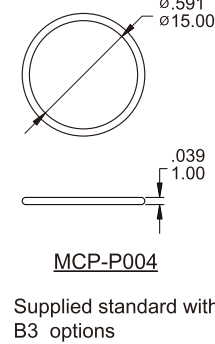
LOCK WASHER



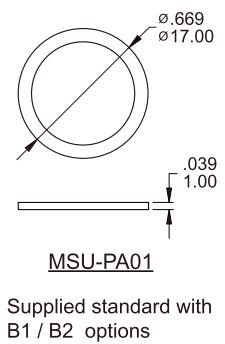
O-RING



O-RING



EVA WASHER



WITH LED ELECTRO-OPTICAL DATA

* The LED specification for reference only

Model No.	Lens Appearance	Color	Electro-optical Data (AT 20mA)				Peak Wavelength	Viewing Angle 2C 1/2 (deg)	
			Vf (V)		Iv (mcd)				
			Typ.	Max.	Typ.	Min.			
PAS6 & PAS7	Water Clear	Super White	2.8	3.3	200	100	X / Y=0.27	35°	
		Super Red	2.0	2.5	700	200	645		
		Yellow	2.1	2.6	100	55	589		
		Green	2.2	2.7	130	70	565		
		Super Blue	3.1	3.6	580	250	460		
		Super Yellow (Super Green)	Y	2	2.6	475	210		590
			G	2	2.6	210	140		570
		Super Yellow (Super Blue)	Y	2.1	2.6	200	94		590
			B	3.2	3.6	200	94		460
		Super Yellow (Super Red)	Y	2.1	2.6	100	63		590
			R	2	2.6	90	42		630
		Super Red (Super Green)	R	2	2.6	90	42		630
			G	2.0	2.6	90	42		570
		Super Red (Super Blue)	R	2	2.6	90	42		630
	B	3.2	3.6	200	94	460			
PAL6	Water Clear	White	3.3	4	250	50	X=0.31 Y=0.31	90°	
		Super Red	1.95	2.5	350	70	635		
		Super Yellow	2	2.5	160	70	590		
		Super Green	2.1	2.5	70	18	570		
		Super Blue	3.3	4	150	36	470		
		Super Yellow (Super Green)	Y	2	2.5	170	50	590	170°
			G	2.1	2.5	50	18	570	
		Super Yellow (Super Red)	Y	1.95	2.5	220	70	630	
			R	2	2.5	170	50	590	
		Super Red (Super Green)	R	1.95	2.5	220	70	630	
			G	2.1	2.5	50	18	570	

SOLDERING PROCESSES

MANUAL SOLDERING: Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

WAVE SOLDERING:
Recommended Soldering Temperature: 260 ± 5°C
Duration of Solder Immersion: Max 5 sec.
(PCB is 1.6mm in thickness)

IP 67 for the whole series:
Protected against the effects of immersion up to 1 m water(30mn)

ILLUMINATED SWITCH ZPBL SERIES

Pushbutton Switches Illuminated



FEATURES

- ✘ Small size
- ✘ Long electrical life
- ✘ High brightness LED. Button surface are illuminated and even

APPLICATION

- ✘ Automotive industry
- ✘ Office appliance
- ✘ Computer products
- ✘ Communication equipments
- ✘ Audio equipment

SPECIFICATION

Contact Rating	0.1A, 30V DC
Contact Resistance	50mΩ max. 1.5V DC; 100mA, by Method of Voltage DROP
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	250±100gf
Travel	1.2mm
Operating Life	50,000 cycles
Operating Temp.	-40°C ~ +85°C

HOW TO ORDER

Z P B L -

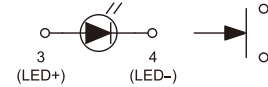
Led Color:
01=White
03=Red
05=Yellow
06=Green
07=Blue
76=Blue(Green)

WITH LED ELECTRO-OPTICAL DATA

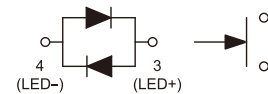
Lens Appearance	Color	Electro-optical Data(AT 20mA)				Peak Wavelength	Viewing Angle 2θ 1/2(deg)
		Vf(V)		Iv(mcd)			
		Typ.	Max.	Typ.	Min.		
Water Clear	White	3.3	4	1500	900	X/Y=0.31	45°
	Red	1.95	2.5	1300	700	630	
	Yellow	2.1	2.5	25	12	588	
	Green	2.1	2.5	300	100	570	
	Blue	3.3	4	1300	700	470	
	Blue(Green)	B	3.3	4	160	80	470
	G	2.1	2.5	80	30	570	

CIRCUIT

Single LED



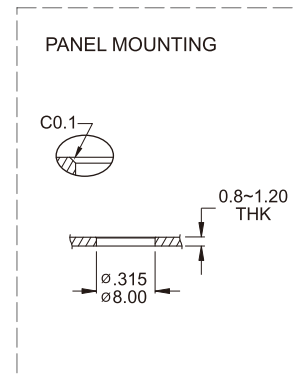
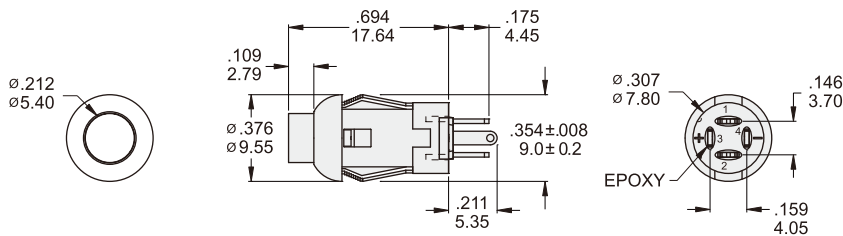
Dual Colors LED



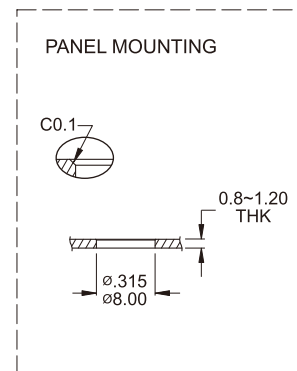
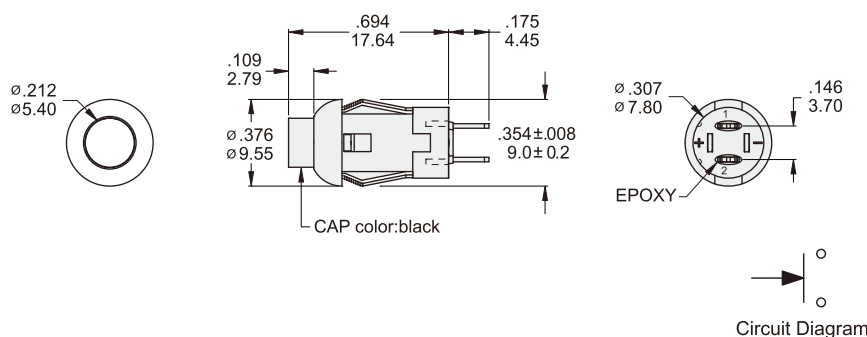
PACKAGE

<Bag>
100 pcs.

ZPBL-XX

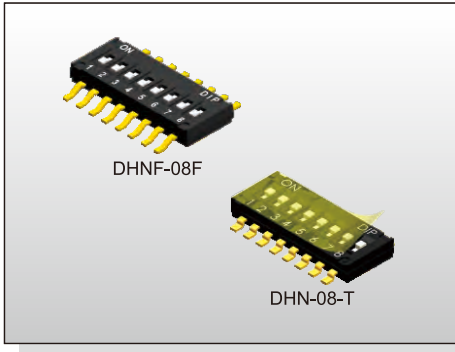


ZPBL-A2



DIP SWITCH DHN(F) SERIES

1.6mm
Half Pitch Type



FEATURES

- ※Low profile 1.6mm height
- ※Gold contact for high reliability
- ※Top tape type for washing process

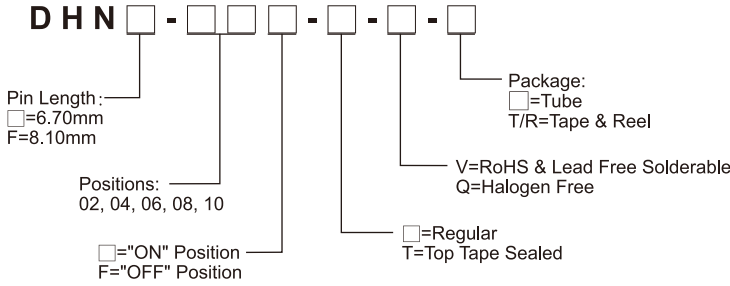
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※NB, electronic devices

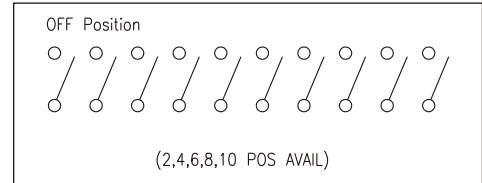
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	500gf max.
Travel	0.6mm
Operating Life	1,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



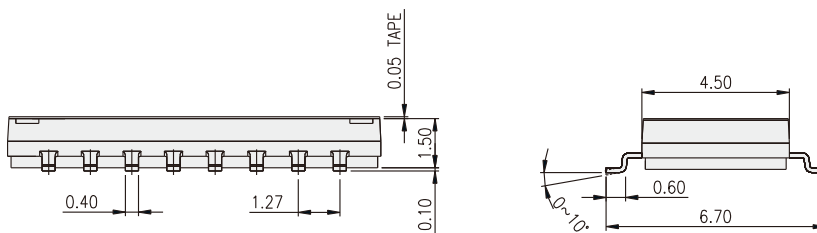
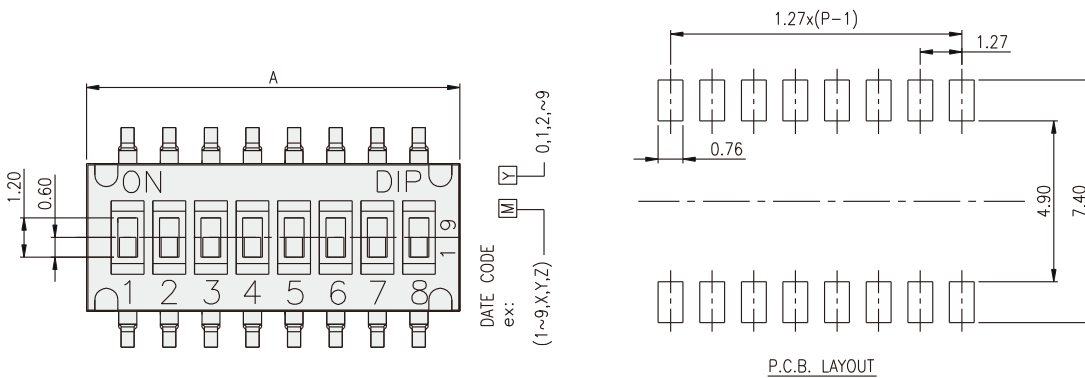
CIRCUIT



PACKAGE

- <Tube>
 DHN(F)-02: 125 pcs
 DHN(F)-04: 75 pcs
 DHN(F)-06: 54 pcs
 DHN(F)-08: 40 pcs
 DHN(F)-10: 33 pcs
- <Tape & Reel>
 DHN: 4000 pcs
 DHNF: 2500 pcs

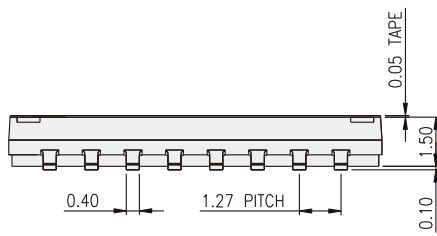
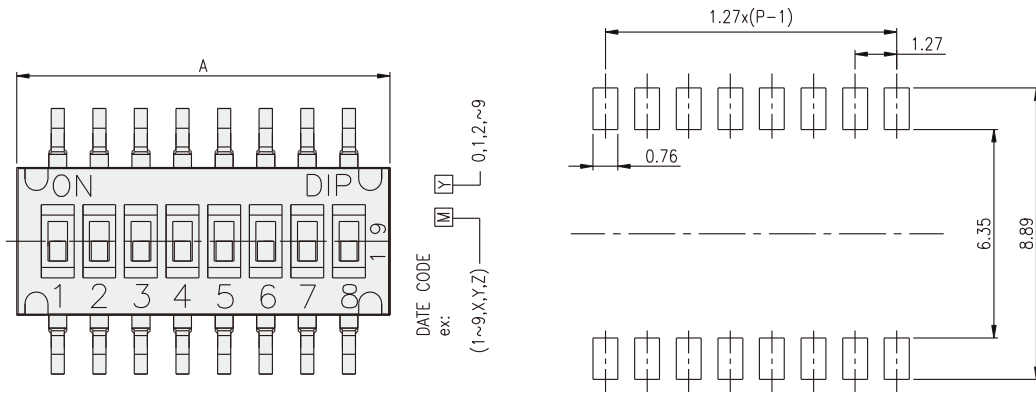
DHN



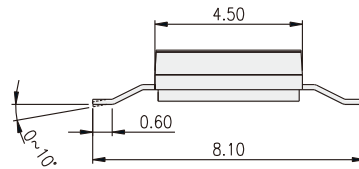
PART NO.	NO.OF POS	DIM A
DHN-02	2	3.77
DHN-04	4	6.31
DHN-06	6	8.85
DHN-08	8	11.39
DHN-10	10	13.93

DHNF

DIP SWITCH



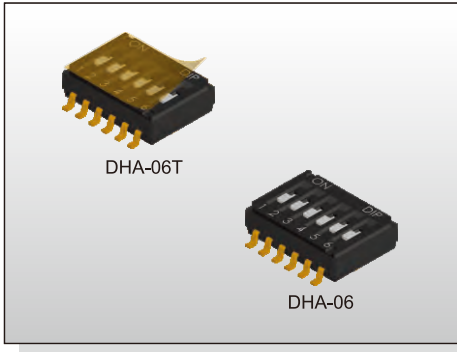
P.C.B. LAYOUT



PART NO.	NO.OF POS	DIM A
DHNF-02	2	3.77
DHNF-04	4	6.31
DHNF-06	6	8.85
DHNF-08	8	11.39
DHNF-10	10	13.93

DIP SWITCH DHA SERIES

2.2mm
Half Pitch Type



FEATURES

- ※Low profile 2.2mm height
- ※Gold contact for high reliability
- ※Top tape type for washing process

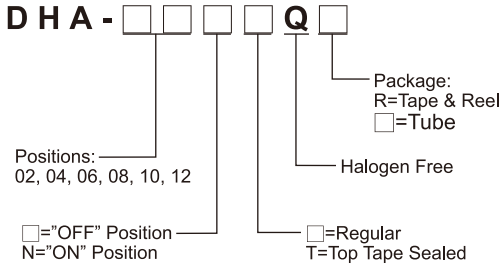
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※NB, electronic devices

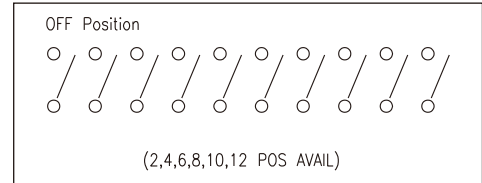
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	500gf max.
Travel	0.8mm
Operating Life	1,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

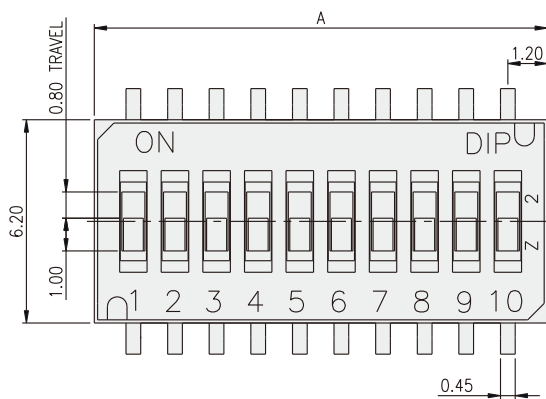


PACKAGE

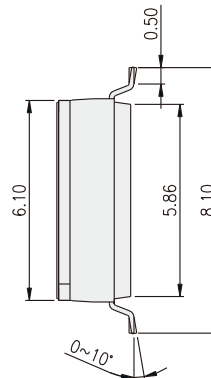
<Tape & Reel>
1800 pcs

<Tube>
DHA-02: 125 pcs
DHA-04: 75 pcs
DHA-06: 54 pcs
DHA-08: 40 pcs
DHA-10: 33 pcs
DHA-12: 28 pcs

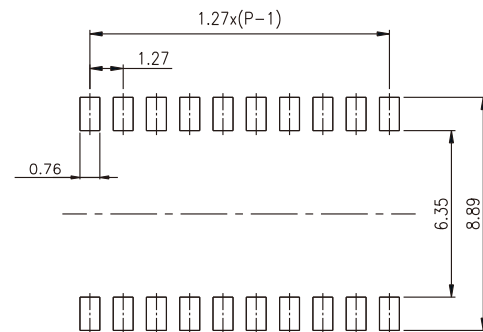
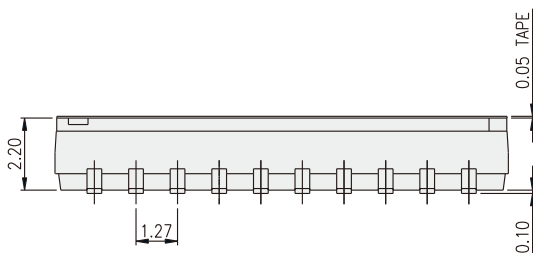
DHA



DATE CODE
ex: 0,1,2,~9
(1,2~9,X,Y,Z)



PART NO.	NO.OF POS	DIM A
DHA-02	2	3.67
DHA-04	4	6.21
DHA-06	6	8.75
DHA-08	8	11.29
DHA-10	10	13.83
DHA-12	12	16.37



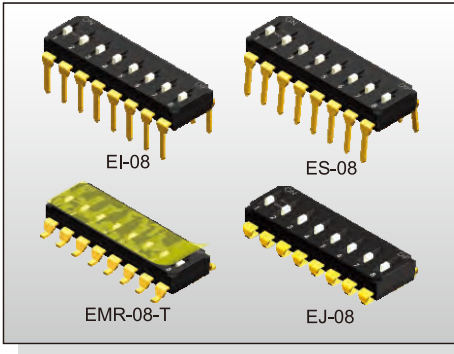
P.C.B. LAYOUT

DIP SWITCH E(M)(I)(S)(J) SERIES

End Stackable /
SMT & Through Hole Type



DIP SWITCH



FEATURES

- ※End stackable
- ※Through hole or SMT
- ※Gold contact provides high reliability

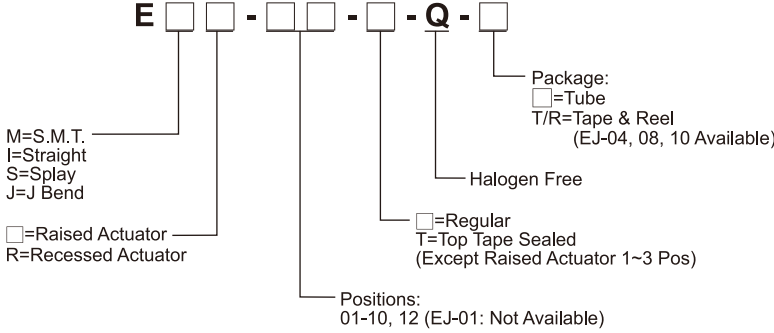
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※Telecommunication

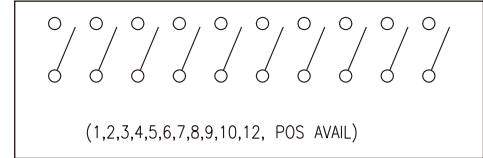
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	1mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



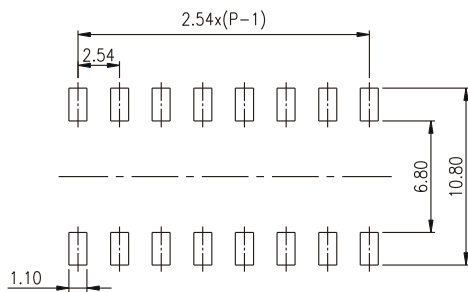
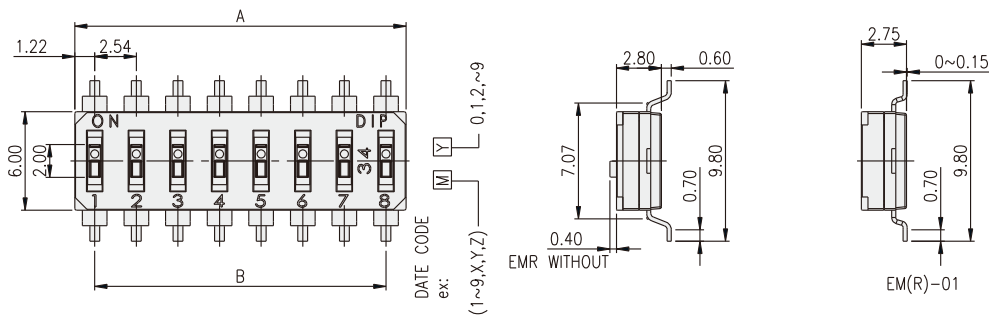
CIRCUIT



PACKAGE

- <Tube>**
 EM(R)/EI(R)/ES(R)-01: 194 pcs
 E□(R)-02: 95 pcs
 E□(R)-03: 63 pcs
 E□(R)-04: 47 pcs
 E□(R)-05: 38 pcs
 E□(R)-06: 31 pcs
 E□(R)-07: 27 pcs
 E□(R)-08: 23 pcs
 E□(R)-09: 21 pcs
 E□(R)-10: 19 pcs
 E□(R)-12: 15 pcs
- <Tape & Reel>**
 EM(R)-01~10, 12: 900 pcs
 EJ(R)-04, 08, 10: 900 pcs

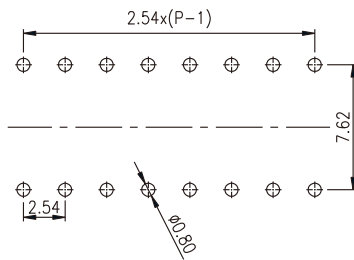
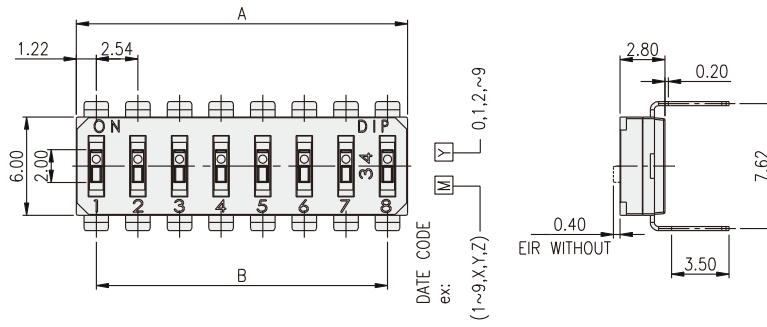
EM(R)



P.C.B. LAYOUT

PART NO.	NO.OF POS.	DIM.A	DIM.B
EM(R)-01	1	2.44	
EM(R)-02	2	4.98	2.54
EM(R)-03	3	7.52	5.08
EM(R)-04	4	10.06	7.62
EM(R)-05	5	12.60	10.16
EM(R)-06	6	15.14	12.70
EM(R)-07	7	17.68	15.24
EM(R)-08	8	20.22	17.78
EM(R)-09	9	22.76	20.32
EM(R)-10	10	25.30	22.86
EM(R)-12	12	30.38	27.94

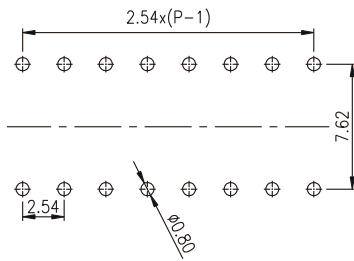
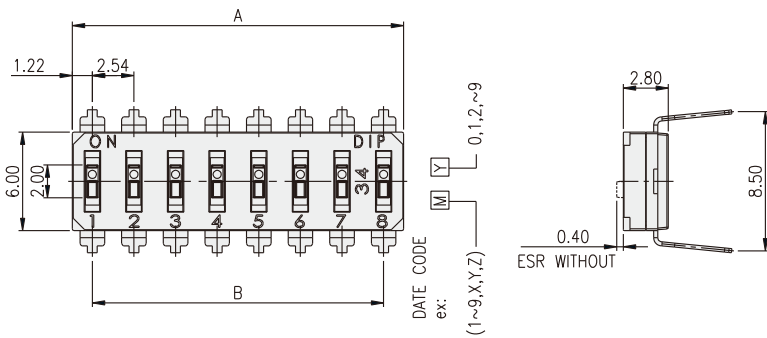
EI(R)



P.C.B. LAYOUT

PART NO.	NO.OF POS.	DIM.A	DIM.B
EI(R)-01	1	2.44	/
EI(R)-02	2	4.98	2.54
EI(R)-03	3	7.52	5.08
EI(R)-04	4	10.06	7.62
EI(R)-05	5	12.60	10.16
EI(R)-06	6	15.14	12.70
EI(R)-07	7	17.68	15.24
EI(R)-08	8	20.22	17.78
EI(R)-09	9	22.76	20.32
EI(R)-10	10	25.30	22.86
EI(R)-12	12	30.38	27.94

ES(R)

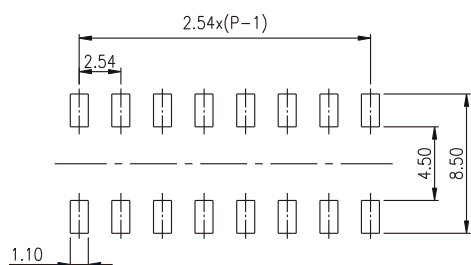
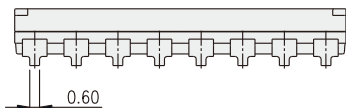
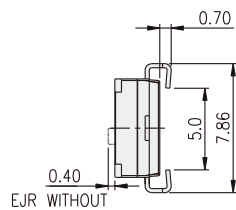
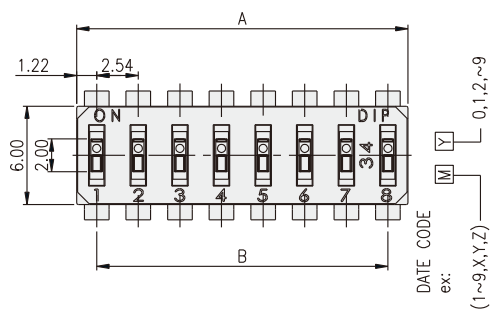


P.C.B. LAYOUT

PART NO.	NO.OF POS.	DIM.A	DIM.B
ES(R)-01	1	2.44	/
ES(R)-02	2	4.98	2.54
ES(R)-03	3	7.52	5.08
ES(R)-04	4	10.06	7.62
ES(R)-05	5	12.60	10.16
ES(R)-06	6	15.14	12.70
ES(R)-07	7	17.68	15.24
ES(R)-08	8	20.22	17.78
ES(R)-09	9	22.76	20.32
ES(R)-10	10	25.30	22.86
ES(R)-12	12	30.38	27.94

DIP SWITCH

EJ(R)



P.C.B. LAYOUT

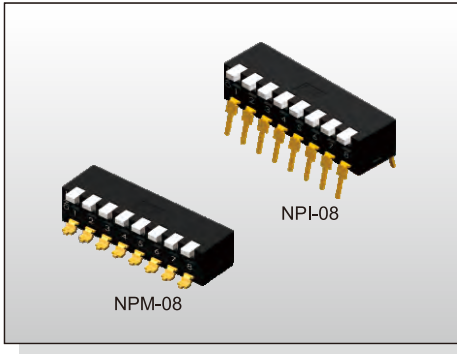
PART NO.	NO.OF POS.	DIM.A	DIM.B
* EJ(R)-02	2	4.98	2.54
EJ(R)-03	3	7.52	5.08
EJ(R)-04	4	10.06	7.62
* EJ(R)-05	5	12.60	10.16
EJ(R)-06	6	15.14	12.70
* EJ(R)-07	7	17.68	15.24
EJ(R)-08	8	20.22	17.78
EJ(R)-09	9	22.76	20.32
* EJ(R)-10	10	25.30	22.86
* EJ(R)-12	12	30.38	27.94

* Please consult DIPTRONICS

DIP SWITCH

DIP SWITCH NP(I)(M) SERIES

Piano Type



FEATURES

- ※Side actuation
- ※Wide stem for easy operation
- ※Gold contact for high reliability

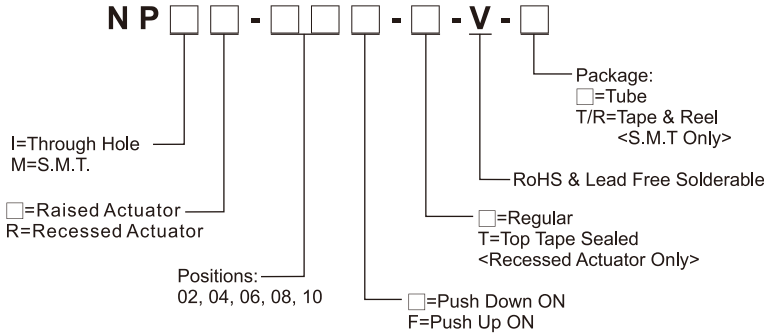
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※Telecommunication

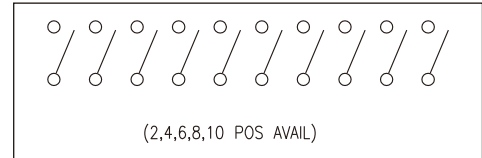
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	800gf max.
Travel	1mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



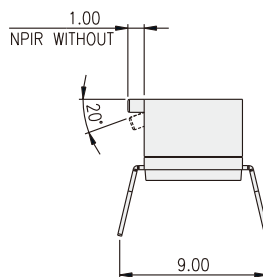
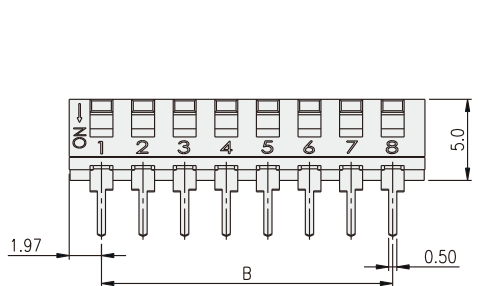
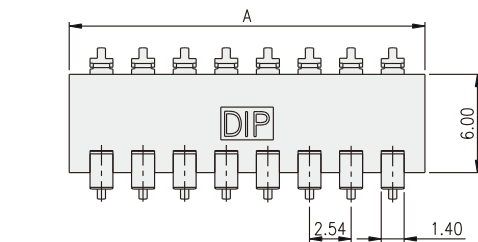
CIRCUIT



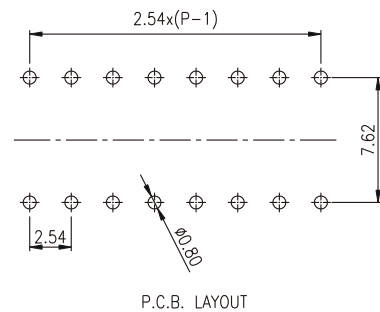
PACKAGE

- <Tube>**
- NPI(R)/NPM(R)-02: 70 pcs
 - NPI(R)/NPM(R)-04: 40 pcs
 - NPI(R)/NPM(R)-06: 28 pcs
 - NPI(R)/NPM(R)-08: 20 pcs
 - NPI(R)/NPM(R)-10: 16 pcs
- <Tape & Reel>**
- NPM(R)-02, 04, 06, 08, 10: 700 pcs

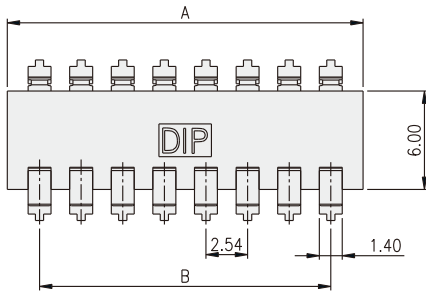
NPI



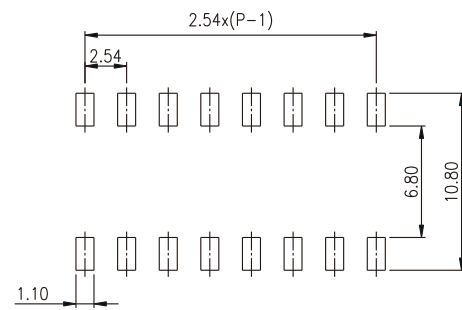
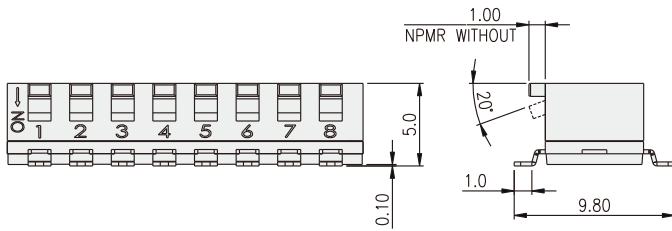
PART NO.	NO.OF POS.	DIM.A	DIM.B
NPI(R)-02	2	6.48	2.54
NPI(R)-04	4	11.56	7.62
NPI(R)-06	6	16.64	12.70
NPI(R)-08	8	21.72	17.78
NPI(R)-10	10	26.80	22.86



NPM

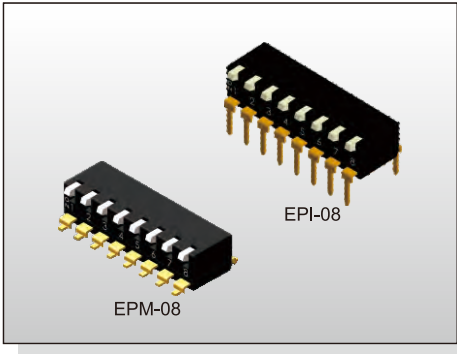


PART NO.	NO.OF POS.	DIM.A	DIM.B
NPM(R)-02	2	6.48	2.54
NPM(R)-04	4	11.56	7.62
NPM(R)-06	6	16.64	12.70
NPM(R)-08	8	21.72	17.78
NPM(R)-10	10	26.80	22.86



P.C.B. LAYOUT

DIP SWITCH



FEATURES

- ※Side actuation
- ※End stackable
- ※Through hole or SMT

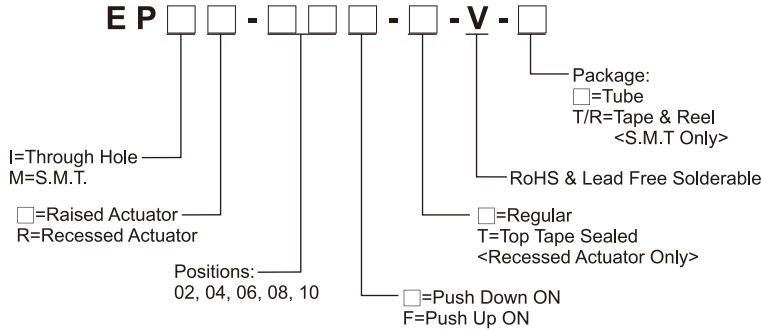
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※Telecommunication

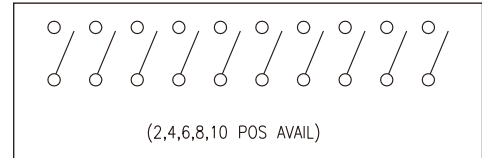
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	800gf max.
Travel	1mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



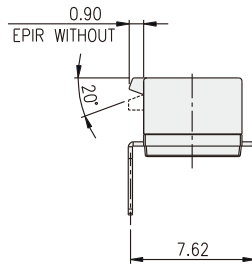
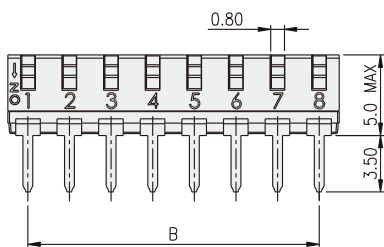
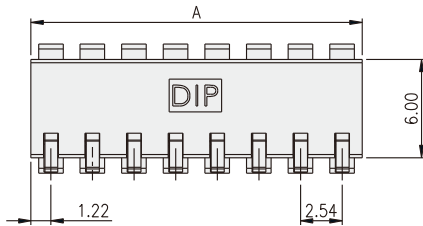
CIRCUIT



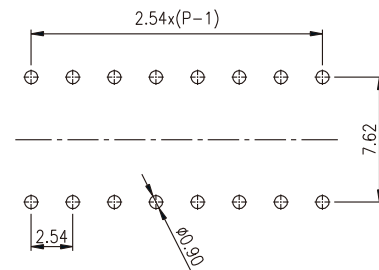
PACKAGE

- <Tube>
- EP [] (R)-02: 95 pcs
 - EP [] (R)-04: 47 pcs
 - EP [] (R)-06: 31 pcs
 - EP [] (R)-08: 23 pcs
 - EP [] (R)-10: 18 pcs
- <Tape & Reel>
- EPM(R): 700 pcs

EPI(R)

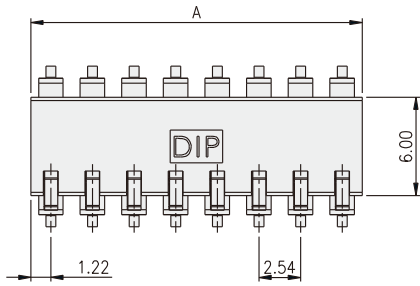


PART NO.	NO.OF POS.	DIM.A	DIM.B
EPI(R)-02	2	4.89	2.54
EPI(R)-04	4	10.06	7.62
EPI(R)-06	6	15.14	12.70
EPI(R)-08	8	20.22	17.78
EPI(R)-10	10	25.30	22.86

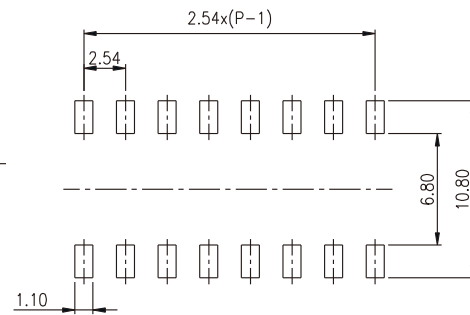
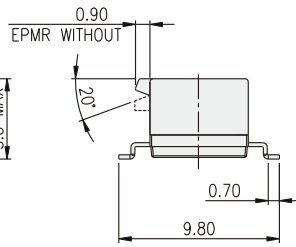
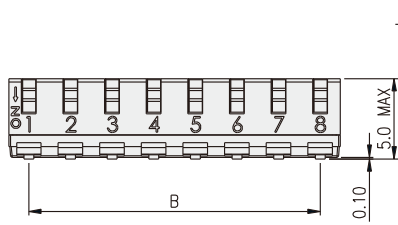


P.C.B. LAYOUT

EPM(R)



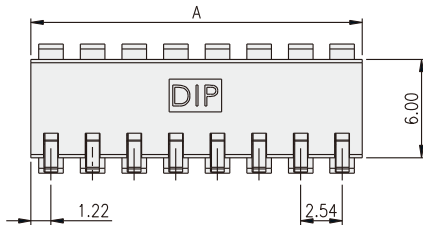
PART NO.	NO.OF POS.	DIM.A	DIM.B
EPM(R)-02	2	4.89	2.54
EPM(R)-04	4	10.06	7.62
EPM(R)-06	6	15.14	12.70
EPM(R)-08	8	20.22	17.78
EPM(R)-10	10	25.30	22.86



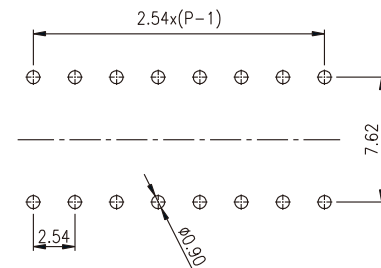
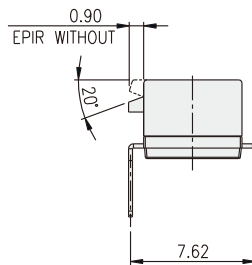
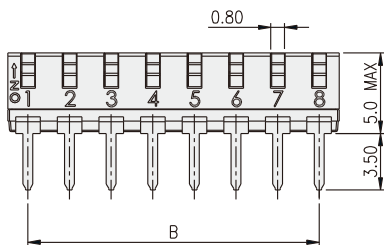
P.C.B. LAYOUT

DIP SWITCH

EPI(R)-F



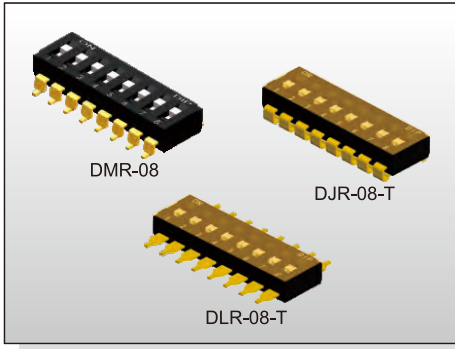
PART NO.	NO.OF POS.	DIM.A	DIM.B
EPI(R)-02F	2	4.89	2.54
EPI(R)-04F	4	10.06	7.62
EPI(R)-06F	6	15.14	12.70
EPI(R)-08F	8	20.22	17.78
EPI(R)-10F	10	25.30	22.86



P.C.B. LAYOUT

DIP SWITCH D(M)(J)(L) SERIES

SMT Type



FEATURES

- ※Low profile for space saving
- ※Gold contact for high reliability
- ※Top tape type for washing process

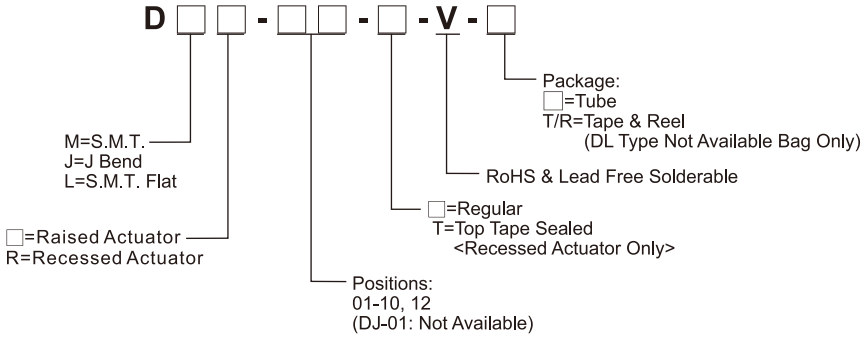
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※Telecommunication

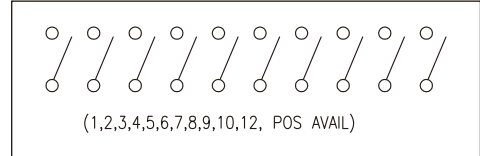
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	1mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT



PACKAGE

<Tube>

DM(R), DJ(R):

01: 130 pcs 02: 76 pcs 03: 55 pcs 04: 42 pcs
 05: 35 pcs 06: 28 pcs 07: 25 pcs 08: 22 pcs
 09: 20 pcs 10: 18 pcs 12: 15 pcs

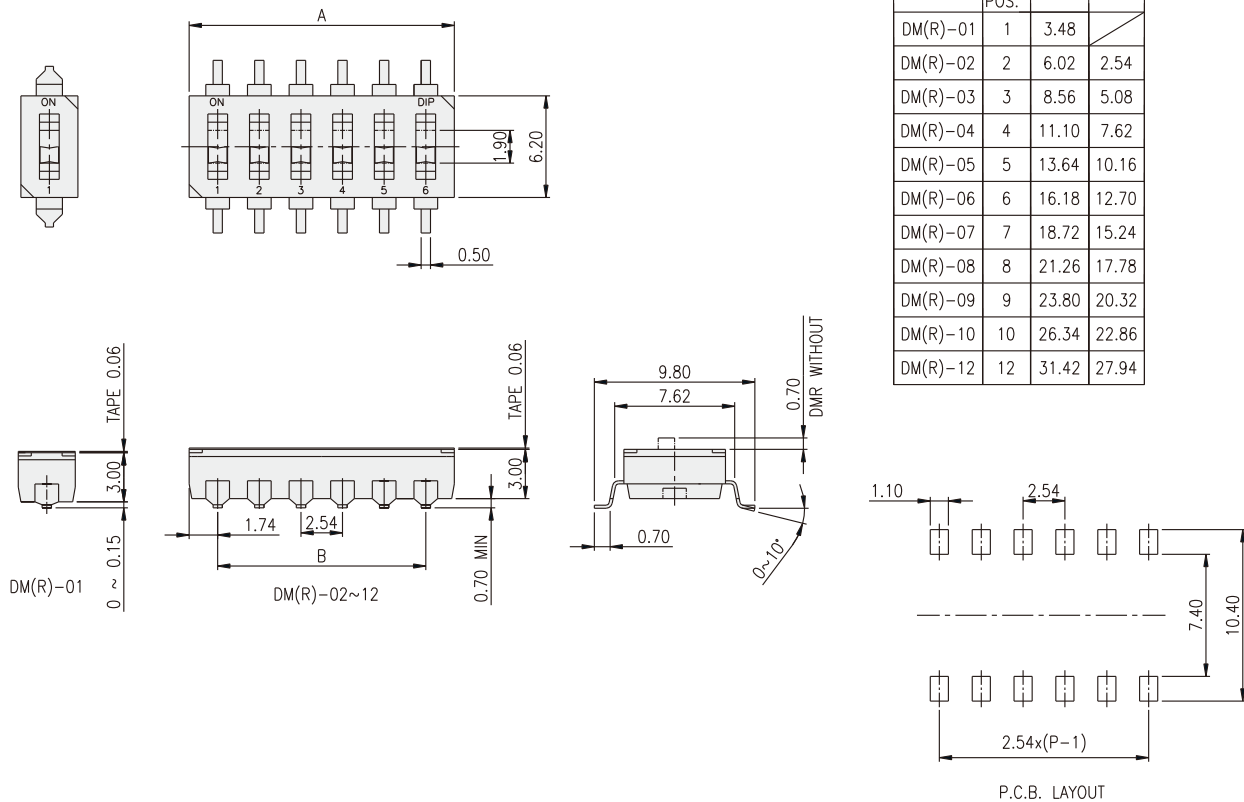
<Tape & Reel>

DM(R)-01: 800 pcs
 DMR-02~DMR-12: 900 pcs
 DM-(01)(05)(07): 800 pcs
 DM-(02)(03)(04)(06)(08)(09)(10)(12): 700 pcs
 DJR-(02)(03)(04)(08)(09)(10): 1000 pcs

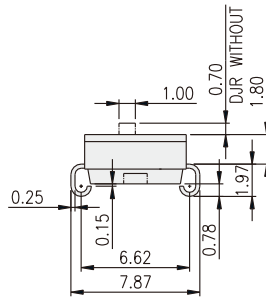
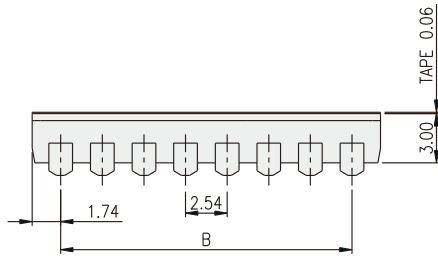
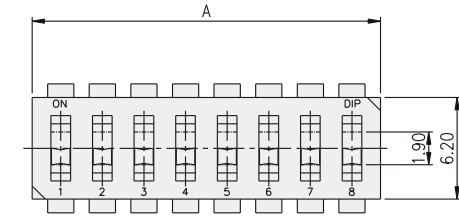
<Bag>

DL(R): 1000 pcs

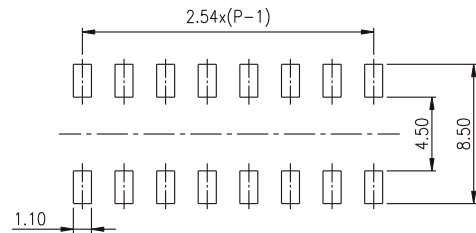
DM(R)



DJ(R)

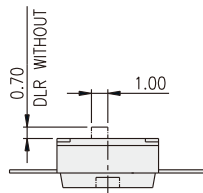
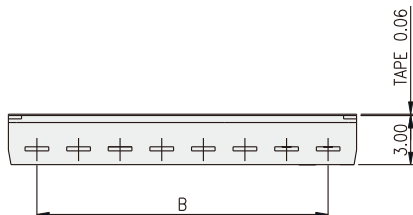
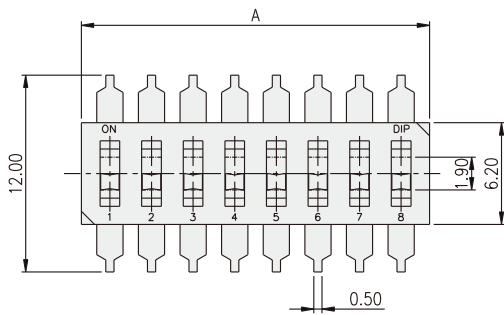


PART NO.	NO.OF POS.	DIM.A	DIM.B
DJ(R)-02	2	6.02	2.54
DJ(R)-03	3	8.56	5.08
DJ(R)-04	4	11.10	7.62
DJ(R)-05	5	13.64	10.16
DJ(R)-06	6	16.18	12.70
DJ(R)-07	7	18.72	15.24
DJ(R)-08	8	21.26	17.78
DJ(R)-09	9	23.80	20.32
DJ(R)-10	10	26.34	22.86
DJ(R)-12	12	31.42	27.94

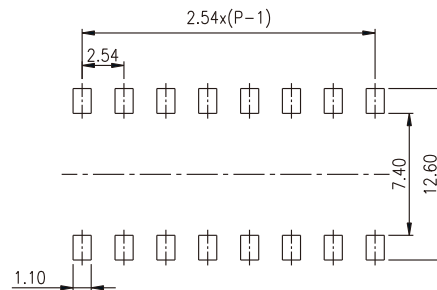


P.C.B. LAYOUT

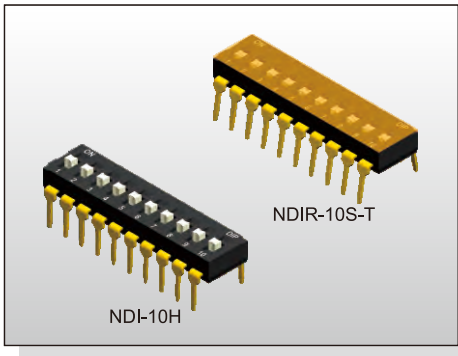
DL(R)



PART NO.	NO.OF POS.	DIM.A	DIM.B
DL(R)-01	1	3.48	
DL(R)-02	2	6.02	2.54
DL(R)-03	3	8.56	5.08
DL(R)-04	4	11.10	7.62
DL(R)-05	5	13.64	10.16
DL(R)-06	6	16.18	12.70
DL(R)-07	7	18.72	15.24
DL(R)-08	8	21.26	17.78
DL(R)-09	9	23.80	20.32
DL(R)-10	10	26.34	22.86
DL(R)-12	12	31.42	27.94



P.C.B. LAYOUT



FEATURES

- ※Low profile for space saving
- ※Gold contact for high reliability
- ※Top tape type for washing process

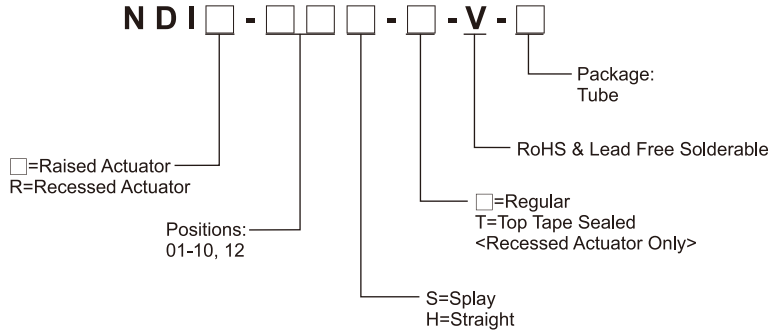
APPLICATION

- ※Industrial control
- ※Automatic machines control
- ※Telecommunication

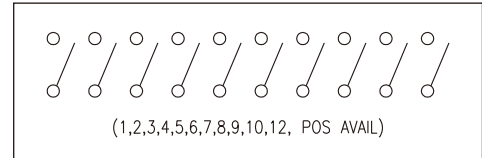
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	1mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



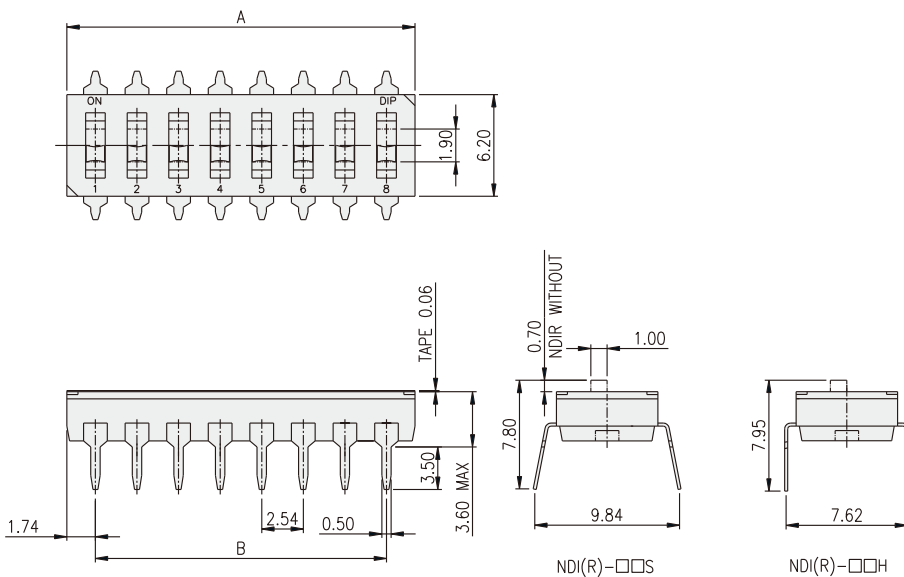
CIRCUIT



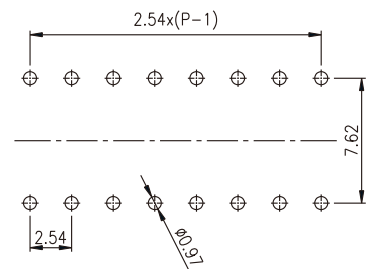
PACKAGE

- <Tube>**
- NDI(R)-01: 130 pcs
 - NDI(R)-02: 76 pcs
 - NDI(R)-03: 55 pcs
 - NDI(R)-04: 42 pcs
 - NDI(R)-05: 35 pcs
 - NDI(R)-06: 28 pcs
 - NDI(R)-07: 25 pcs
 - NDI(R)-08: 22 pcs
 - NDI(R)-09: 20 pcs
 - NDI(R)-10: 18 pcs
 - NDI(R)-12: 15 pcs

NDI(R)



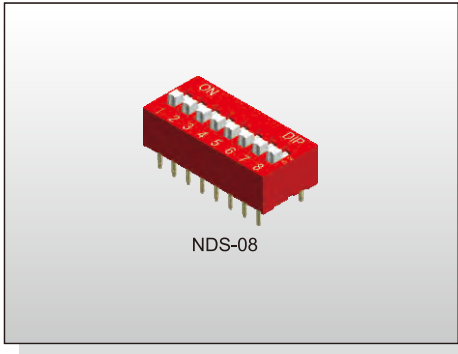
PART NO.	NO.OF POS.	DIM.A	DIM.B
NDI(R)-01	1	3.48	
NDI(R)-02	2	6.02	2.54
NDI(R)-03	3	8.56	5.08
NDI(R)-04	4	11.10	7.62
NDI(R)-05	5	13.64	10.16
NDI(R)-06	6	16.18	12.70
NDI(R)-07	7	18.72	15.24
NDI(R)-08	8	21.26	17.78
NDI(R)-09	9	23.80	20.32
NDI(R)-10	10	26.34	22.86
NDI(R)-12	12	31.42	27.94



P.C.B. LAYOUT

DIP SWITCH NDS SERIES

Slide Type



FEATURES

- ※Both ON/OFF position applicable for soldering process.
- ※Gold contact for high reliability
- ※Red, blue, and black color options.

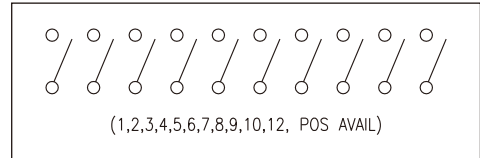
APPLICATION

- ※Industrial control
- ※Computers and peripherals
- ※Variety of function controls

SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	2mm
Operating Life	2,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

CIRCUIT



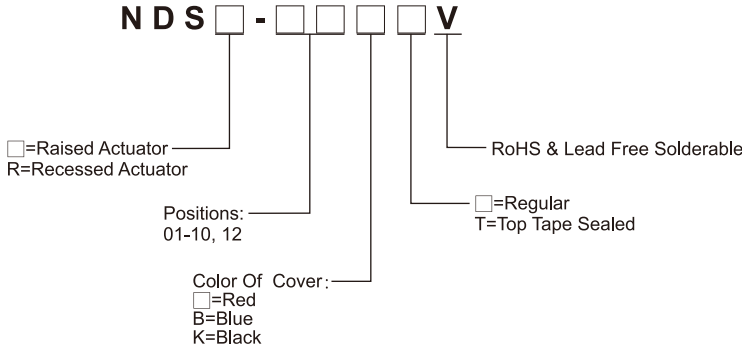
PACKAGE

<Tube>

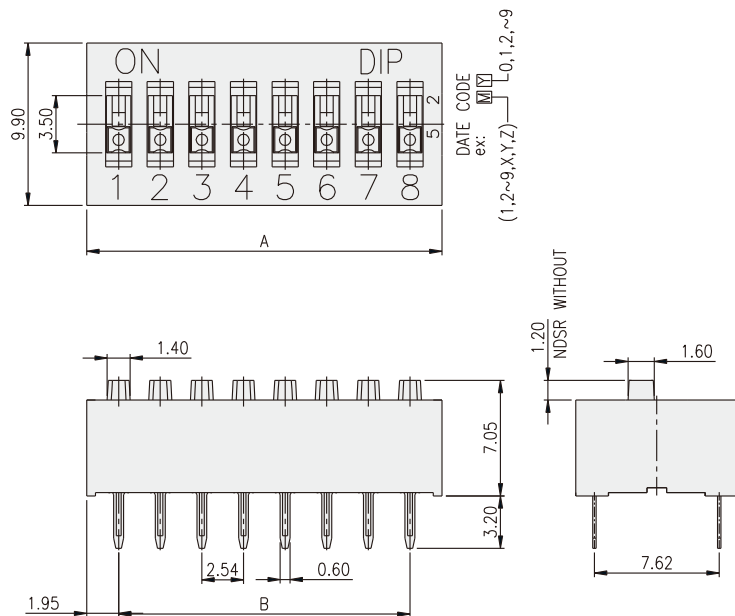
NDS(R)-01: 120 pcs	NDS(R)-01T: 110 pcs
NDS(R)-02: 72 pcs	NDS(R)-02T: 70 pcs
NDS(R)-03: 51 pcs	NDS(R)-03T: 50 pcs
NDS(R)-04: 40 pcs	NDS(R)-04T: 39 pcs
NDS(R)-05: 32 pcs	NDS(R)-05T: 32 pcs
NDS(R)-06: 27 pcs	NDS(R)-06T: 27 pcs
NDS(R)-07: 24 pcs	NDS(R)-07T: 24 pcs
NDS(R)-08: 21 pcs	NDS(R)-08T: 21 pcs
NDS(R)-09: 19 pcs	NDS(R)-09T: 19 pcs
NDS(R)-10: 17 pcs	NDS(R)-10T: 17 pcs
NDS(R)-12: 14 pcs	NDS(R)-12T: 14 pcs

DIP SWITCH

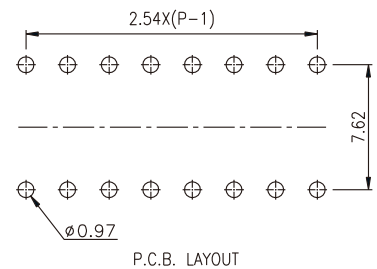
HOW TO ORDER

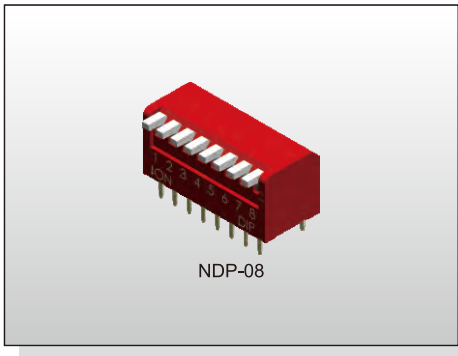


NDS(R)



PART NO.	NO.OF POS.	DIM.A	DIM.B
NDS(R)-01	1	3.90	
NDS(R)-02	2	6.44	2.54
NDS(R)-03	3	8.98	5.08
NDS(R)-04	4	11.52	7.62
NDS(R)-05	5	14.06	10.16
NDS(R)-06	6	16.60	12.70
NDS(R)-07	7	19.14	15.24
NDS(R)-08	8	21.68	17.78
NDS(R)-09	9	24.22	20.32
NDS(R)-10	10	26.76	22.86
NDS(R)-12	12	31.84	27.94





FEATURES

- ※Side actuation
- ※Gold contact for high reliability
- ※Red, blue, and black color options.

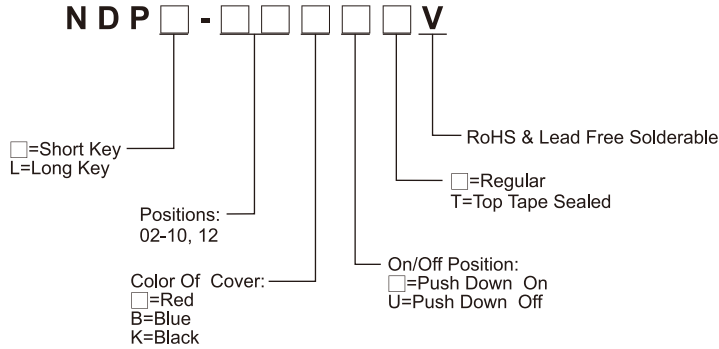
APPLICATION

- ※Industrial control
- ※Computers and peripherals
- ※Variety of function controls

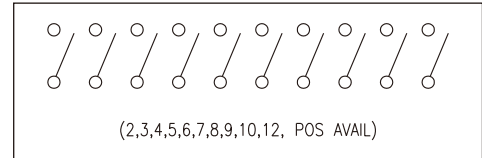
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	400gf max.
Travel	25°
Operating Life	2,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

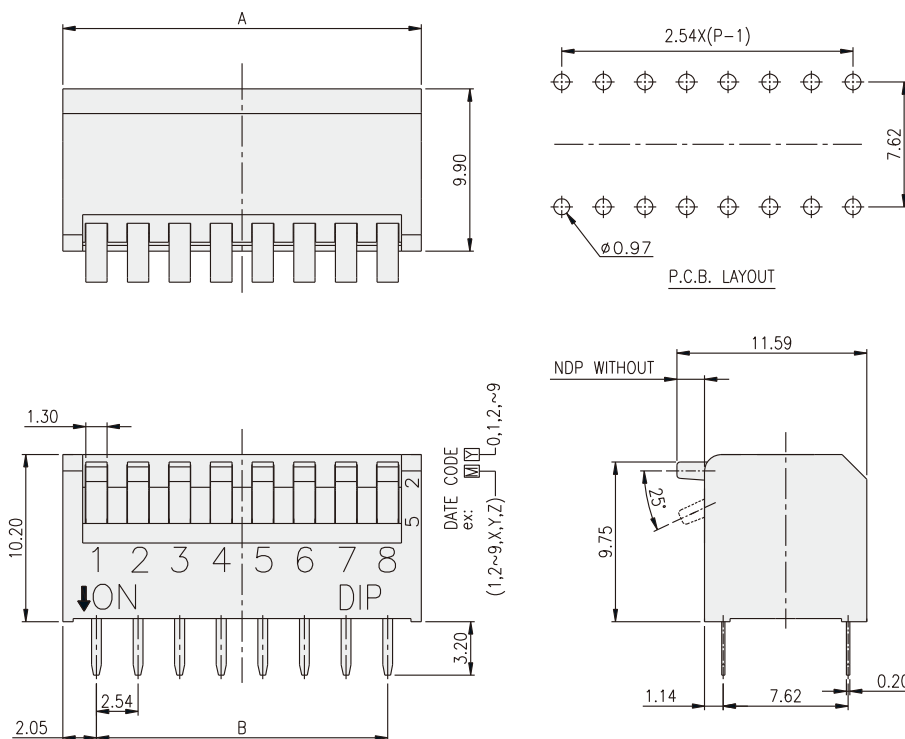


PACKAGE

<Tube>

NDP(L)-02: 70 pcs	NDP(L)-02T: 65 pcs
NDP(L)-03: 50 pcs	NDP(L)-03T: 49 pcs
NDP(L)-04: 39 pcs	NDP(L)-04T: 39 pcs
NDP(L)-05: 32 pcs	NDP(L)-05T: 32 pcs
NDP(L)-06: 27 pcs	NDP(L)-06T: 27 pcs
NDP(L)-07: 24 pcs	NDP(L)-07T: 24 pcs
NDP(L)-08: 21 pcs	NDP(L)-08T: 21 pcs
NDP(L)-09: 19 pcs	NDP(L)-09T: 19 pcs
NDP(L)-10: 17 pcs	NDP(L)-10T: 17 pcs
NDP(L)-12: 14 pcs	NDP(L)-12T: 14 pcs

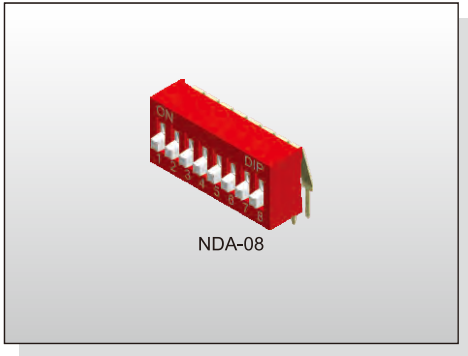
NDP(L)



PART NO.	NO.OF POS.	DIM.A	DIM.B
NDP(L)-02	2	6.64	2.54
NDP(L)-03	3	9.18	5.08
NDP(L)-04	4	11.72	7.62
NDP(L)-05	5	14.26	10.16
NDP(L)-06	6	16.80	12.70
NDP(L)-07	7	19.34	15.24
NDP(L)-08	8	21.88	17.78
NDP(L)-09	9	24.42	20.32
NDP(L)-10	10	26.96	22.86
NDP(L)-12	12	32.04	27.94

DIP SWITCH NDA SERIES

Right Angle Type



FEATURES

- ✧ Side actuation
- ✧ Gold contact for high reliability
- ✧ Red, blue, and black color options.

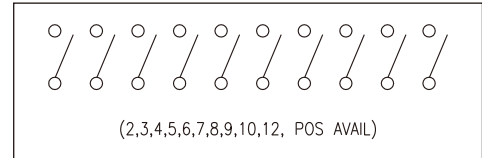
APPLICATION

- ✧ Industrial control
- ✧ Computers and peripherals
- ✧ Variety of function controls

SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	2mm
Operating Life	2,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

CIRCUIT



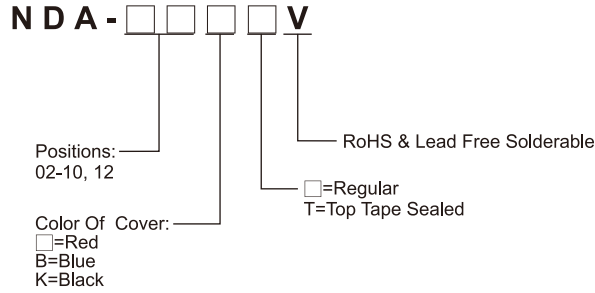
PACKAGE

<Tube>

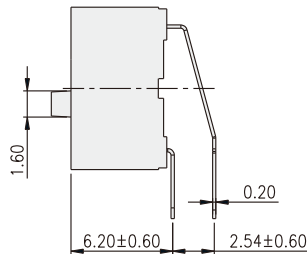
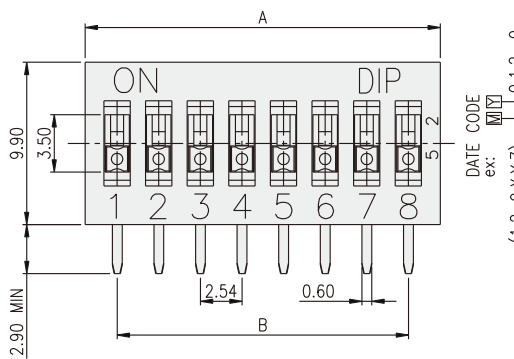
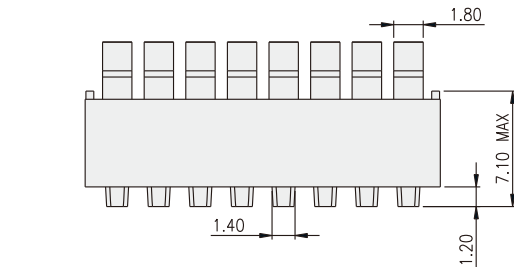
NDA-02: 73pcs	NDA-02T: 70 pcs
NDA-03: 52pcs	NDA-03T: 50 pcs
NDA-04: 40pcs	NDA-04T: 39 pcs
NDA-05: 33pcs	NDA-05T: 32 pcs
NDA-06: 28pcs	NDA-06T: 28 pcs
NDA-07: 24pcs	NDA-07T: 24 pcs
NDA-08: 21pcs	NDA-08T: 21 pcs
NDA-09: 19pcs	NDA-09T: 19 pcs
NDA-10: 17pcs	NDA-10T: 17 pcs
NDA-12: 14pcs	NDA-12T: 14 pcs

DIP SWITCH

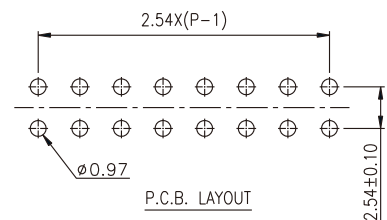
HOW TO ORDER

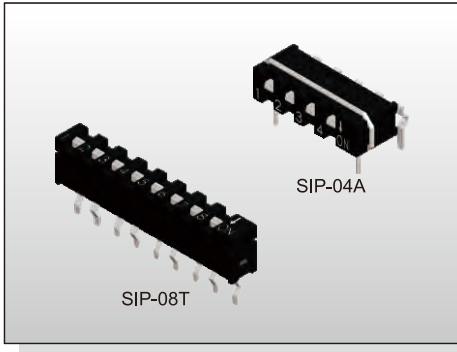


NDA



PART NO.	NO. OF POS.	DIM.A	DIM.B
NDA-02	2	6.44	2.54
NDA-03	3	8.98	5.08
NDA-04	4	11.52	7.62
NDA-05	5	14.06	10.16
NDA-06	6	16.60	12.70
NDA-07	7	19.14	15.24
NDA-08	8	21.68	17.78
NDA-09	9	24.22	20.32
NDA-10	10	26.76	22.86
NDA-12	12	31.84	27.94





FEATURES

- ※Single In-line Packaging saves PCB space
- ※Available in vertical or right angle models

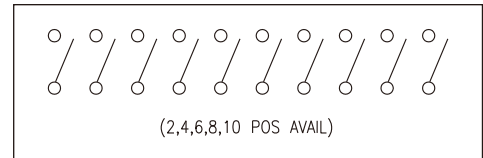
APPLICATION

- ※Industrial control
- ※Computers and peripherals
- ※Variety of function controls

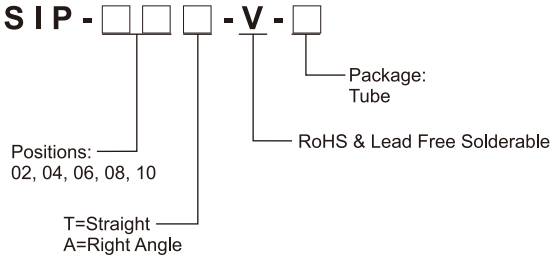
SPECIFICATION

Contact Rating	10mA, 5V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	800gf max.
Operating Life	500 cycles
Operating Temp.	-30°C ~ +80°C
Storage Temp.	-30°C ~ +80°C

CIRCUIT



HOW TO ORDER

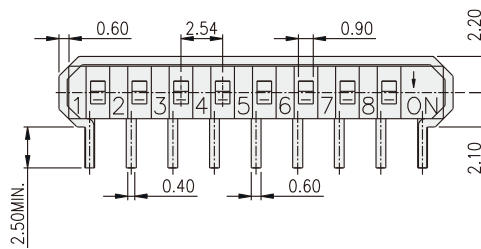


PACKAGE

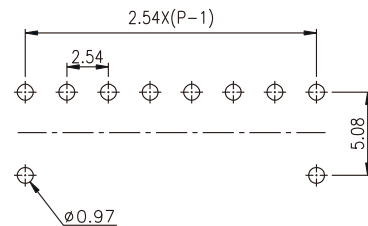
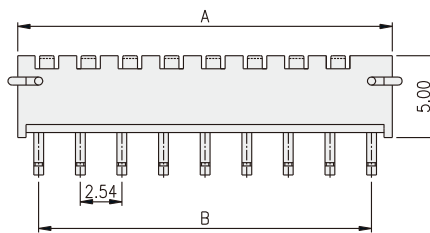
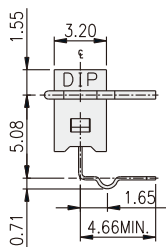
<Tube>

SIP-02A: 56 pcs	SIP-02T: 61 pcs
SIP-04A: 35 pcs	SIP-04T: 37 pcs
SIP-06A: 25 pcs	SIP-06T: 26 pcs
SIP-08A: 20 pcs	SIP-08T: 20 pcs
SIP-10A: 16 pcs	SIP-10T: 17 pcs

SIP-A



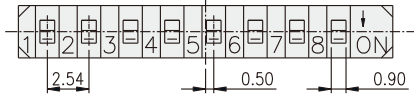
PART NO.	NO.OF POS.	DIM.A	DIM.B
SIP-02	2	7.62	5.08
SIP-04	4	12.70	10.16
SIP-06	6	17.78	15.24
SIP-08	8	22.86	20.32
SIP-10	10	27.94	25.40



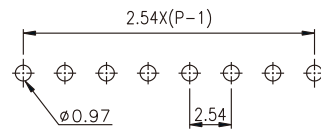
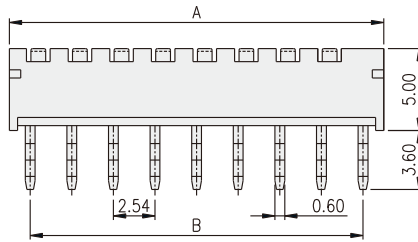
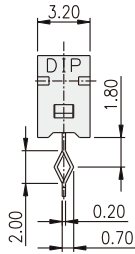
P.C.B. LAYOUT

DIP SWITCH

SIP-T

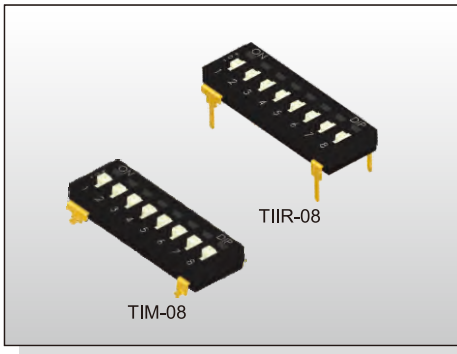


PART NO.	NO.OF POS.	DIM.A	DIM.B
SIP-02	2	7.62	5.08
SIP-04	4	12.70	10.16
SIP-06	6	17.78	15.24
SIP-08	8	22.86	20.32
SIP-10	10	27.94	25.40



P.C.B. LAYOUT

DIP SWITCH



FEATURES

- ※3-state setting
- ※Low profile for space saving

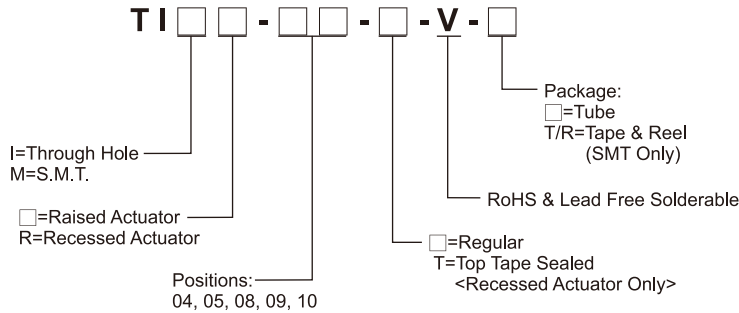
APPLICATION

- ※Remote control
- ※Home automation
- ※Telecommunication

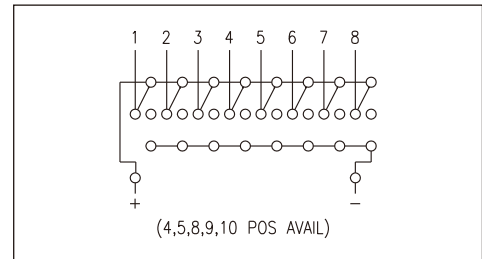
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	0.8mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



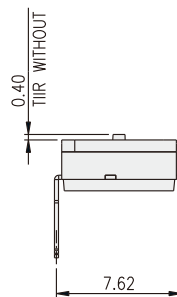
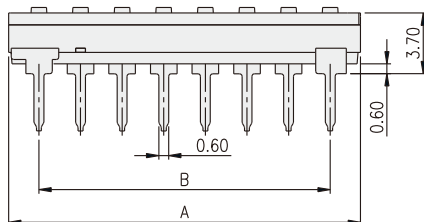
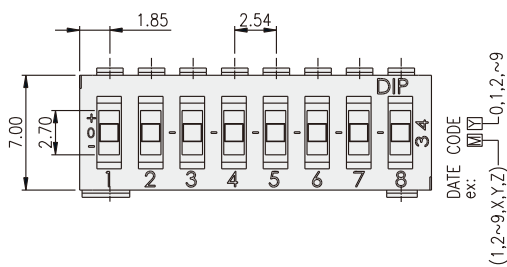
CIRCUIT



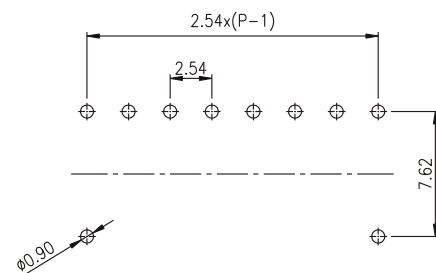
PACKAGE

- <Tube>
- TII(R)/TIM(R)-04: 41 pcs
 - TII(R)/TIM(R)-05: 34 pcs
 - TII(R)/TIM(R)-08: 22 pcs
 - TII(R)/TIM(R)-09: 20 pcs
 - TII(R)/TIM(R)-10: 18 pcs
- <Tape & Reel>
- TIM(R): 900 pcs

TII(R)



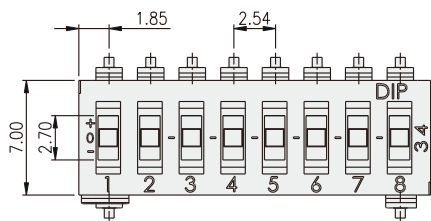
PART NO.	NO. OF POS.	DIM.A	DIM.B
TII(R)-04	4	11.32	7.62
TII(R)-05	5	13.86	10.16
TII(R)-08	8	21.48	17.78
TII(R)-09	9	24.02	20.32
TII(R)-10	10	26.56	22.86



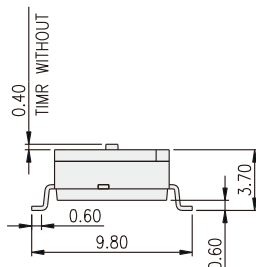
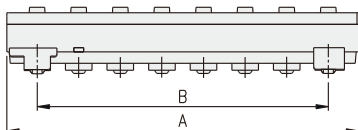
P.C.B. LAYOUT

TIM(R)

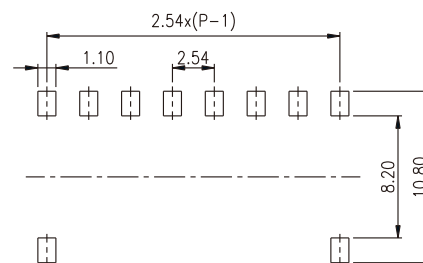
DIP SWITCH



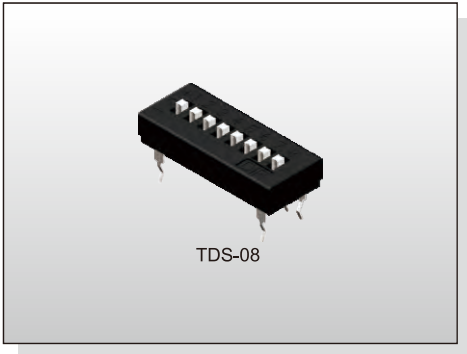
DATE CODE
 ex: MYY
 (1,2~9,X,Y,Z) L0,1,2~9



PART NO.	NO.OF POS.	DIM.A	DIM.B
TIM(R)-04	4	11.32	7.62
TIM(R)-05	5	13.86	10.16
TIM(R)-08	8	21.48	17.78
TIM(R)-09	9	24.02	20.32
TIM(R)-10	10	26.56	22.86



P.C.B. LAYOUT



FEATURES

※3-state setting

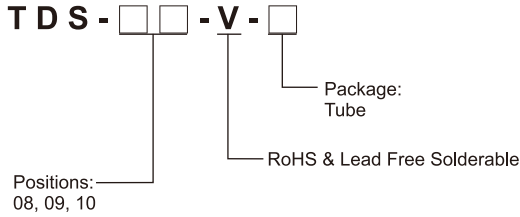
APPLICATION

- ※Remote control
- ※Home automation
- ※Telecommunication

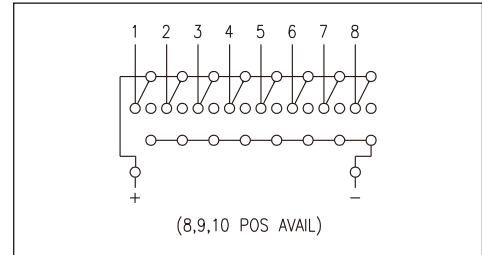
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	1,000gf max.
Travel	1mm
Operating Life	2,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



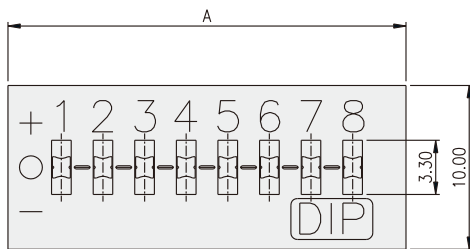
CIRCUIT



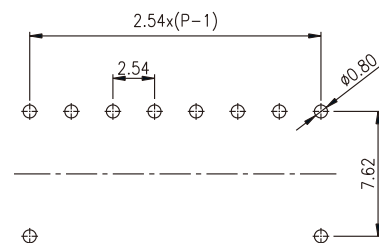
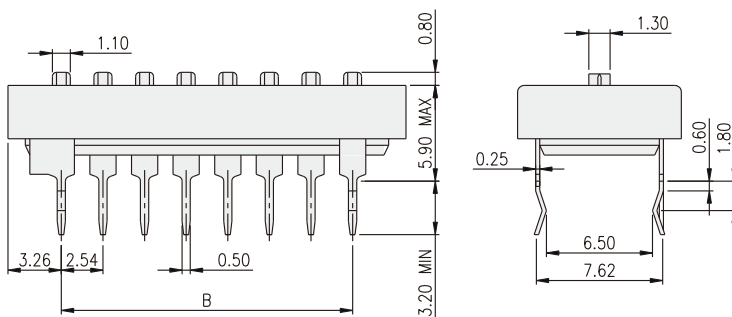
PACKAGE

<Tube>
TDS-08: 19 pcs
TDS-09: 17 pcs
TDS-10: 16 pcs

TDS

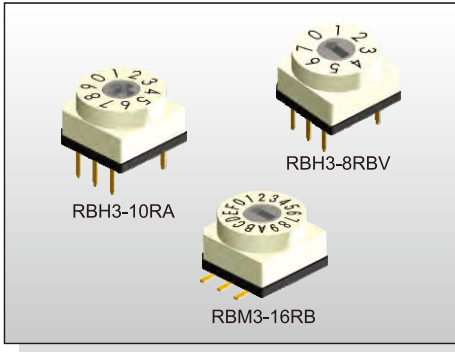


PART NO.	NO. OF POS.	DIM.A	DIM.B
TDS-08	8	24.30	17.78
TDS-09	9	26.84	20.32
TDS-10	10	29.38	22.86



P.C.B. LAYOUT

DIP SWITCH



FEATURES

- ※BCD, Hexadecimal
- ※Cross-head& Flat-head Actuator
- ※Washable

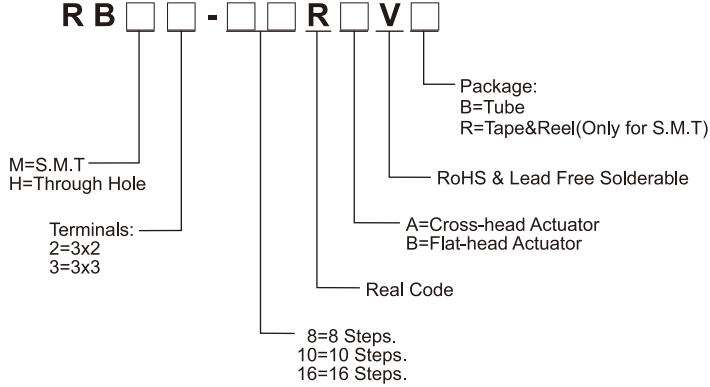
APPLICATION

- ※Steering system
- ※White goods
- ※Wireless microphone

SPECIFICATION

Contact Rating	150mA, 24V DC
Contact Resistance	80mΩ max.
Insulation Resistance	100MΩ min. 250V DC
Dielectric Strength	250V AC/1 minute
Operating Force	400gf·cm max.
Operating Life	10,000 steps
Operating Temp.	-60°C ~ +125°C
Storage Temp.	-60°C ~ +125°C

HOW TO ORDER

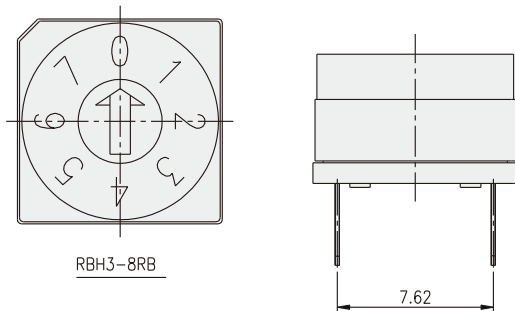
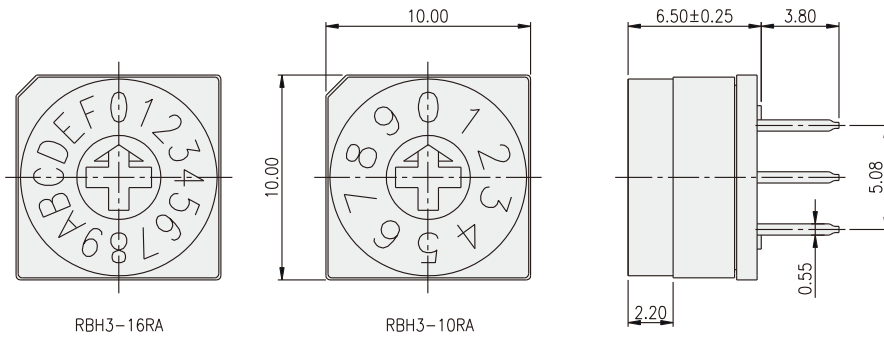


PACKAGE

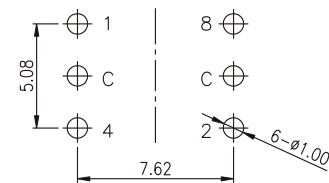
<Tube>
47 pcs
<Tape & Reel>
RBM: 450 pcs.

ROTARY CODED SWITCH

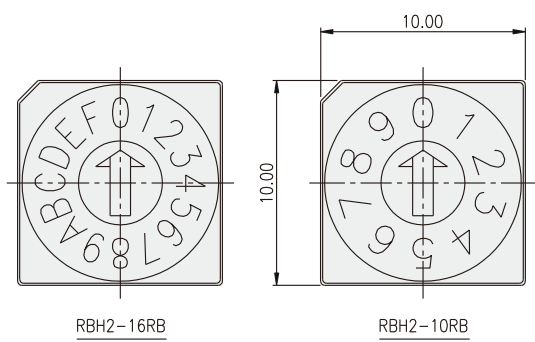
RBH3-□□RA



TYPE	POSITION	CODE			
		1	2	4	8
10R 08R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	●	●	○
	9	○	○	●	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○

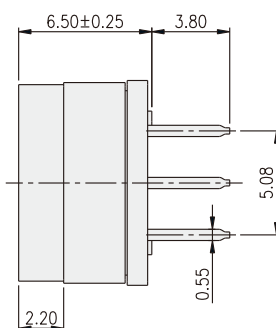


RBH2-□□RB



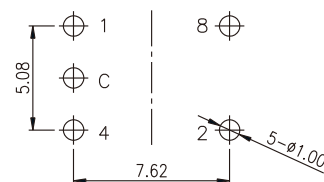
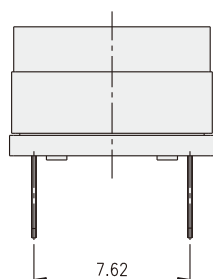
RBH2-16RB

RBH2-10RB



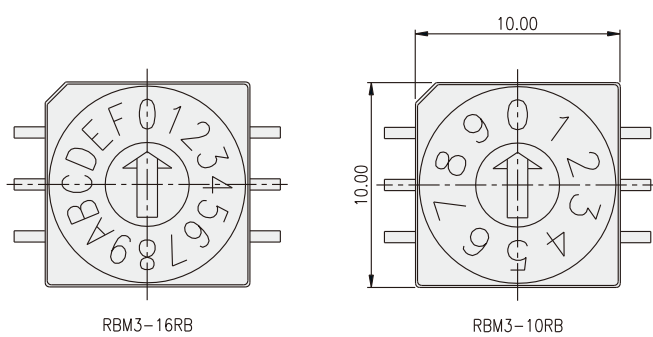
○ ON
● OFF

TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	○	●	●
	2	●	○	○	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	○	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	○	●	●	○
	9	●	●	●	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



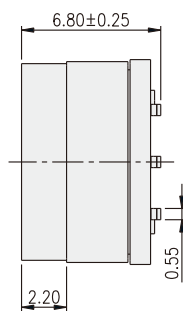
P.C.B. LAYOUT

RBM3-□□RB



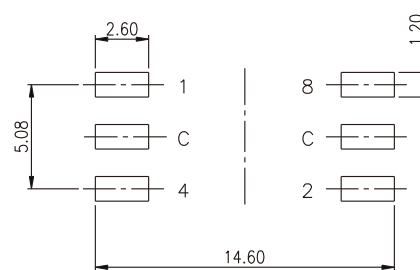
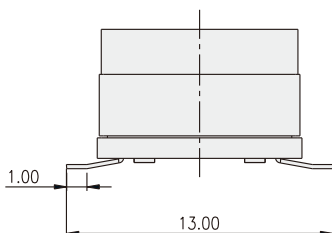
RBM3-16RB

RBM3-10RB



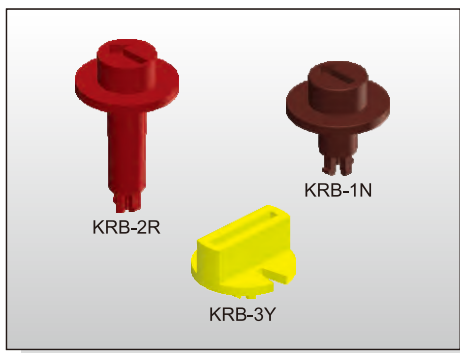
○ ON
● OFF

TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	○	○	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	○	●	●	○
	9	○	●	●	○
16R	A	○	○	●	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



P.C.B. LAYOUT

ROTARY CODED SWITCH



HOW TO ORDER

KRB -

Cap Color:
 K=Black
 N=Brown
 B=Blue
 Ge=Grey
 R=Red
 Y=Yellow

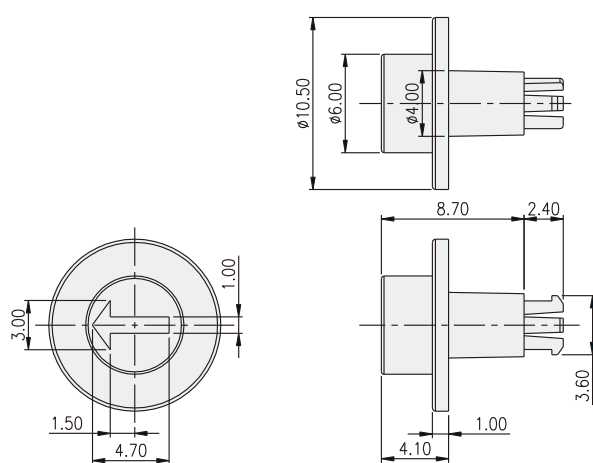
Knob Type:
 1= Short Spindle
 2= Long Spindle
 3=Segment Wheel

PACKAGE

<Bag>
 KRB-1, KRB-2: 500 pcs.
 KRB-3: 1000 pcs.

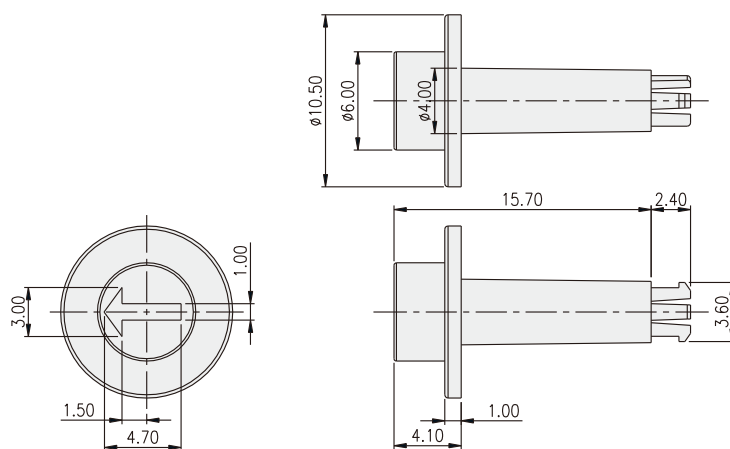
ROTARY CODED SWITCH

KRB-1



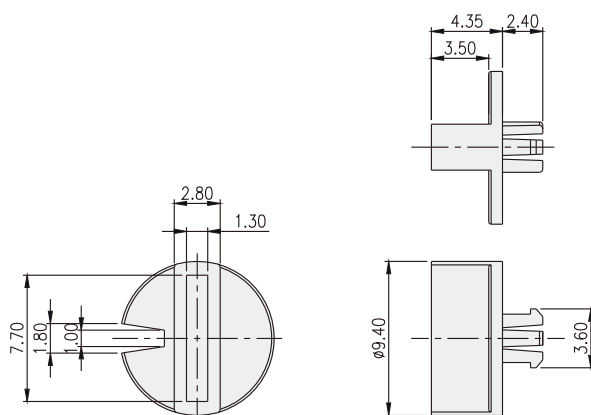
PART NO.	COLOR
KRB-1K	BLACK
KRB-1N	BROWN
KRB-1R	RED
KRB-1B	BLUE
KRB-1Y	YELLOW
KRB-1Ge	GREY

KRB-2



PART NO.	COLOR
KRB-2K	BLACK
KRB-2N	BROWN
KRB-2R	RED
KRB-2B	BLUE
KRB-2Y	YELLOW
KRB-2Ge	GREY

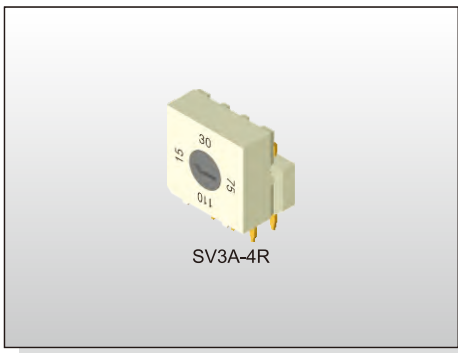
KRB-3



PART NO.	COLOR
KRB-3K	BLACK
KRB-3N	BROWN
KRB-3R	RED
KRB-3B	BLUE
KRB-3Y	YELLOW
KRB-3Ge	GREY

ROTARY CODED SWITCH
SV3A-4 SERIES

10x10mm
Selector Rotary Type



FEATURES

- ※ Through hole pin type
- ※ Flush Actuator
- ※ 20,000 steps mechanical Life

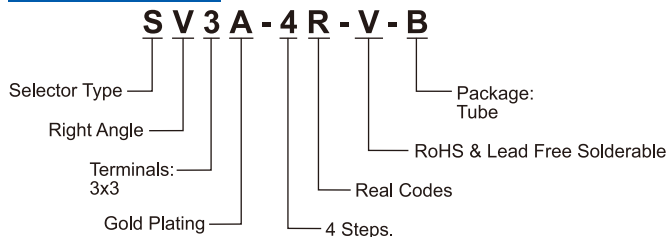
APPLICATION

- ※ Building & home automation
- ※ White goods
- ※ Electronic instrument

SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 250V DC
Dielectric Strength	250V AC/1 minute
Operating Force	200gf·cm max.
Operating Life	20,000 steps
Operating Temp.	-25°C ~ +80°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

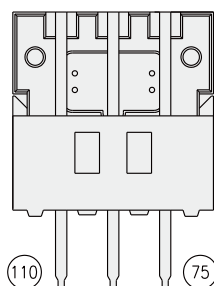
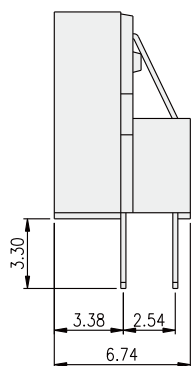
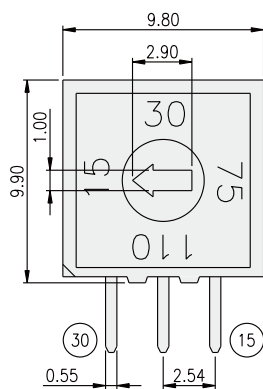


PACKAGE

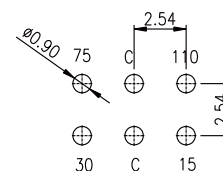
<Tube>
48 pcs

ROTARY CODED SWITCH

SV3A-4



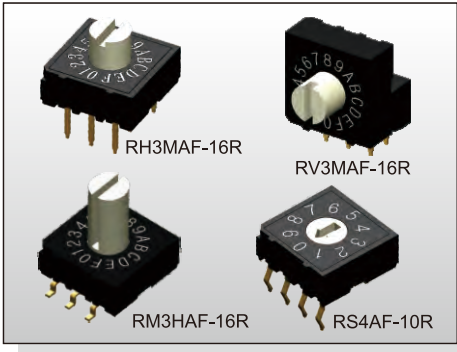
		CODE			
POSITION		15	30	75	110
15	○ ON	○	●	●	●
30	● OFF	●	○	●	●
75		●	●	○	●
110		●	●	●	○



P.C.B. LAYOUT

ROTARY CODED SWITCH R(H)(V)(M)(S) SERIES

10x10mm
Rotary Type



FEATURES

- ※Vertical and right angel type
- ※Flush & raised actuator
- ※BCD; Hexadecimal

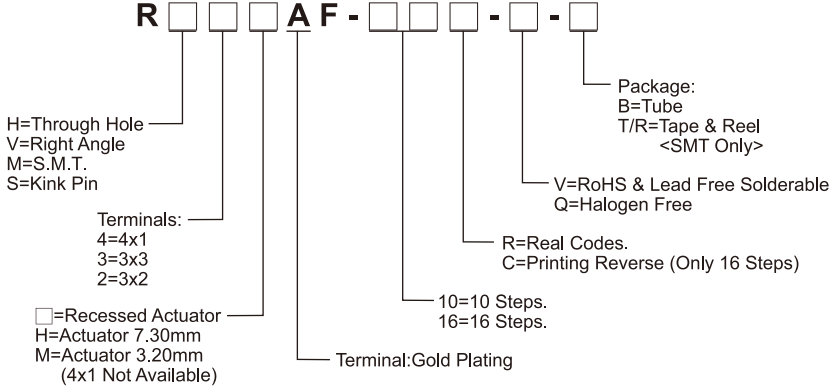
APPLICATION

- ※Building & home automation
- ※White goods
- ※Electronic instrument

SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 250V DC
Dielectric Strength	250V AC/1 minute
Operating Force	400gf·cm max.
Operating Life	20,000 Steps
Operating Temp.	-25°C ~ +80°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

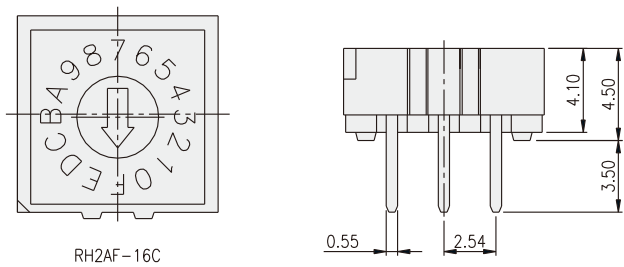
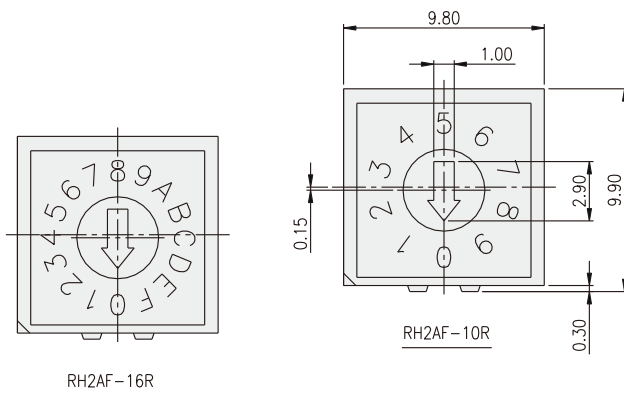


PACKAGE

- <Tube>
48 pcs
- <Tape & Reel>
750 pcs (recessed actuator)
500 pcs (3.2mm actuator)
250 pcs (7.3mm actuator)

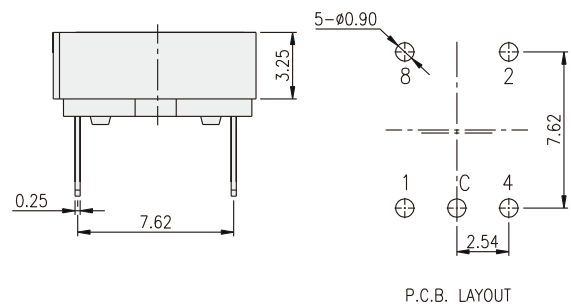
ROTARY CODED SWITCH

RH2

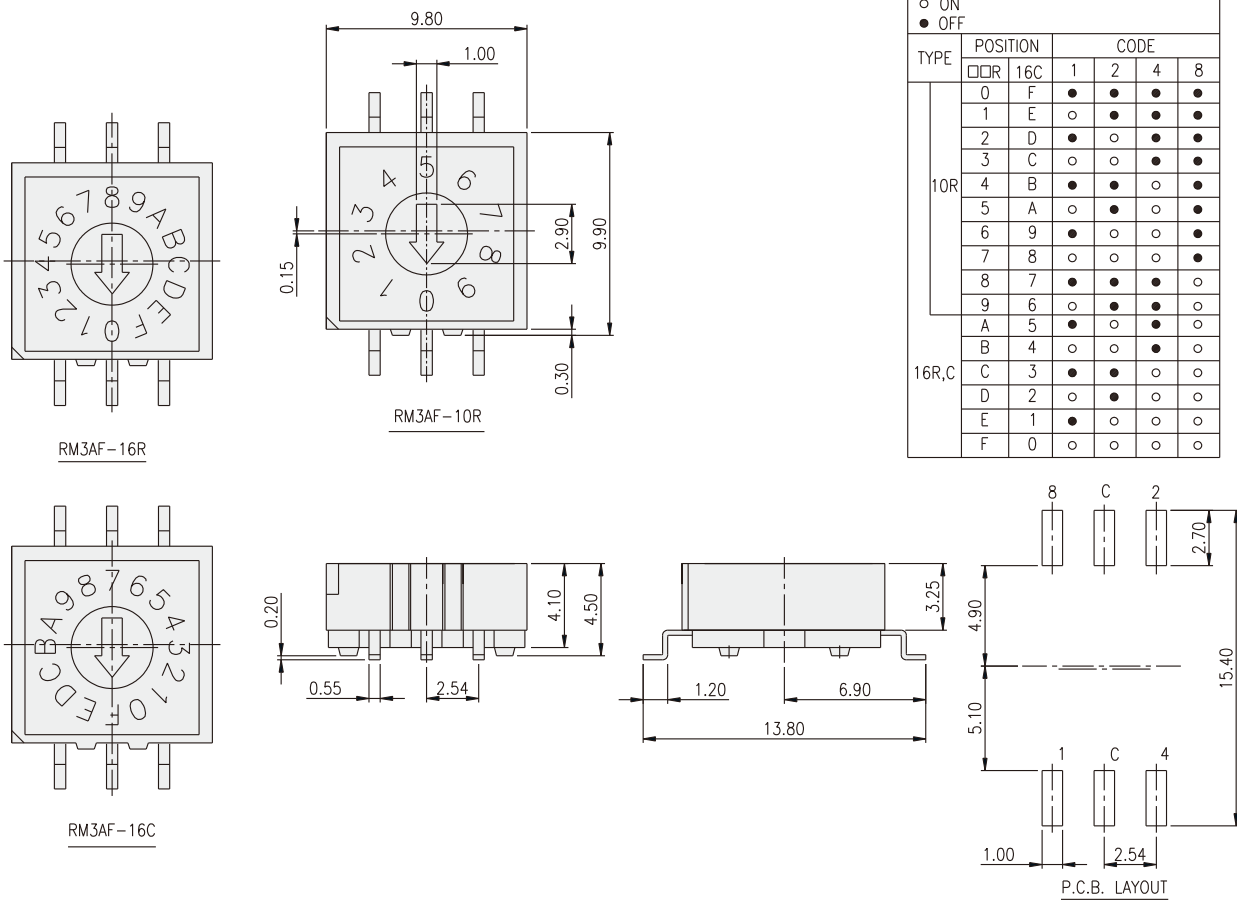


TYPE	POSITION	CODE				
		16C	1	2	4	8
10R	0	F	●	●	●	●
	1	E	○	●	●	●
	2	D	●	○	●	●
	3	C	○	○	●	●
	4	B	○	●	○	●
	5	A	○	●	○	●
	6	9	●	○	○	●
	7	8	○	○	○	●
	8	7	●	●	●	○
	9	6	○	●	●	○
16R,C	A	5	○	○	●	○
	B	4	○	○	○	○
	C	3	●	●	○	○
	D	2	○	●	○	○
	E	1	●	○	○	○
	F	0	○	○	○	○

○ ON
● OFF

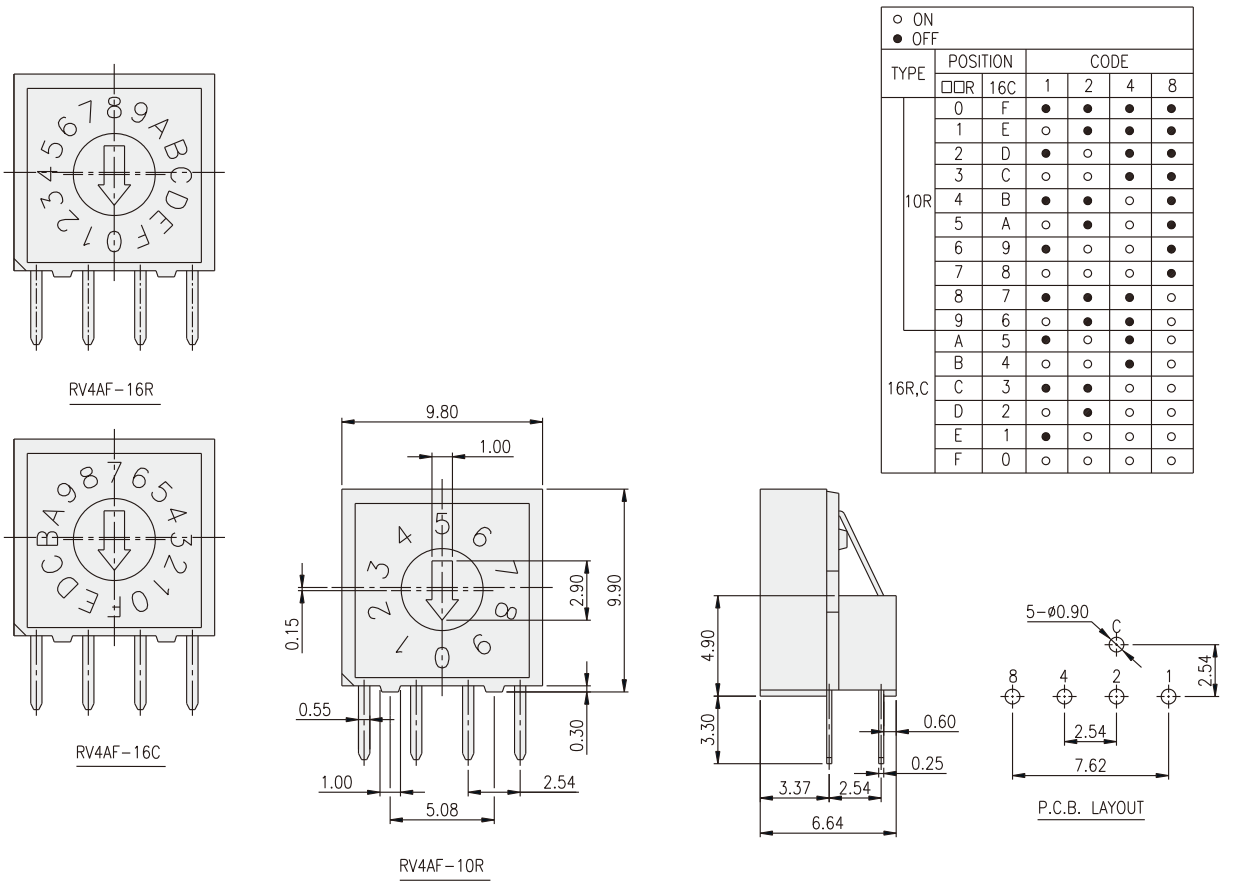


RM3



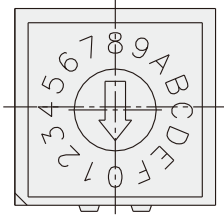
ROTARY CODED SWITCH

RV4

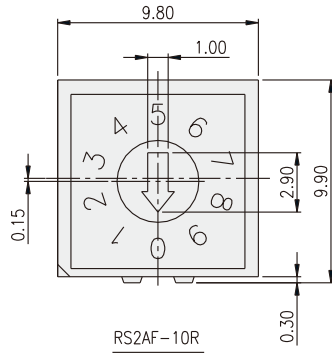


RS2

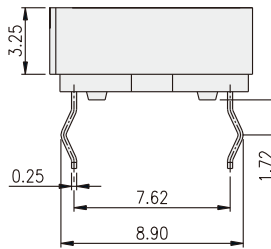
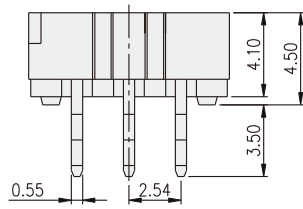
ROTARY CODED SWITCH



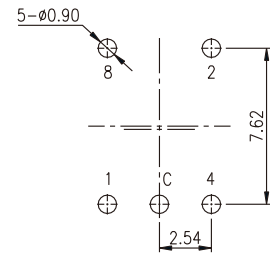
RS2AF-16R



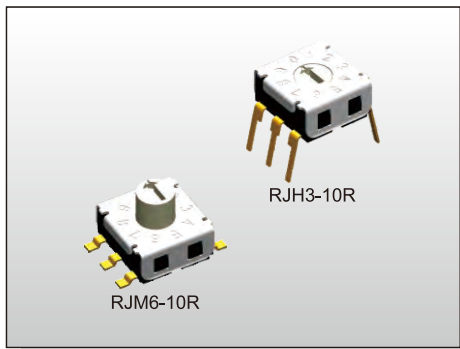
RS2AF-10R



TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	●	●	○
	9	○	○	●	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	○	○	○
	E	●	○	○	○
	F	○	○	○	○



P.C.B. LAYOUT



FEATURES

- ※Center common terminal pin
- ※Through hole or SMT
- ※Flush & raised actuator

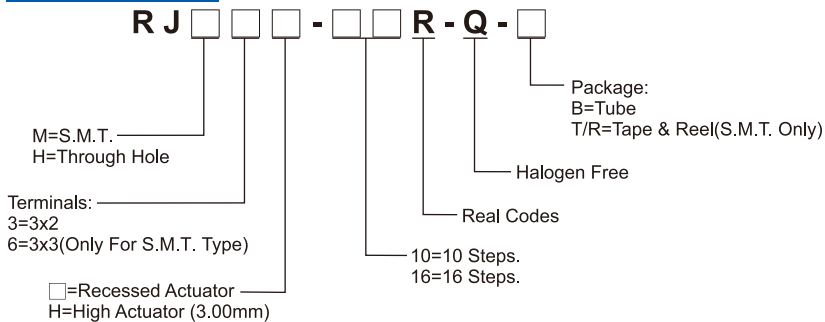
APPLICATION

- ※Industrial equipment
- ※Power supply
- ※Safety relay

SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	200gf·cm max.
Operating Life	20, 000 Steps
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

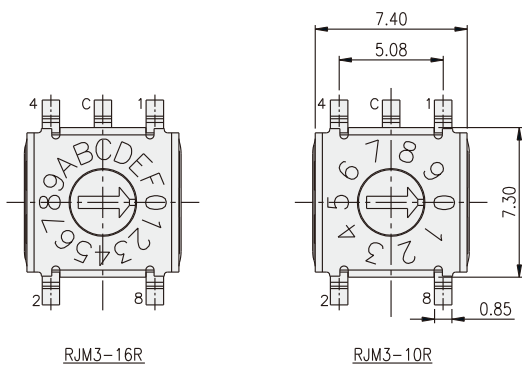


PACKAGE

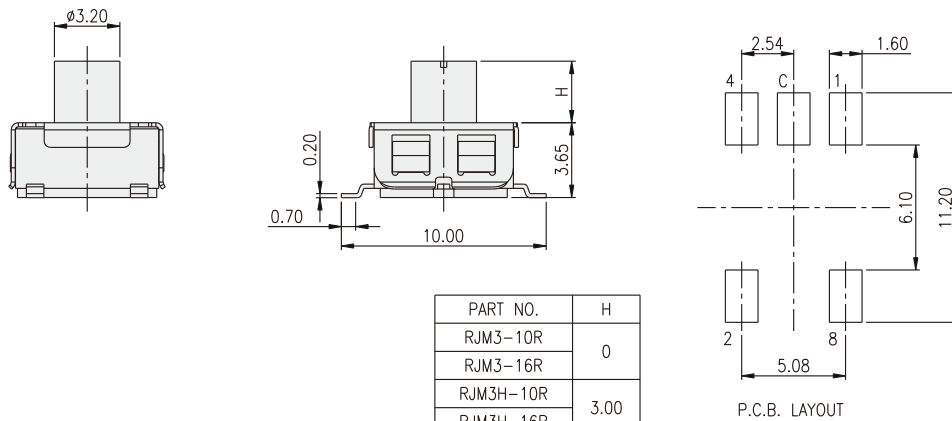
<Tube>
62 pcs
<Tape & Reel>
RJM[]: 1200 pcs
RJM[]H: 650 pcs

ROTARY CODED SWITCH

RJM3

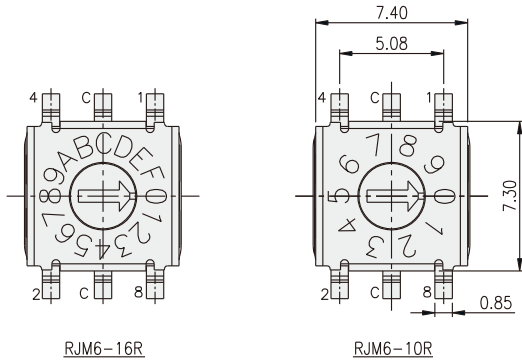


TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	○	●	●	○
	9	○	●	●	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	○	●	○	○
	D	○	○	○	○
	E	●	○	○	○
	F	○	○	○	○



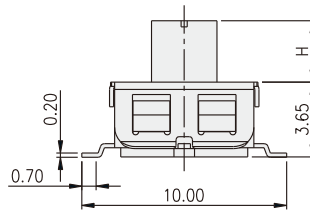
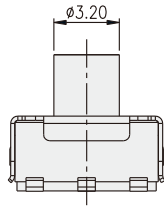
PART NO.	H
RJM3-10R	0
RJM3-16R	0
RJM3H-10R	3.00
RJM3H-16R	3.00

RJM6



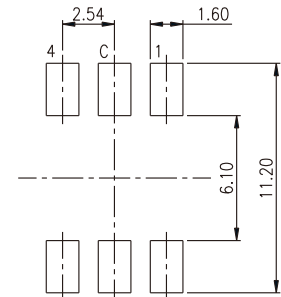
RJM6-16R

RJM6-10R



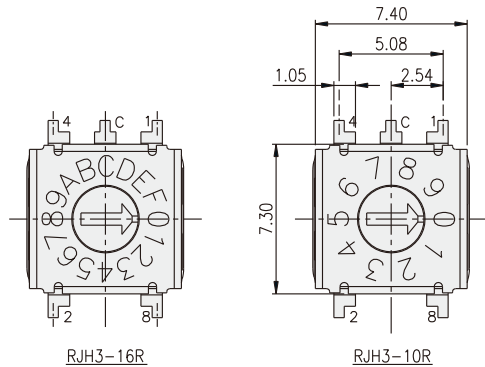
PART NO.	H
RJM6-10R	0
RJM6-16R	0
RJM6H-10R	3.00
RJM6H-16R	3.00

TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	○	●	○
	9	○	●	●	○
16R	A	●	○	○	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



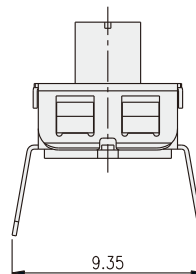
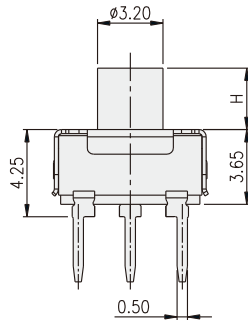
P.C.B. LAYOUT

RJH3



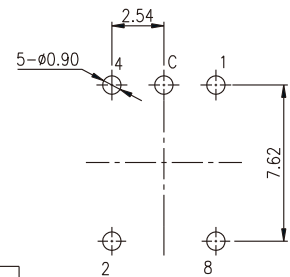
RJH3-16R

RJH3-10R

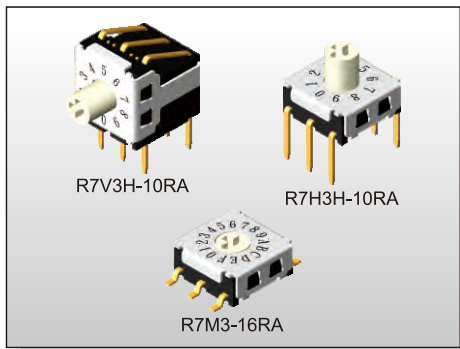


PART NO.	H
RJH3-10R	0
RJH3-16R	0
RJH3H-10R	3.00
RJH3H-16R	3.00

TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	○	●	○
	9	○	●	●	○
16R	A	●	○	○	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



P.C.B. LAYOUT



FEATURES

- ※Vertical and right angle types
- ※Miniature size with stainless steel cover
- ※Low profile (3.0mm)

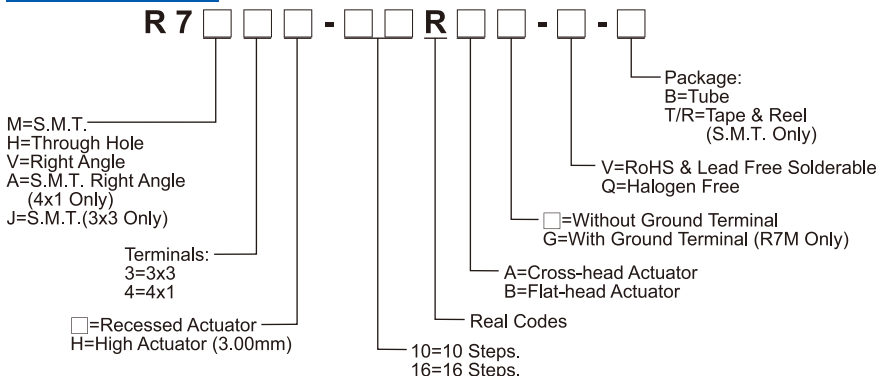
APPLICATION

- ※Instrumentation
- ※Industrial automation
- ※Building & Home automation

SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	200gf-cm max.
Operating Life	10, 000 Steps
Operating Temp.	-30°C ~ +80°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



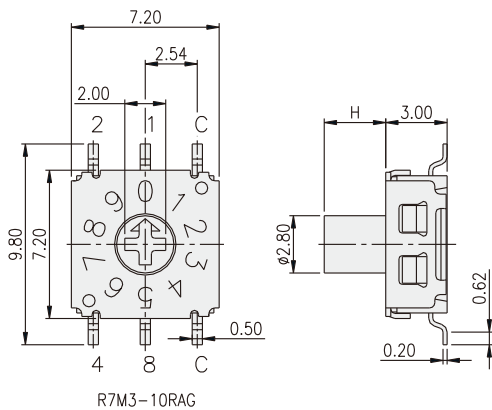
PACKAGE

<Tube>
R7H, R7M: 63 pcs
R7V: 60 pcs

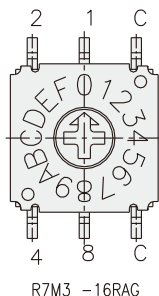
<Tape & Reel>
R7M*: 1450 pcs
R7M*H: 850 pcs
R7A: 750 pcs
R7A4H: 750 pcs
R7J: 1450 pcs

ROTARY CODED SWITCH

R7M3-10RAG



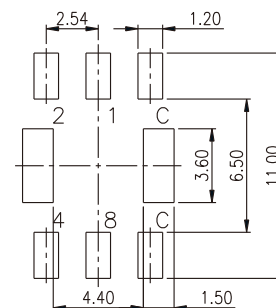
R7M3-10RAG



R7M3-16RAG

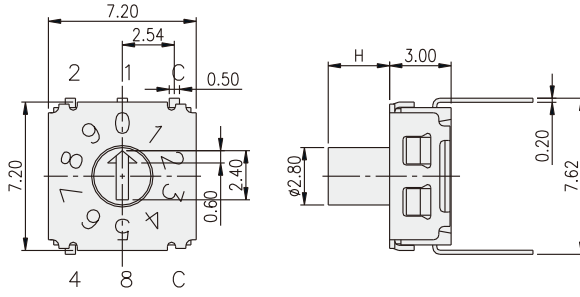
		○ ON ● OFF			
TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	●	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	○	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	●	●	○
	9	○	○	●	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	○	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○

PART NO.	H
R7M3-10RAG	0
R7M3-16RAG	0
R7M3H-10RAG	3.00
R7M3H-16RAG	3.00

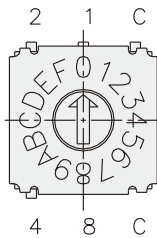


P.C.B. LAYOUT

R7H3



R7H3-10RB

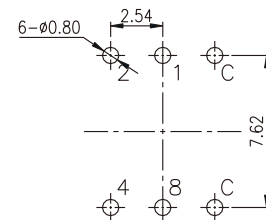


R7H3-16RB

PART NO.	H
R7H3-10RB	0
R7H3-16RB	0
R7H3H-10RB	3.00
R7H3H-16RB	3.00

○ ON
● OFF

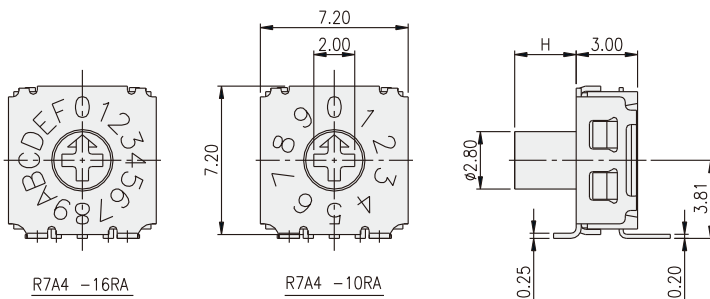
TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	○	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	○	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	●	●	○
	9	○	○	○	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	○	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



P.C.B. LAYOUT

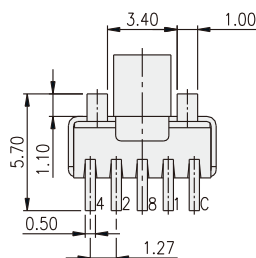
ROTARY CODED SWITCH

R7A4



R7A4 -16RA

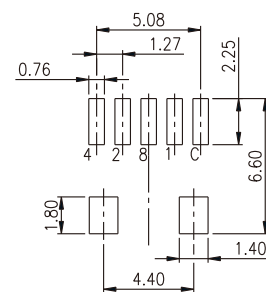
R7A4 -10RA



PART NO.	H
R7A4-10RA	0
R7A4-16RA	0
R7A4H-10RA	3.00
R7A4H-16RA	3.00

○ ON
● OFF

TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	○	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	●	○	●
	5	○	○	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	●	●	○
	9	○	○	○	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	○	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



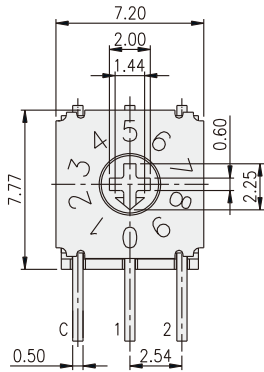
P.C.B. LAYOUT

ROTARY CODED SWITCH
R7 SERIES

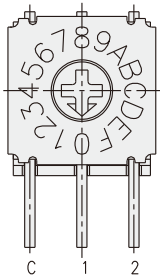
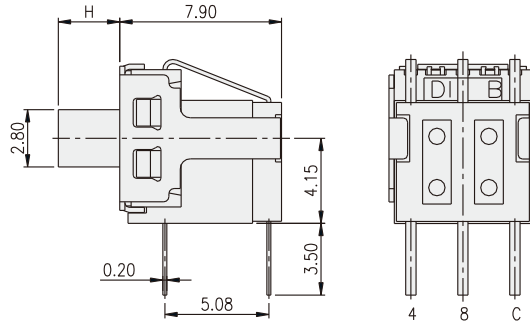
7x7mm
Rotary Type



R7V3



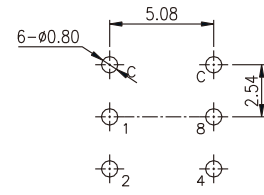
R7V3 -10RA



R7V3 -16RA

PART NO.	H
R7V3-10RA	0
R7V3-16RA	0
R7V3H-10RA	3.00
R7V3H-16RA	3.00

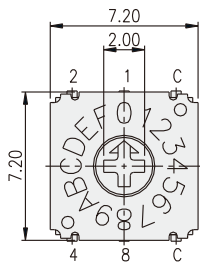
TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	○	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	○	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	○	○	○
	9	○	●	○	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	●	○	○
	E	●	○	○	○
	F	○	○	○	○



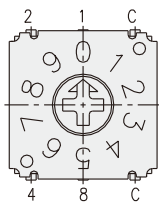
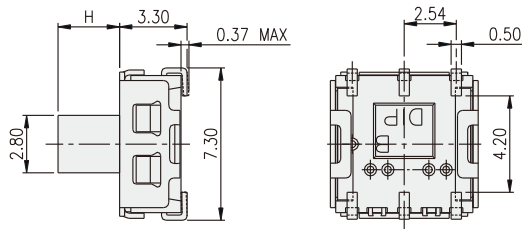
P.C.B. LAYOUT

ROTARY CODED SWITCH

R7J3



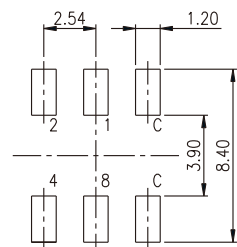
R7J3-16RA



R7J3-10RA

PART NO.	H
R7J3-10RA	0
R7J3-16RA	0
R7J3H-10RA	3.00
R7J3H-16RA	3.00

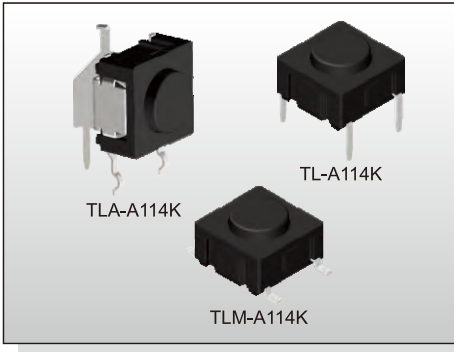
TYPE	POSITION	CODE			
		1	2	4	8
10R	0	●	●	●	●
	1	○	○	●	●
	2	●	○	●	●
	3	○	○	●	●
	4	●	○	○	●
	5	○	●	○	●
	6	●	○	○	●
	7	○	○	○	●
	8	●	○	○	○
	9	○	●	○	○
16R	A	●	○	●	○
	B	○	○	●	○
	C	●	●	○	○
	D	○	○	○	○
	E	●	○	○	○
	F	○	○	○	○



P.C.B. LAYOUT

TACT SWITCH TL(A)-A1 SERIES

10x10
High Reliability



FEATURES

- ✳ Sealed
- ✳ Long life of 10million
- ✳ Variety of actuator lengths

APPLICATION

- ✳ Music instrument
- ✳ Intercom system
- ✳ Industrial

SPECIFICATION

Contact Rating	0.5~50mA, 24V DC
Contact Resistance	30mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	300±75gf
Travel	1mm
Operating Life	10,000, 000 cycles
Operating Temp.	-40°C ~ +160°C
Storage Temp.	-40°C ~ +160°C

HOW TO ORDER

TL □ - A 1 1 4 K - Q - □

Solder Type:
□=Through Hole
M=S.M.T.
A=Right Angle

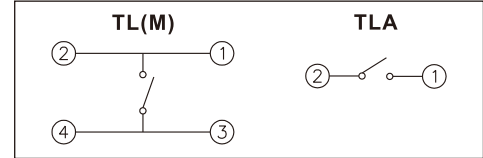
Package:
B=Tube
(For Through Hole Type)
T/R=Tape & Reel(For S.M.T. Type)

Halogen Free

Button Color:
Black

Operating Force:
300gf

CIRCUIT

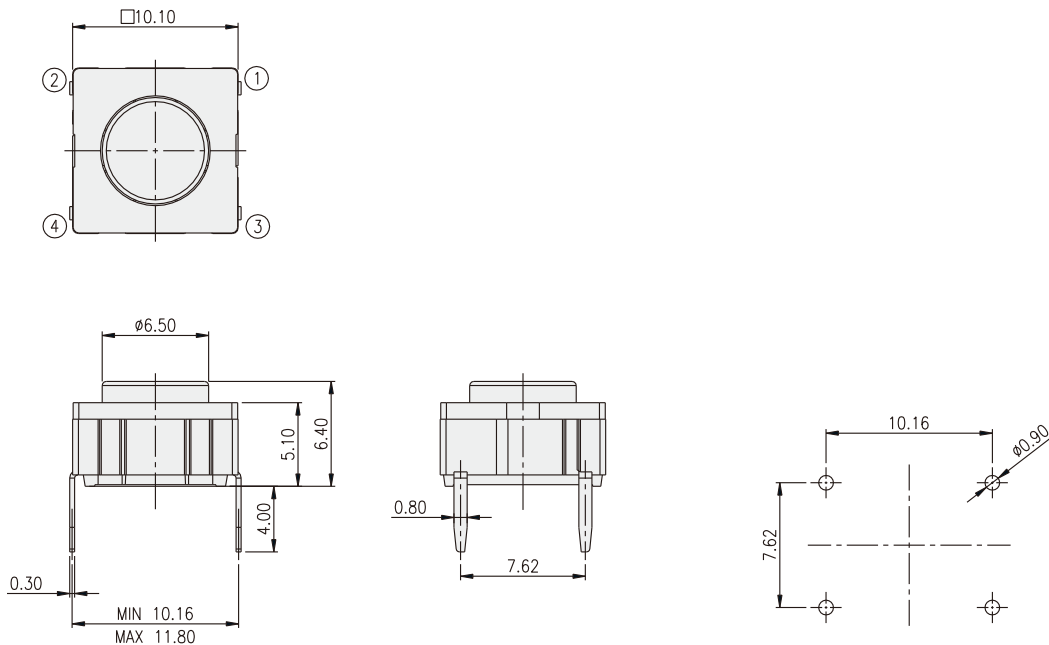


PACKAGE

<Tube>
TL(A): 45 pcs
<Tape & Reel>
TLM: 650 pcs

TACT SWITCH

TL-A114K



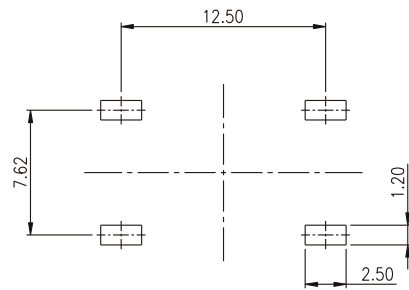
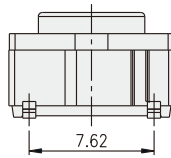
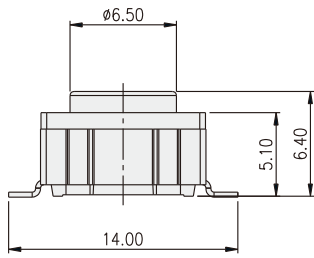
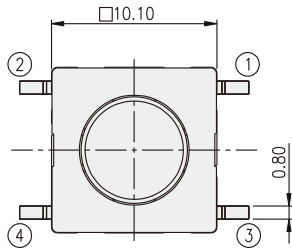
P.C.B. LAYOUT

TACT SWITCH
TL()-A1 SERIES

10x10
High Reliability



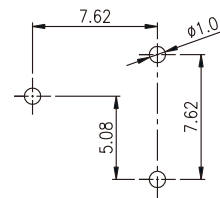
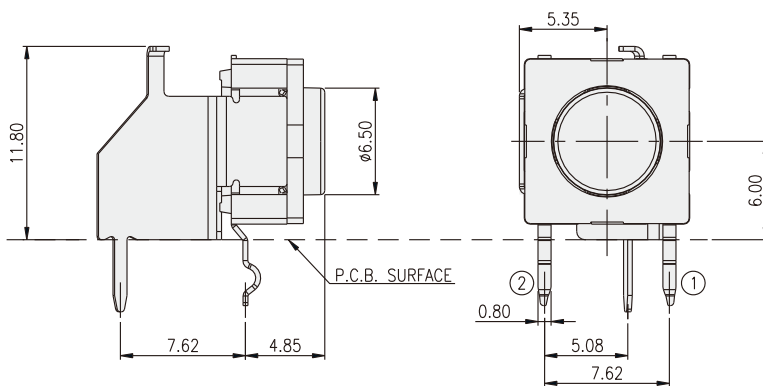
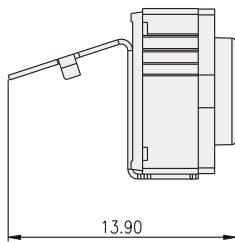
TLM-A114K



P.C.B. LAYOUT

TACT SWITCH

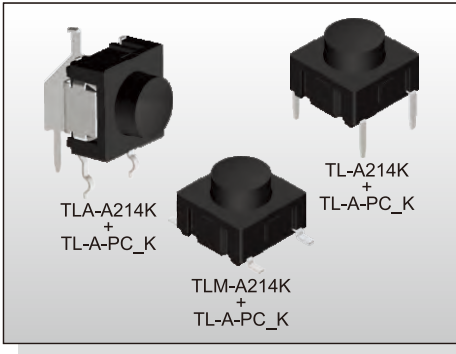
TLA-A114K



P.C.B. LAYOUT

TACT SWITCH TL(A)-A2 SERIES

10x10
High Reliability



FEATURES

- ✘ Sealed
- ✘ Long life of 10million
- ✘ Variety of actuator lengths

APPLICATION

- ✘ Music instrument
- ✘ Intercom system
- ✘ Industrial

SPECIFICATION

Contact Rating	0.5~50mA, 24V DC
Contact Resistance	30mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	300±75gf
Travel	1mm
Operating Life	10,000, 000 cycles
Operating Temp.	-40°C ~ +160°C
Storage Temp.	-40°C ~ +160°C

HOW TO ORDER

TL □ - A 2 1 4 K - Q - □ + TL - A - PC □ K

□=Through Hole
M=S.M.T.
A=Right Angle

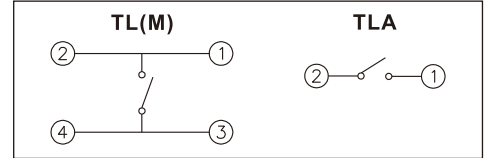
Package:
B=Tube
(For Through Hole Type)
T/R=Tape & Reel(For S.M.T. Type)

Halogen Free

Button Color:
Black

Operating Force:
300gf

CIRCUIT



PACKAGE

<Tube>

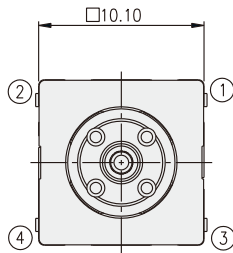
TL(A): 45 pcs

<Tape & Reel>

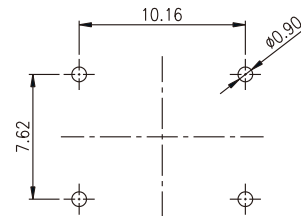
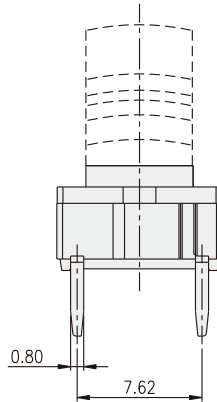
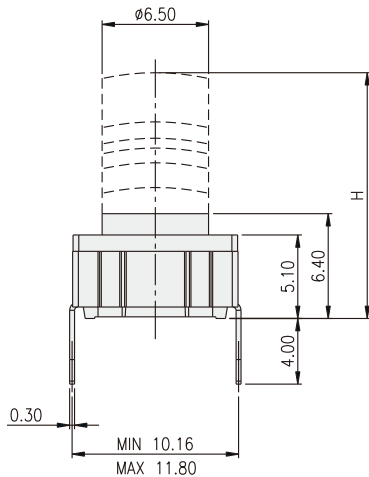
TLM: 650 pcs

TACT SWITCH

TL-A214K+TL-A-PC□K

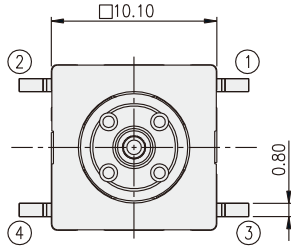


PART NO.	H
TL-A214K-Q-B+TL-A-PC1K	8.00
TL-A214K-Q-B+TL-A-PC2K	9.50
TL-A214K-Q-B+TL-A-PC3K	10.40
TL-A214K-Q-B+TL-A-PC4K	11.00
TL-A214K-Q-B+TL-A-PC5K	12.00
TL-A214K-Q-B+TL-A-PC6K	15.00

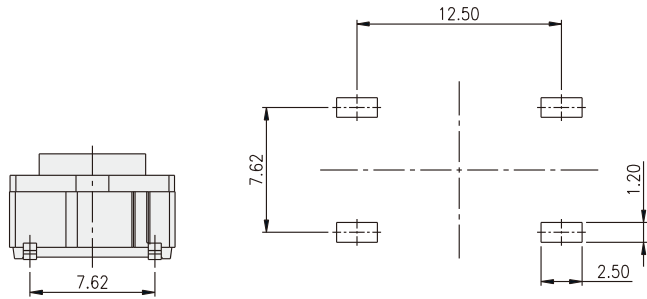
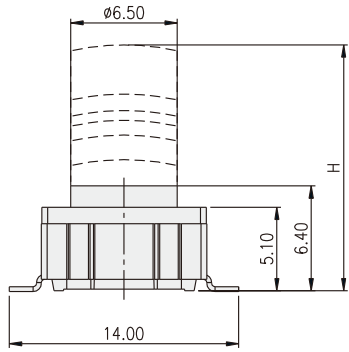


P.C.B. LAYOUT

TLM-A214K+TL-A-PC□K

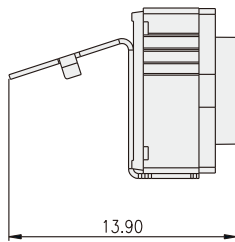


PART NO.	H
TLM-A214K-Q-B+TL-A-PC1K	8.00
TLM-A214K-Q-B+TL-A-PC2K	9.50
TLM-A214K-Q-B+TL-A-PC3K	10.40
TLM-A214K-Q-B+TL-A-PC4K	11.00
TLM-A214K-Q-B+TL-A-PC5K	12.00
TLM-A214K-Q-B+TL-A-PC6K	15.00

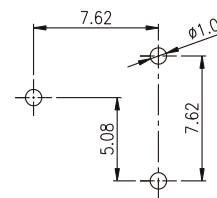
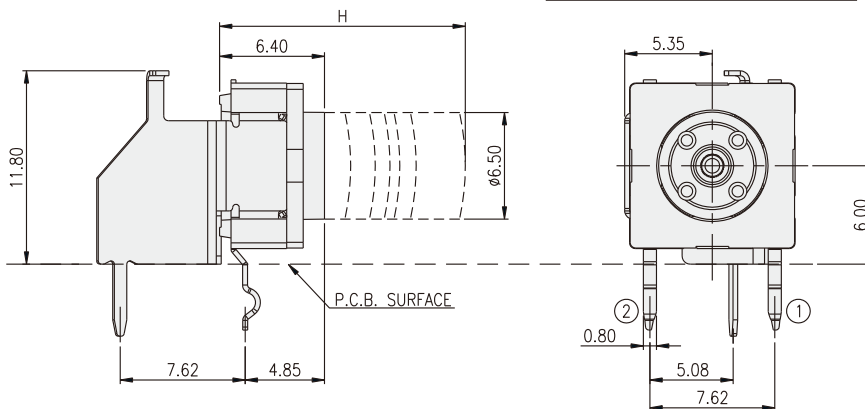


P.C.B. LAYOUT

TLA-A214K+TL-A-PC□K



PART NO.	H
TLA-A214K-Q-B+TL-A-PC1K	8.00
TLA-A214K-Q-B+TL-A-PC2K	9.50
TLA-A214K-Q-B+TL-A-PC3K	10.40
TLA-A214K-Q-B+TL-A-PC4K	11.00
TLA-A214K-Q-B+TL-A-PC5K	12.00
TLA-A214K-Q-B+TL-A-PC6K	15.00

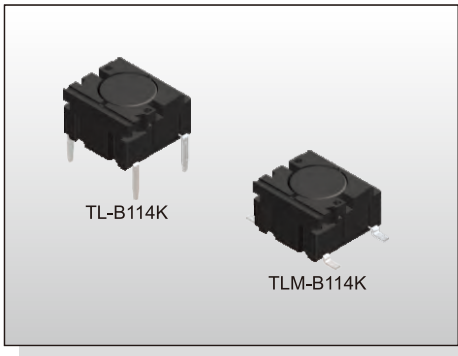


P.C.B. LAYOUT

TACT SWITCH

TACT SWITCH
TL()-B1 SERIES

10x10
High Reliability



FEATURES

- ✘ Sealed
- ✘ Long life of 10million
- ✘ Variety of actuator lengths

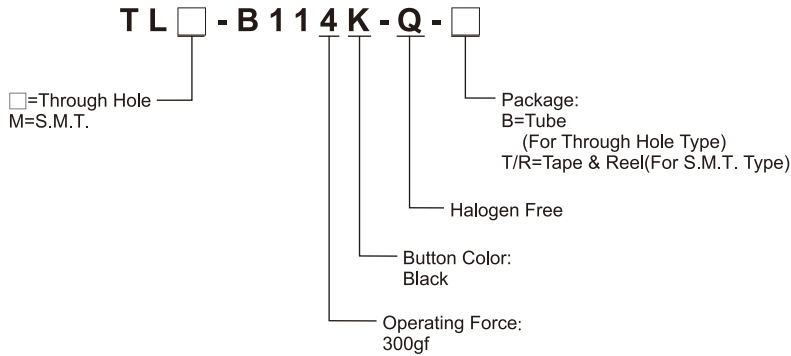
APPLICATION

- ✘ Music instrument
- ✘ Intercom system
- ✘ Industrial

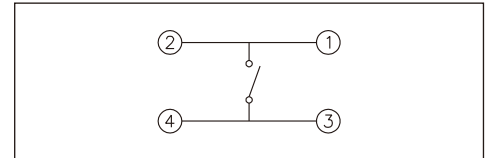
SPECIFICATION

Contact Rating	0.5~50mA, 24V DC
Contact Resistance	30mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	300±75gf
Travel	1mm
Operating Life	10,000, 000 cycles
Operating Temp.	-40°C ~ +160°C
Storage Temp.	-40°C ~ +160°C

HOW TO ORDER



CIRCUIT

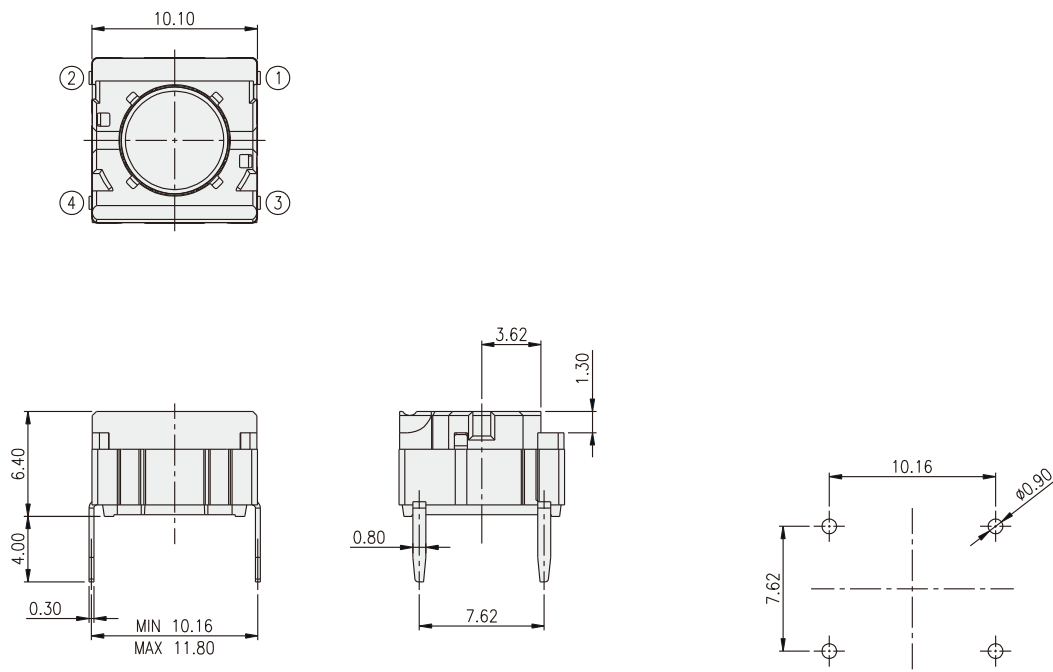


PACKAGE

<Tube>
TL: 45 pcs
<Tape & Reel>
TLM: 650 pcs

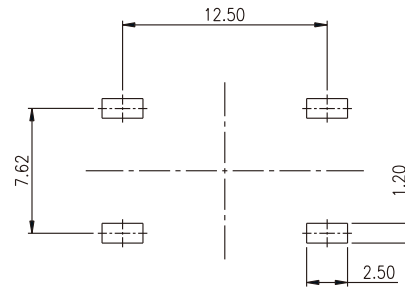
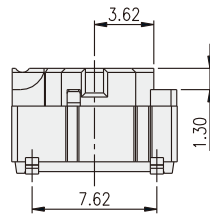
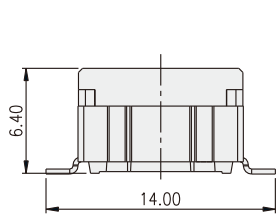
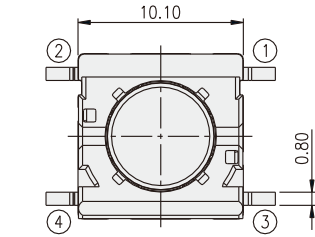
TACT SWITCH

TL-B114K



P.C.B. LAYOUT

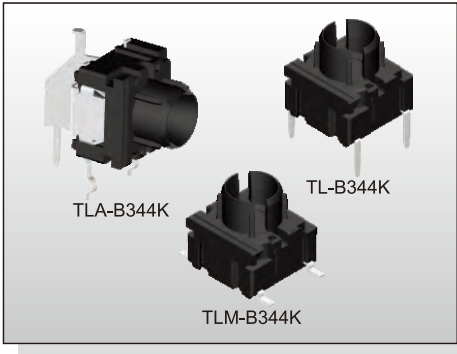
TLM-B114K



P.C.B. LAYOUT

TACT SWITCH TL()-B344 SERIES

10x10
High Reliability



FEATURES

- ✘ Sealed
- ✘ Long life of 10million
- ✘ Variety of actuator lengths

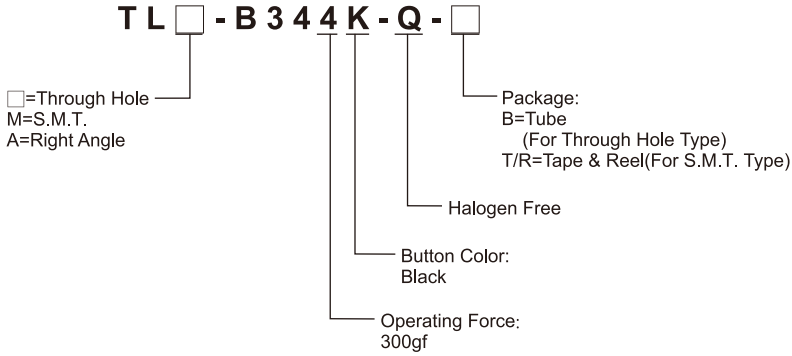
APPLICATION

- ✘ Music instrument
- ✘ Intercom system
- ✘ Industrial

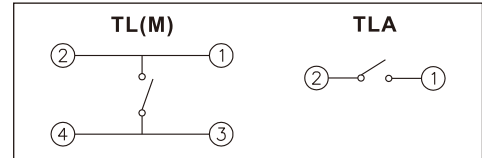
SPECIFICATION

Contact Rating	0.5~50mA, 24V DC
Contact Resistance	30mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	300±75gf
Travel	1mm
Operating Life	10,000, 000 cycles
Operating Temp.	-40°C ~ +160°C
Storage Temp.	-40°C ~ +160°C

HOW TO ORDER



CIRCUIT

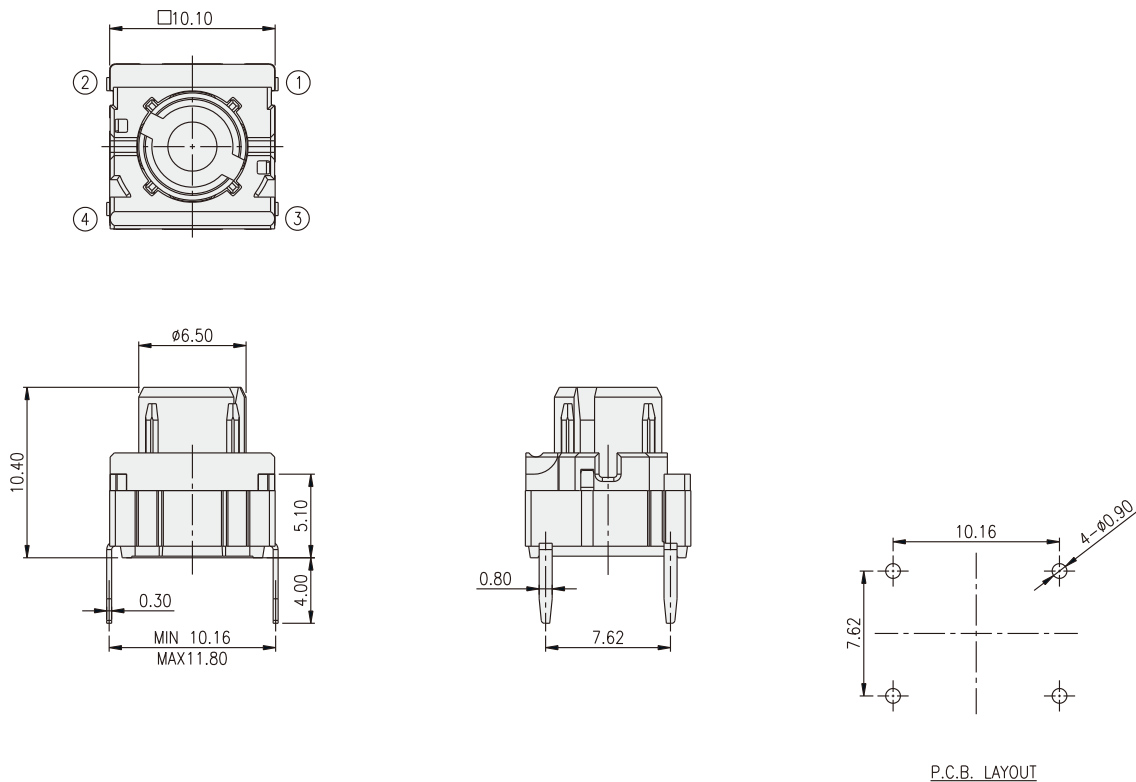


PACKAGE

<Tube>
TL(A): 45 pcs
<Tape & Reel>
TLM: 300 pcs

TACT SWITCH

TL-B344K

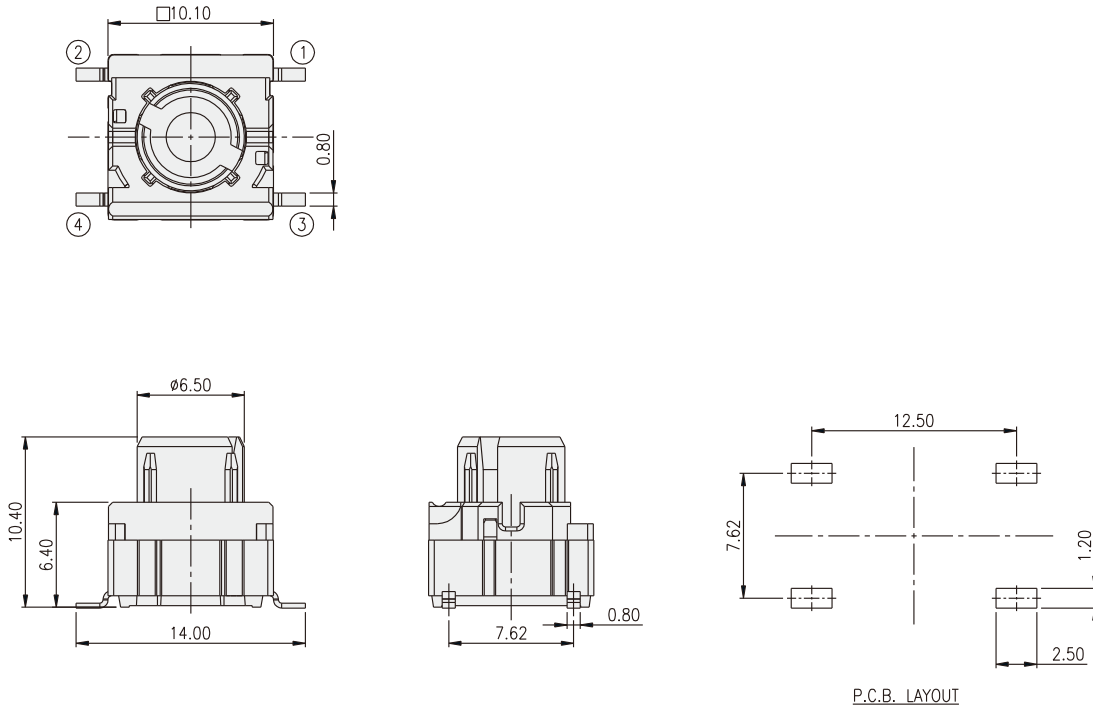


TACT SWITCH
TL()-B344 SERIES

10x10
High Reliability

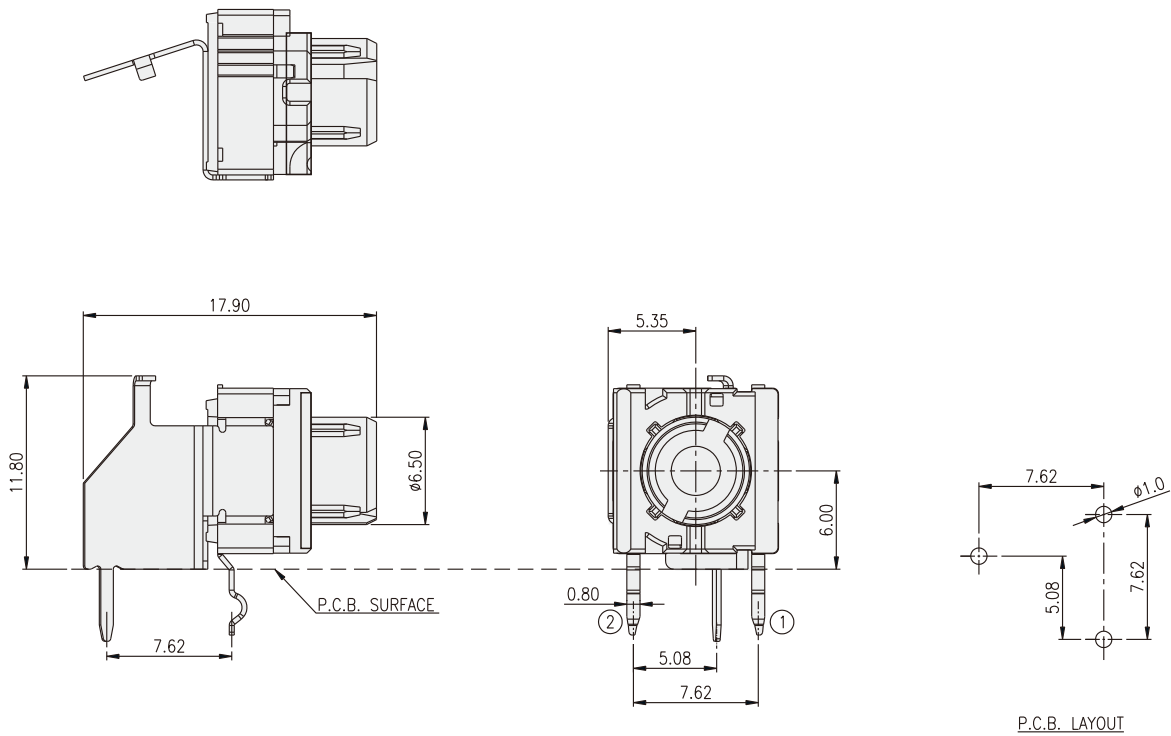


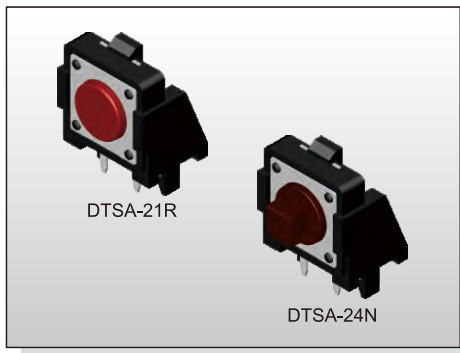
TLM-B344K



TACT SWITCH

TLA-B344K





FEATURES

- ※High reliable metal contacts
- ※Vertical operation available
- ※Cap options

APPLICATION

- ※Audio, OA equipment
- ※Instrumentation
- ※Industrial

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.35mm
Operating Life	Phosphor Bronze Dome 100,000 cycles for 520/320/260gf 200,000 cycles for 160gf
	Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

DTSA - 2 □ □ - □ - V

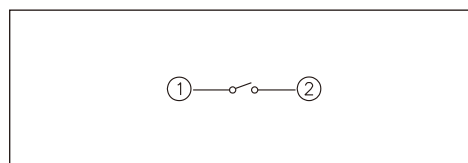
Dimension H:
1=3.65mm
4=6.45(SQ.)x3.8mm
5=7.85mm

□=Phosphor Bronze Dome
S=Stainless Steel Dome

Operating Force:
N=Brown, 160gf
R=Red, 260gf
S=Salmon, 320gf
Y=Yellow, 520gf

RoHS & Lead Free Solderable

CIRCUIT

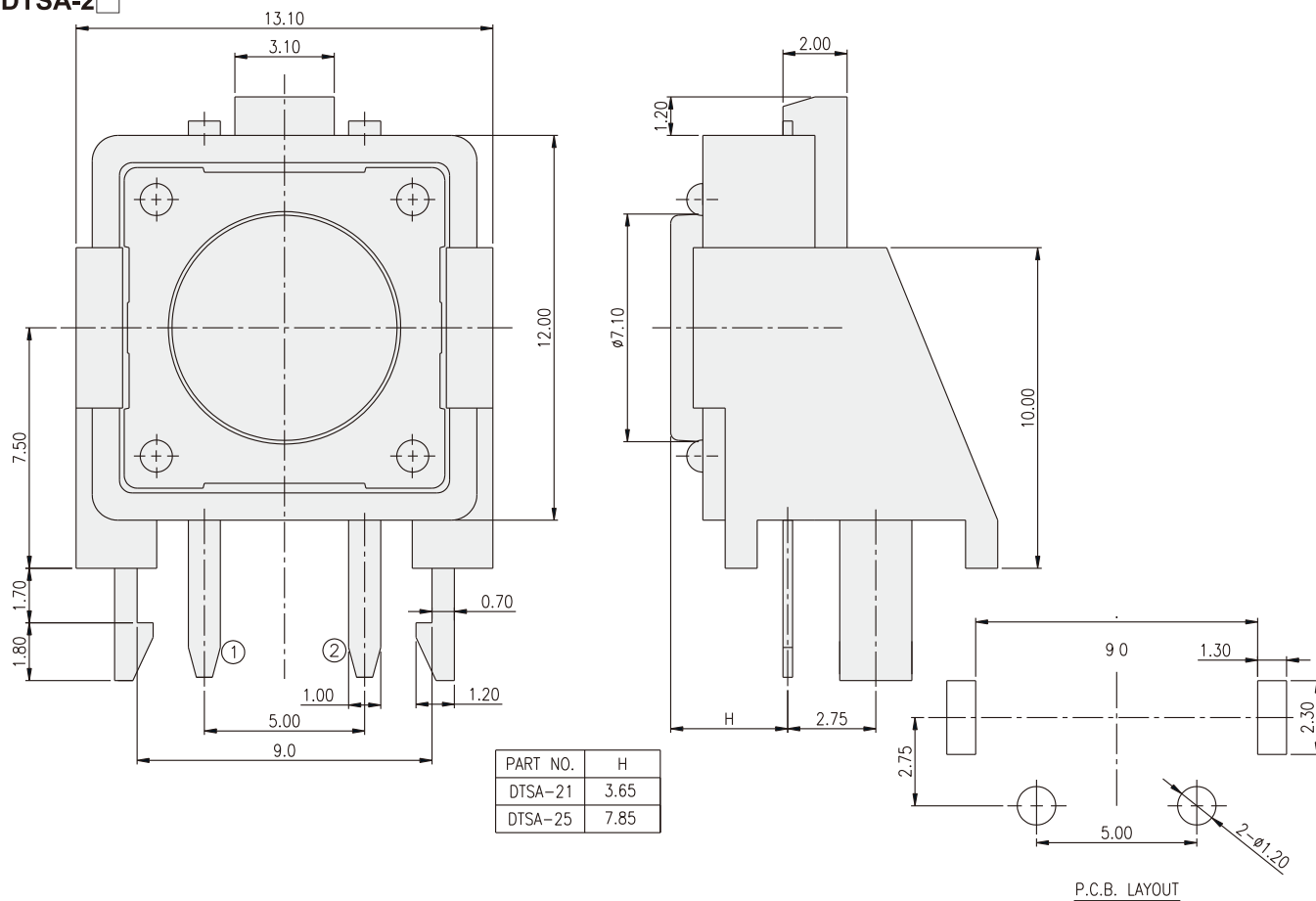


PACKAGE

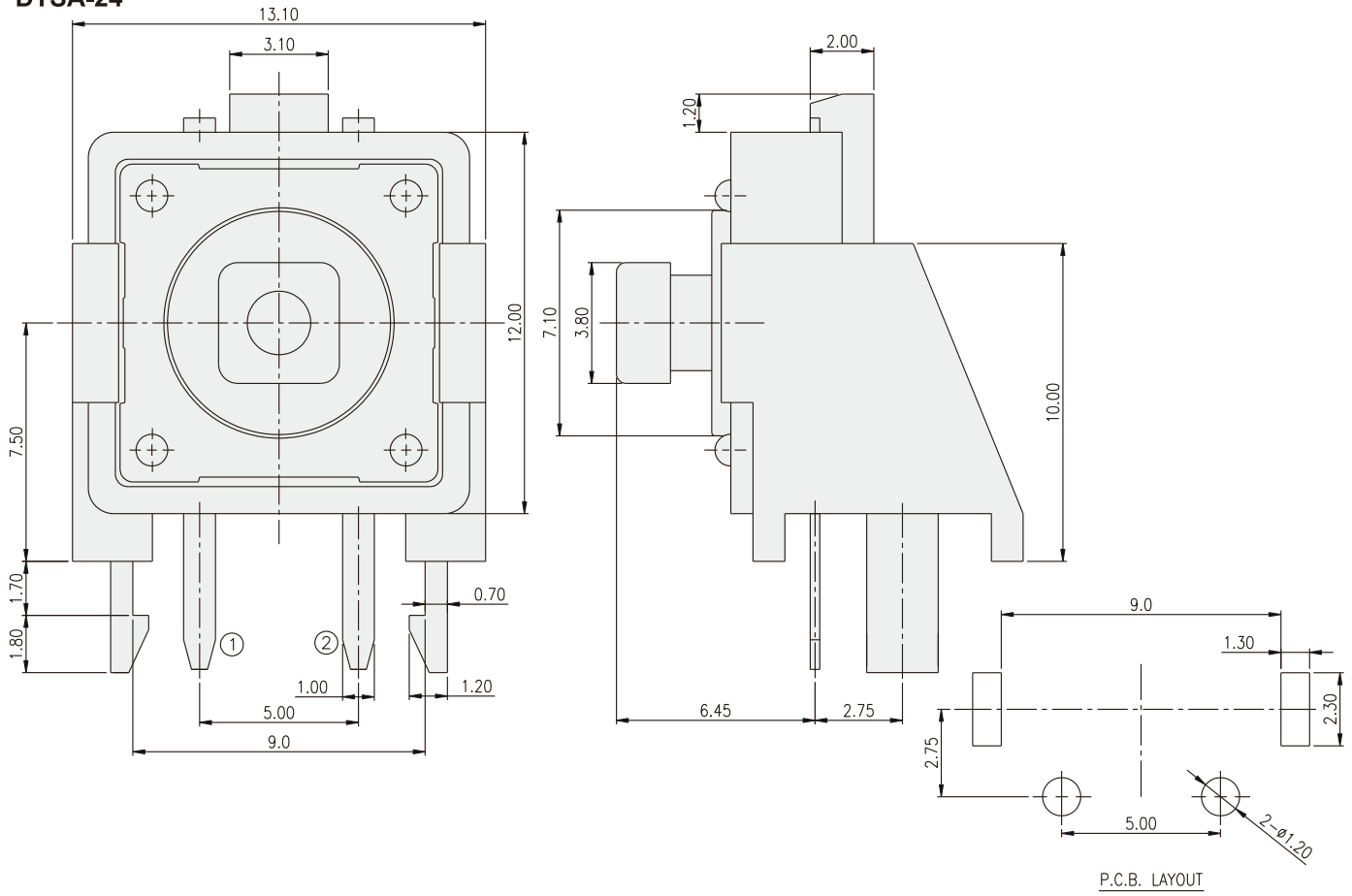
<Bag>
250 pcs

TACT SWITCH

DTSA-2 □



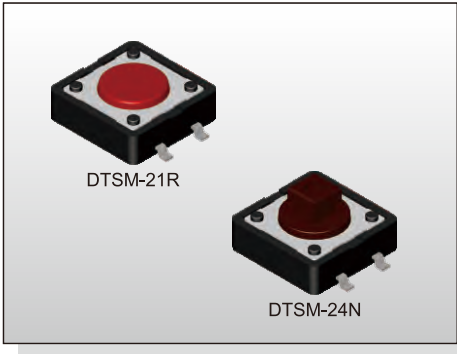
DTSA-24



TACT SWITCH

TACT SWITCH DTSM-2 SERIES

12x12
Surface Mounting Type



FEATURES

- ※High reliable metal contacts
- ※Reflow solderable
- ※Cap options

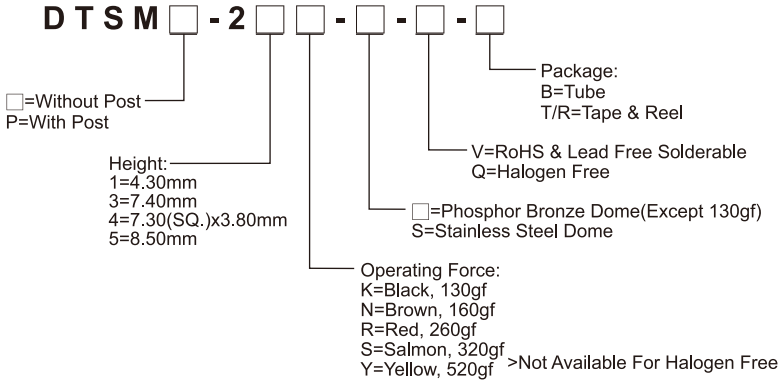
APPLICATION

- ※Audio, OA equipment
- ※Instrumentation
- ※Industrial

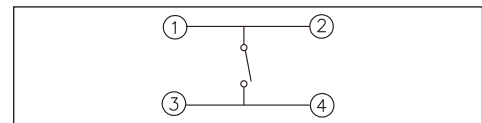
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	130±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.35mm
Operating Life	Phosphor Bronze Dome 100,000 cycles for 520/320/260gf 200,000 cycles for 160gf Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160gf 10,000,000 cycles for 130gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



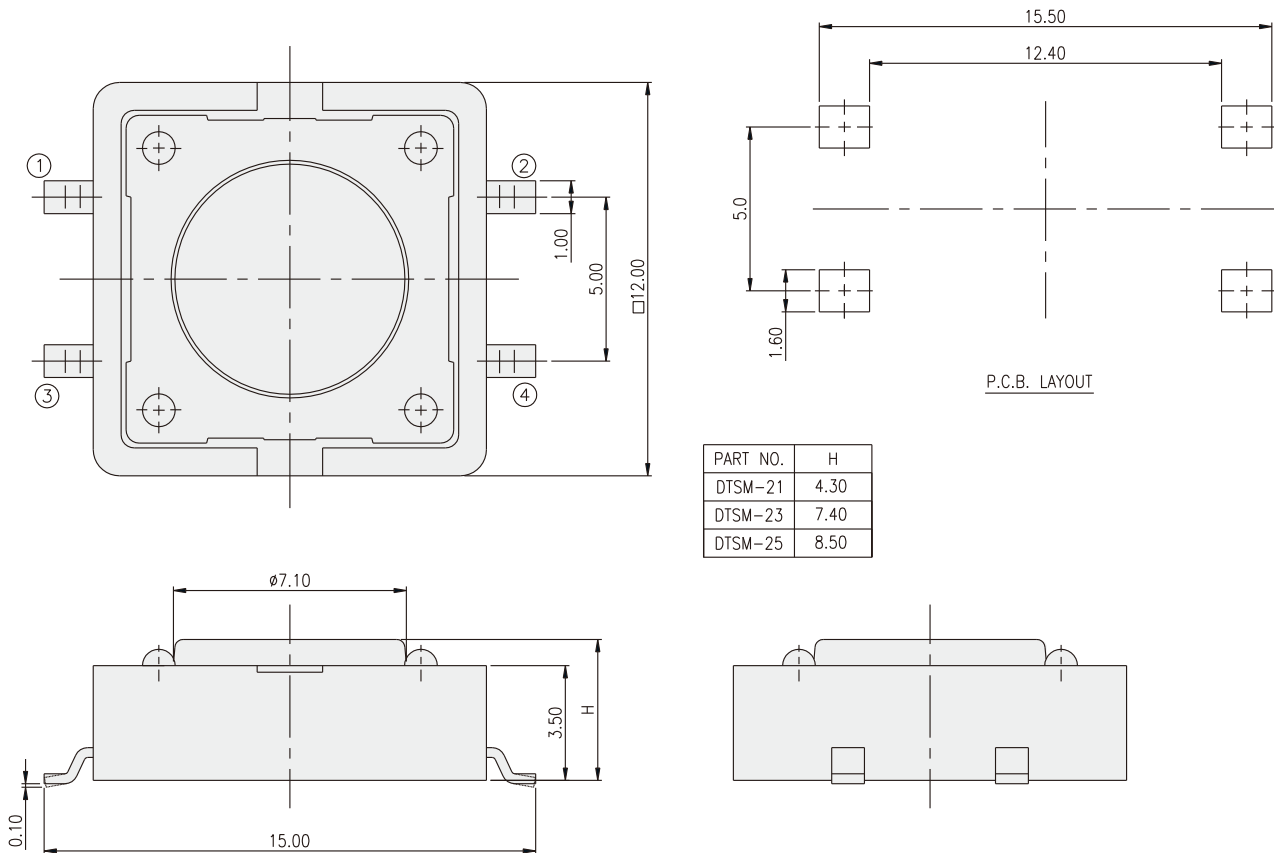
CIRCUIT



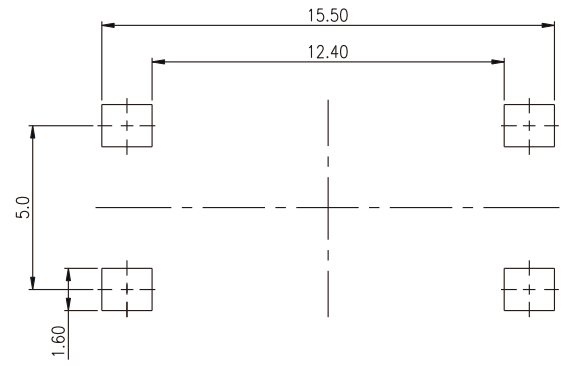
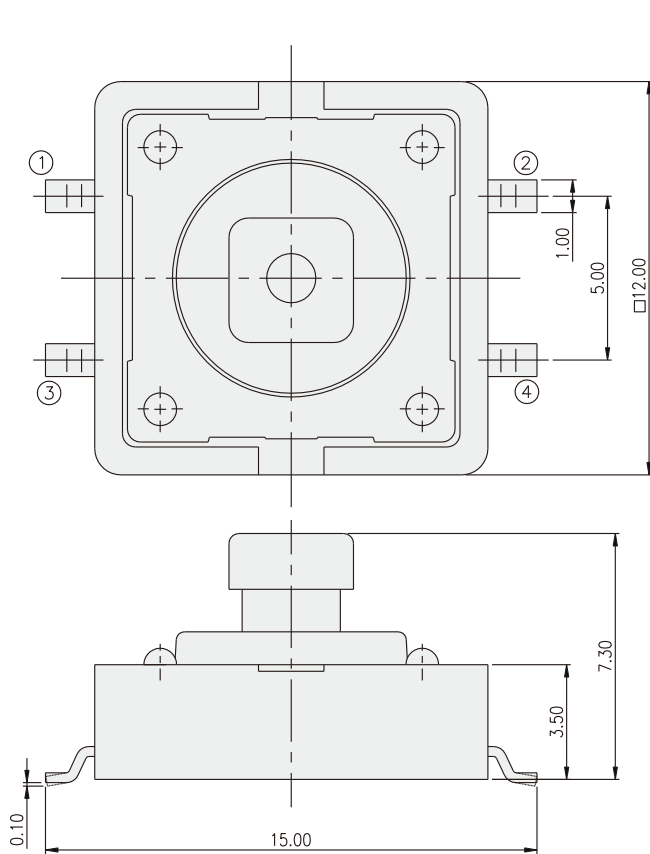
PACKAGE

- <Tube>
DTSM-2: 40 pcs
DTSM-21: 700 pcs
DTSM(P)-23, 24: 500 pcs
DTSM(P)-25: 400 pcs
- <Bag>
DTSMP-21: 500 pcs

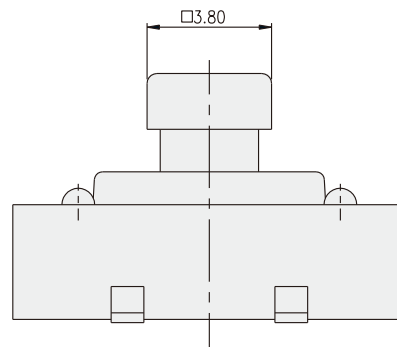
DTSM-2



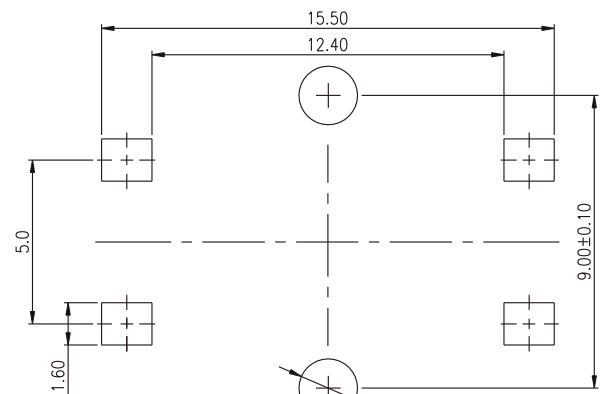
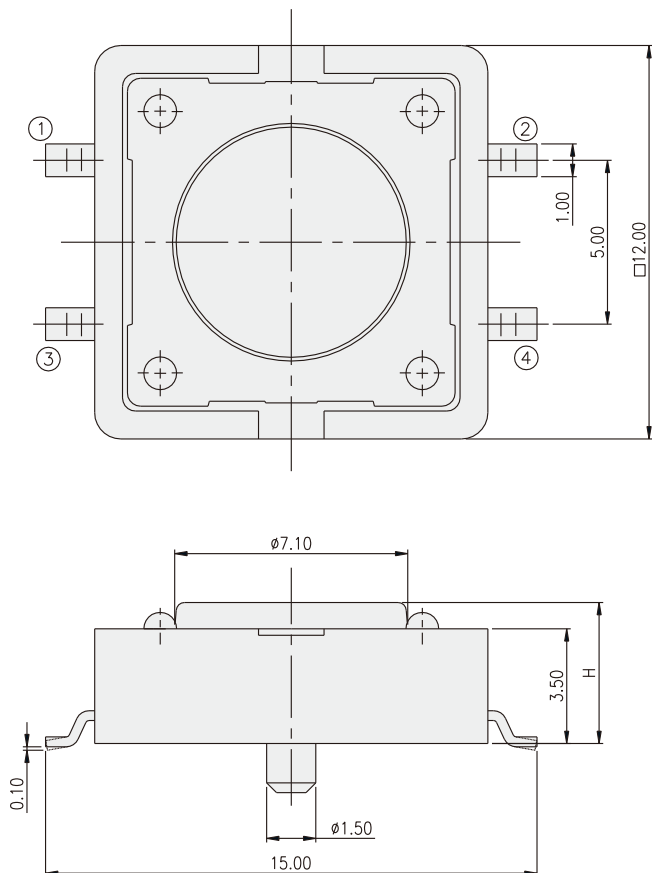
DTSM-24



P.C.B. LAYOUT

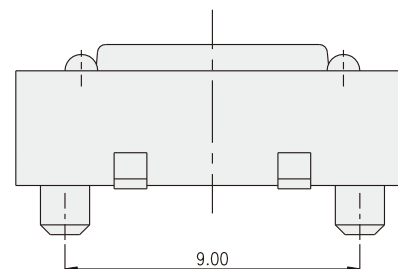


DTSMP-2



P.C.B. LAYOUT

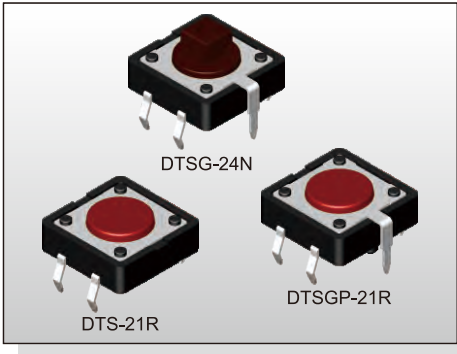
PART NO.	H
DTSM-21	4.30
DTSM-23	7.40
DTSM-25	8.50



TACT SWITCH

TACT SWITCH DTS(G)(P)-2 SERIES

12x12 Through Hole With Ground Terminal Type



FEATURES

- ※ Snap in type with ground pin
- ※ Guide bosses available
- ※ Cap options

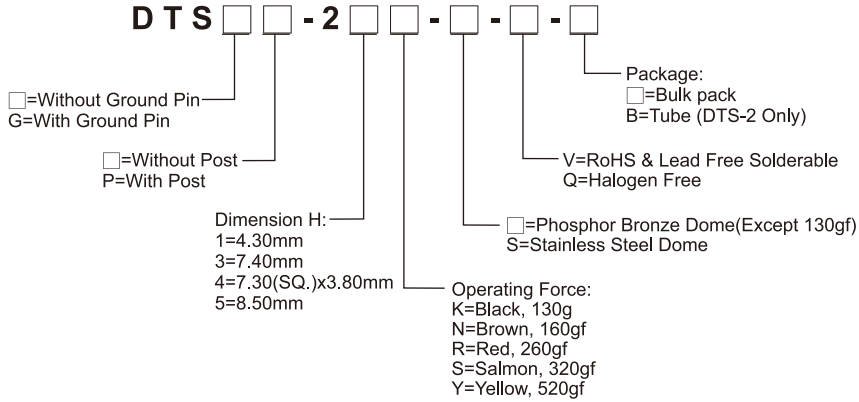
APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Industrial

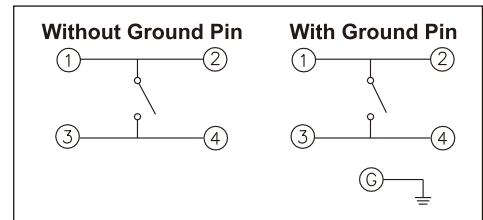
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	130±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.35mm
Operating Life	Phosphor Bronze Dome 100,000 cycles for 520/320/260gf 200,000 cycles for 160gf
	Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160gf 10,000,000 cycles for 130gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



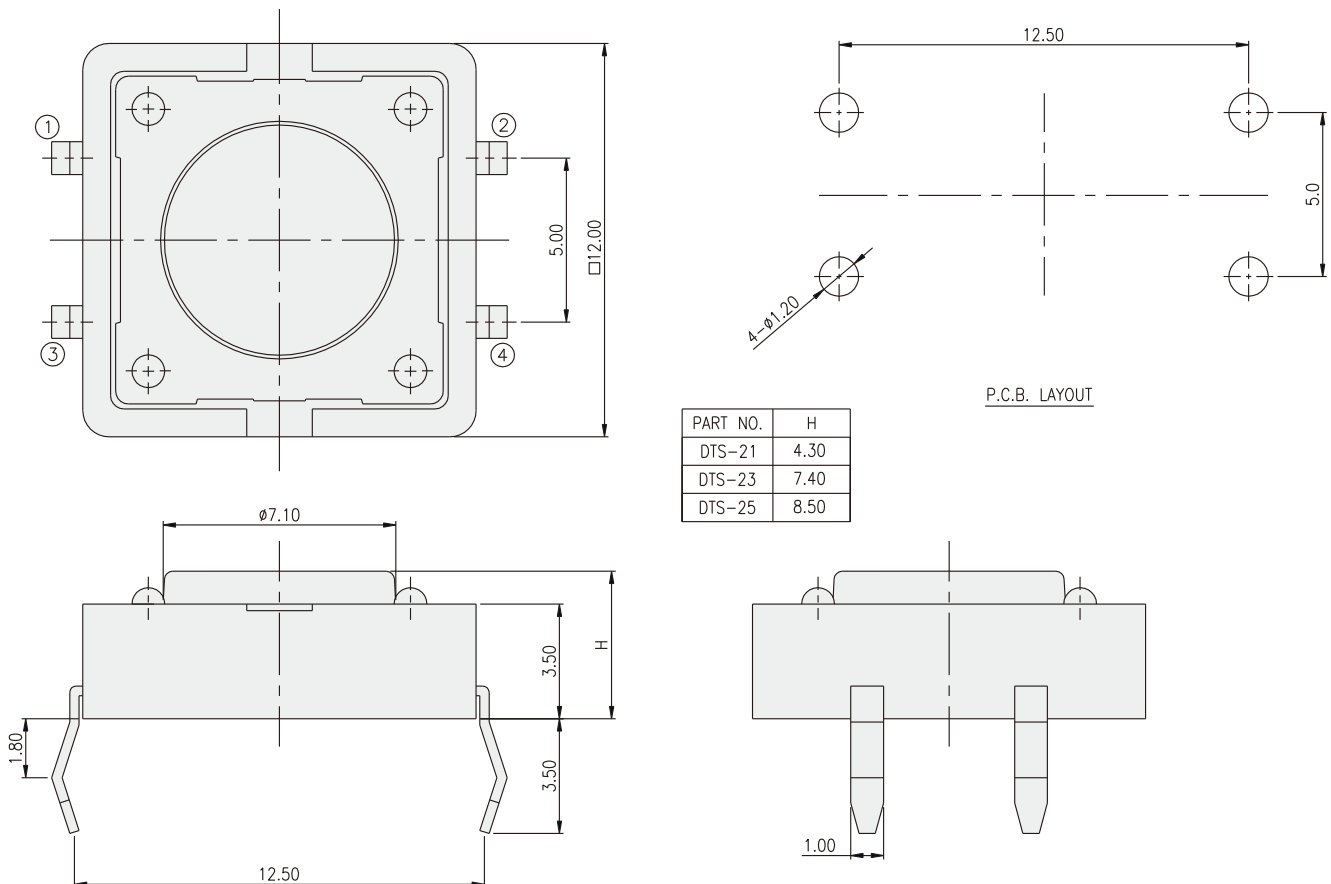
CIRCUIT



PACKAGE

<Bag>
500 pcs
<Tube>
DTS-2: 40 pcs

DTS-2

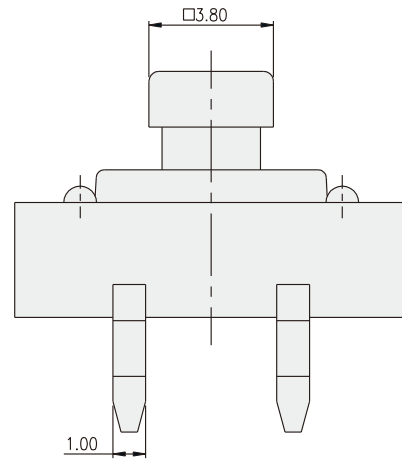
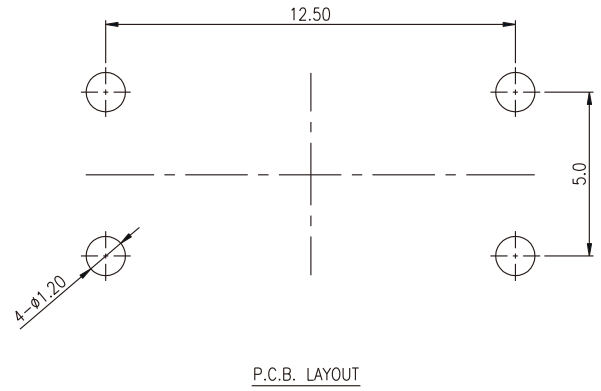
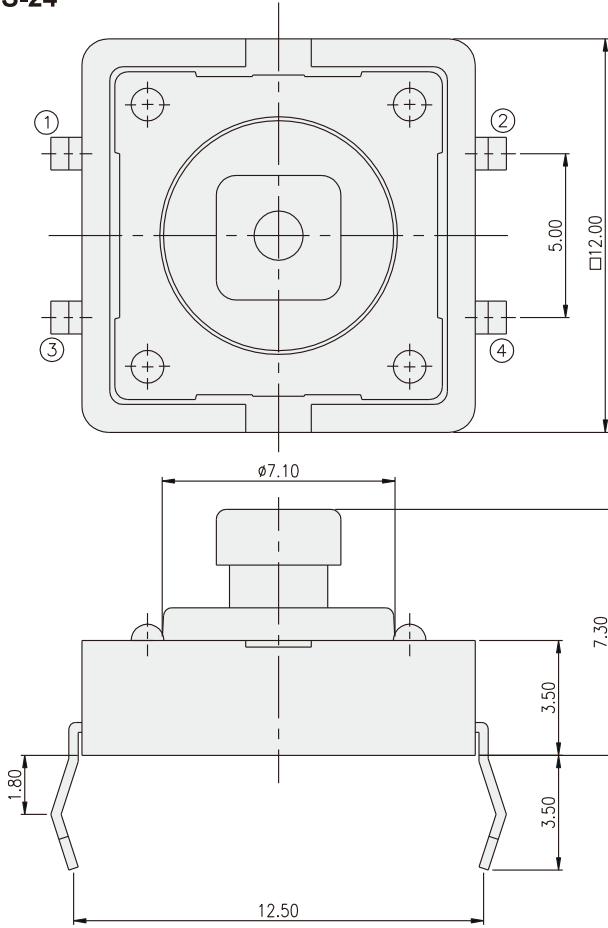


TACT SWITCH
DTS(G)(P)-2 SERIES

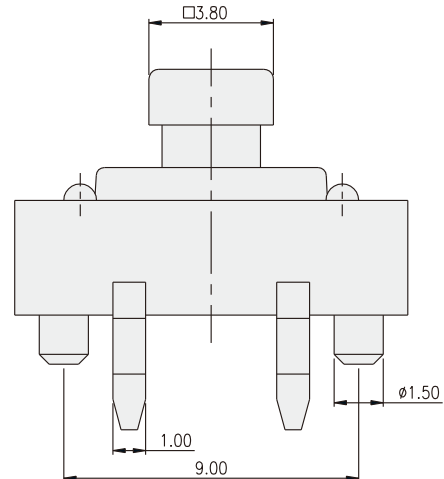
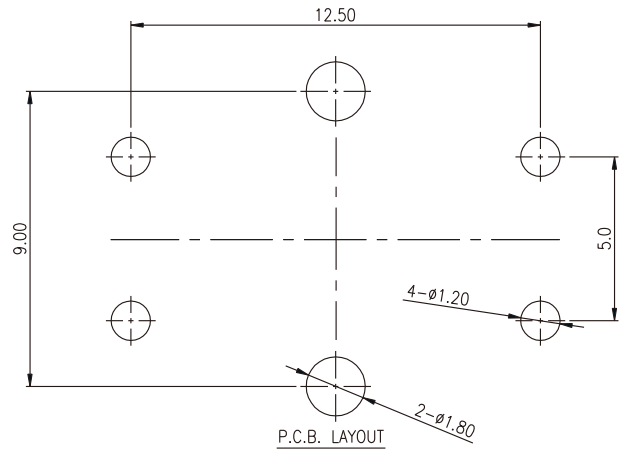
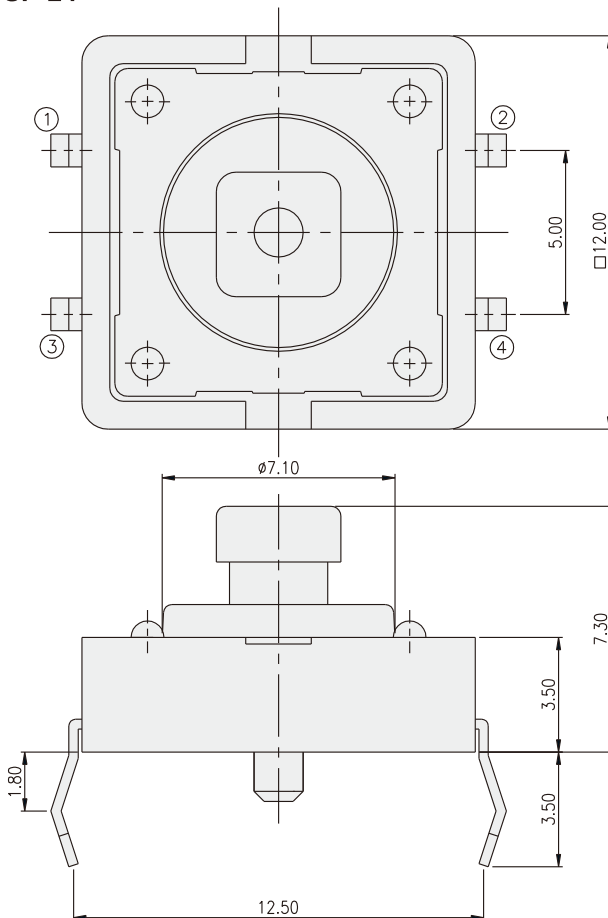
12x12 Through Hole
 With Ground Terminal Type



DTS-24

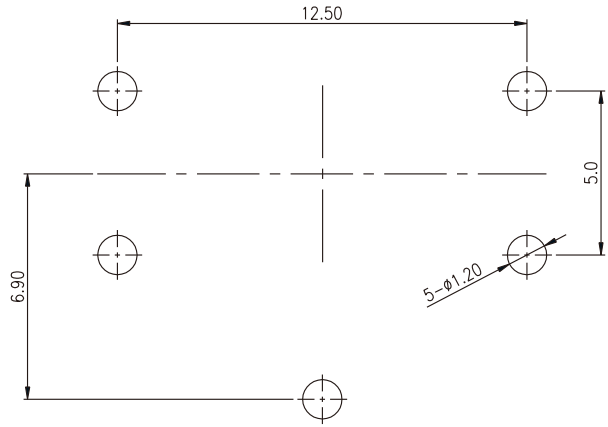
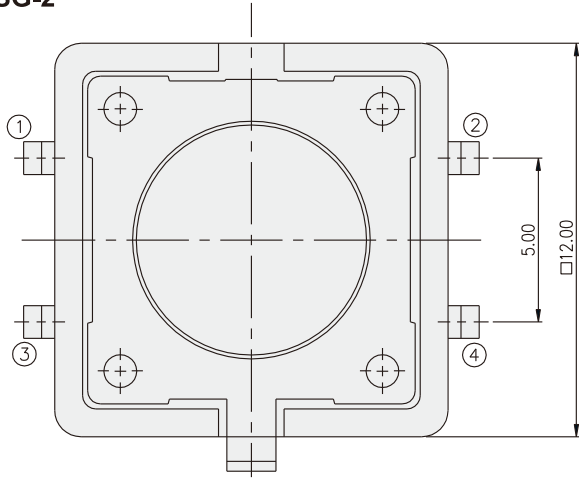


DTSP-24



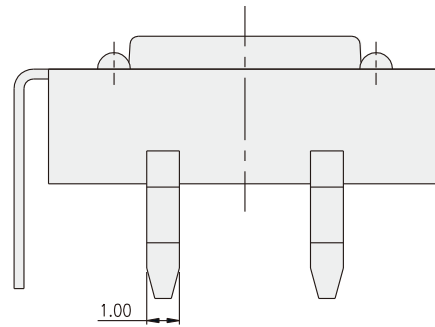
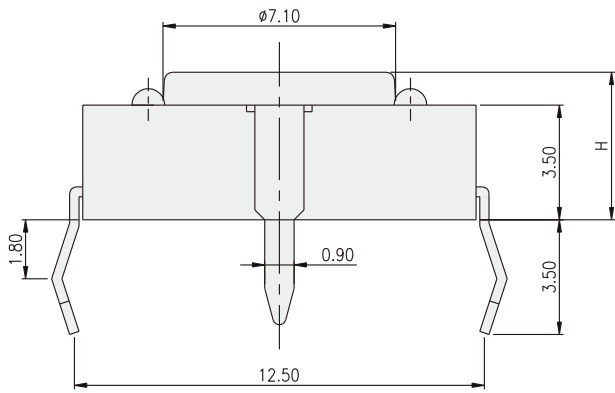
TACT SWITCH

DTSG-2



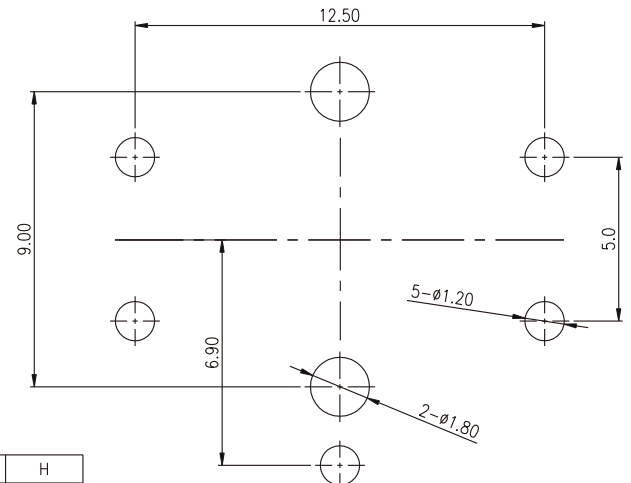
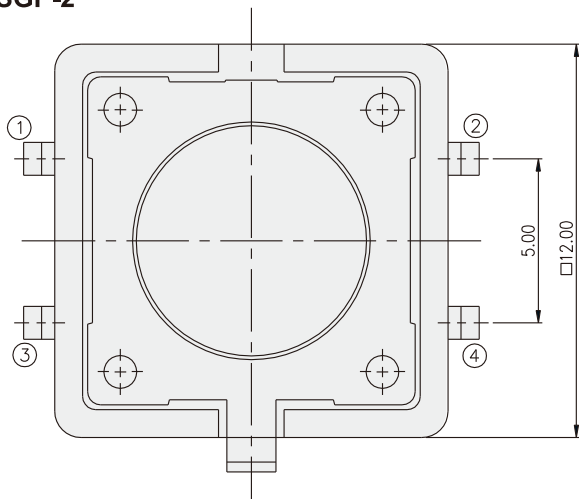
PART NO.	H
DTSG-21	4.30
DTSG-23	7.40
DTSG-25	8.50

P.C.B. LAYOUT



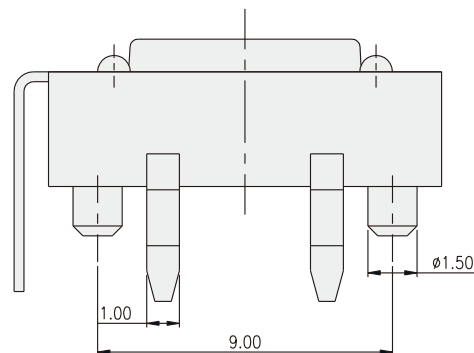
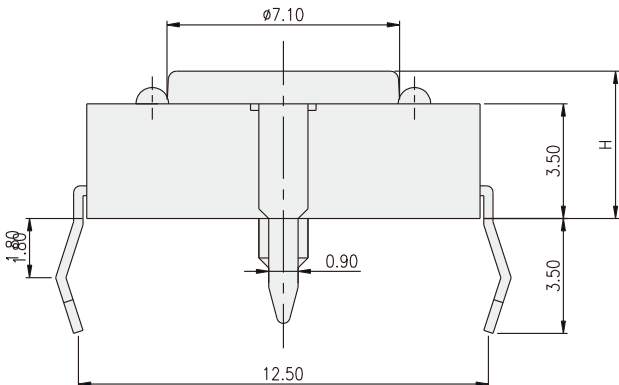
TACT SWITCH

DTSGP-2



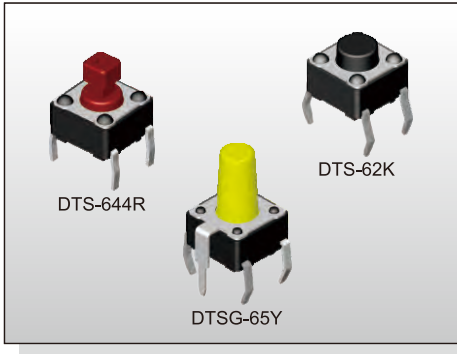
PART NO.	H
DTSGP-21	4.30
DTSGP-23	7.40
DTSGP-25	8.50

P.C.B. LAYOUT



TACT SWITCH DTS(G)-6 SERIES

6x6 Through Hole & Ground Terminal Type



FEATURES

- ※ Compact size 6x6mm
- ※ Sharp tactile feeling
- ※ Cap options

APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Industrial

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	70±30gf, Blue(U) 100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.25mm
Operating Life	Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100/70gf
	Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160/100/70gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

DTS - **6**

=Without Ground Pin
G=With Ground Pin

Height:
1=4.30mm
2=5.00mm
3=7.00mm
44=7.30mm (SQ.)x2.40mm
48=7.30mm (SQ.)x2.80mm
5=9.50mm
6=13.00mm
8=11.30mm
9=19.50mm

Package:
=Bulk pack
▲B=Tube
(▲DTS-61~65 Only)

V=RoHS & Lead Free Solderable
Q=Halogen Free

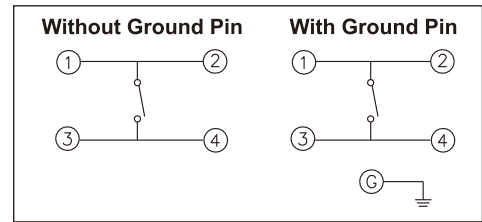
=Phosphor Bronze Dome
S=Stainless Steel Dome

Operating Force:
U=Blue, 70gf
K=Black, 100gf
N=Brown, 160gf
R=Red, 260gf
S=Salmon, 320gf
Y=Yellow, 520gf

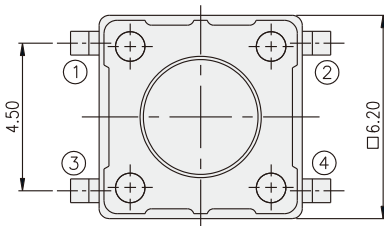
PACKAGE

<Bag>
1000 pcs
<Tube>
DTS-61~65: 75 pcs

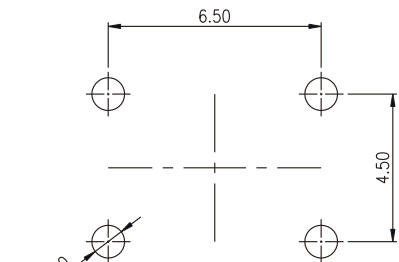
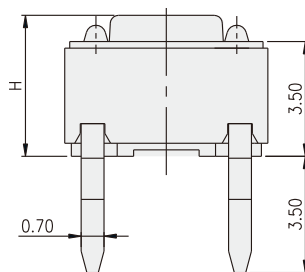
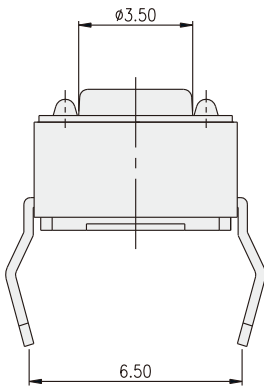
CIRCUIT



DTS-6



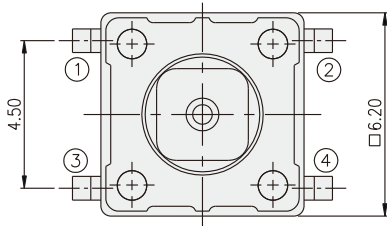
PART NO.	H
DTS-61	4.30
DTS-62	5.00
DTS-63	7.00
DTS-65	9.50
DTS-66	13.00
DTS-68	11.30
DTS-69	19.50



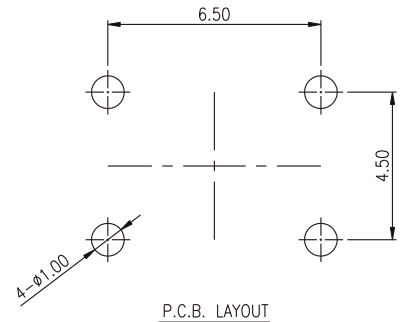
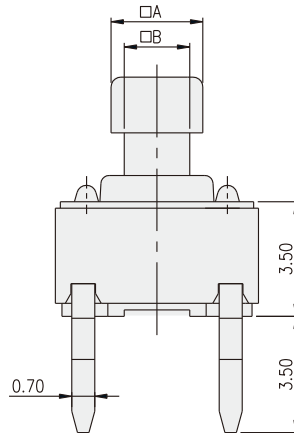
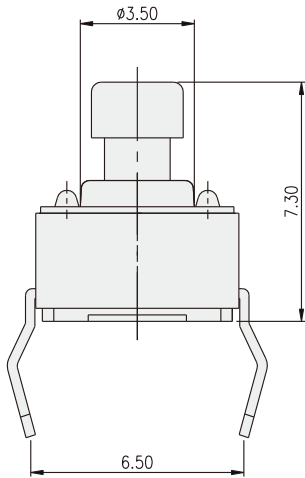
P.C.B. LAYOUT

TACT SWITCH

DTS-644(8)

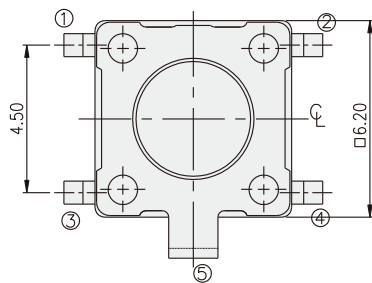


PART NO.	□A	□B
DTS-644	2.40	1.60
DTS-648	2.80	2.00

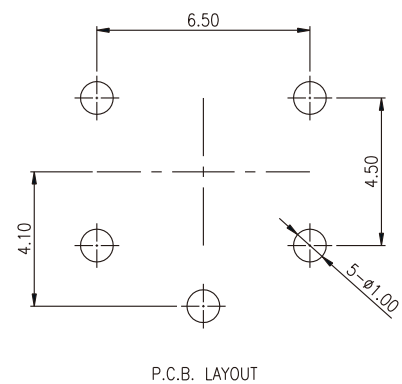
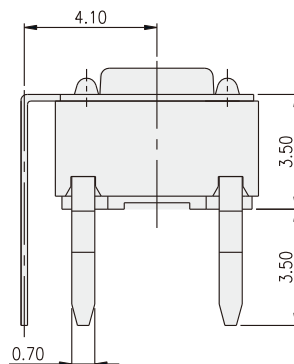
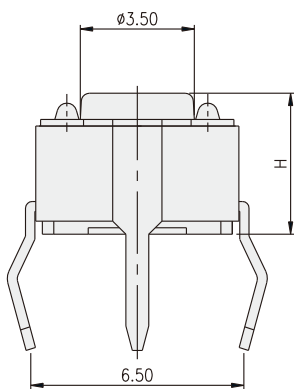


TACT SWITCH

DTSG-6

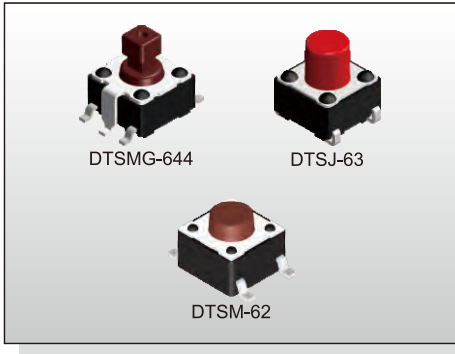


PART NO.	H
DTSG-61	4.30
DTSG-62	5.00
DTSG-63	7.00
DTSG-65	9.50
DTSG-66	13.00
DTSG-68	11.30
DTSG-69	19.50



TACT SWITCH DTS(M)(J)-6 SERIES

6x6 Surface Mounting Type (Ground Terminal Optional)



FEATURES

- ※6x6mm, surface mounting type
- ※Optional ground pin
- ※Reflow solderable

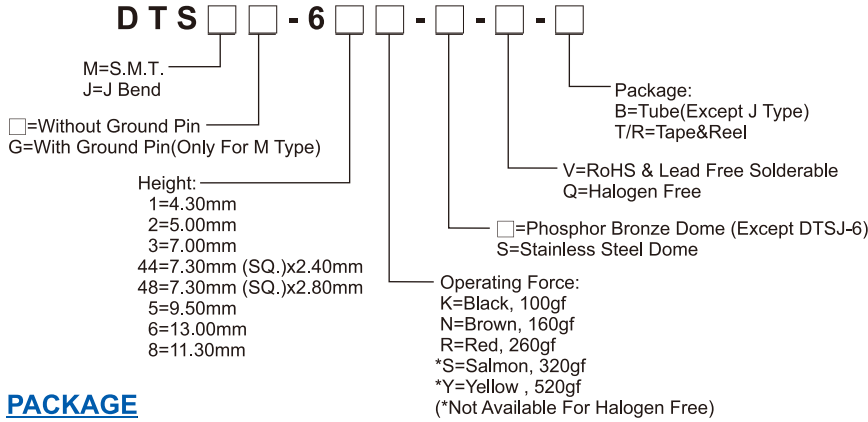
APPLICATION

- ※Audio, OA equipment
- ※Instrumentation, Communication
- ※White goods

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.25mm
Operating Life	Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100gf Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160/100gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

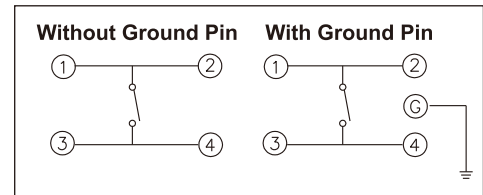
HOW TO ORDER



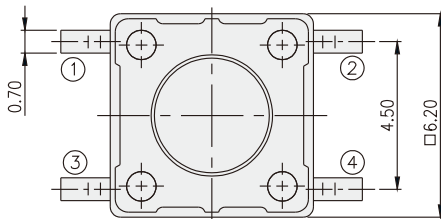
PACKAGE

- <Tube>
77 pcs
- <Tape & Reel>
DTSM(G)(J)-61 / DTSMG-62:1000 pcs
DTS(M)(J)-62:900 pcs DTS(M)(G)(T)-63, 64:700 pcs DTSJ-65:400 pcs
DTSM(G)-65:380 pcs DTS(M)-68:300 pcs DTS(M)(J)-66:200 pcs

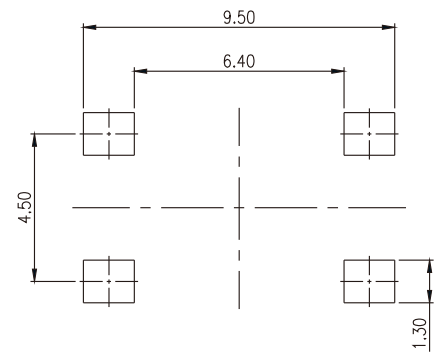
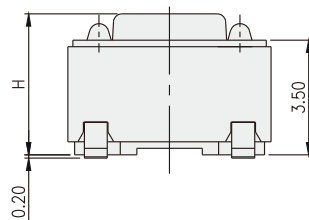
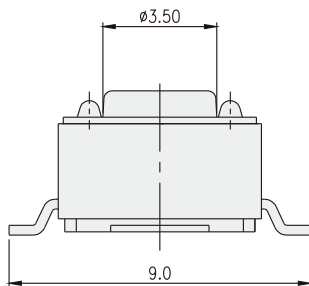
CIRCUIT



DTSM-6



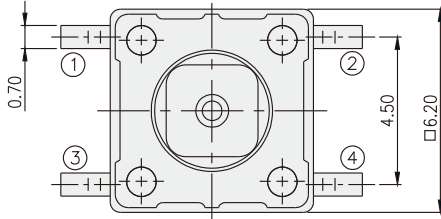
PART NO.	H
DTSM-61	4.30
DTSM-62	5.00
DTSM-63	7.00
DTSM-65	9.50
DTSM-66	13.00
DTSM-68	11.30



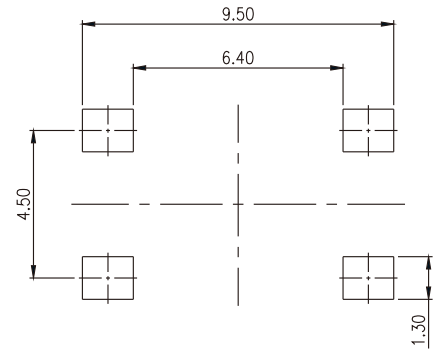
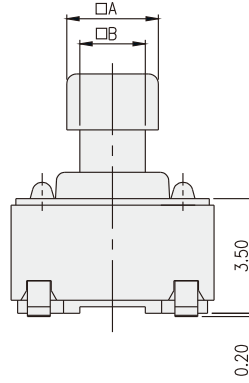
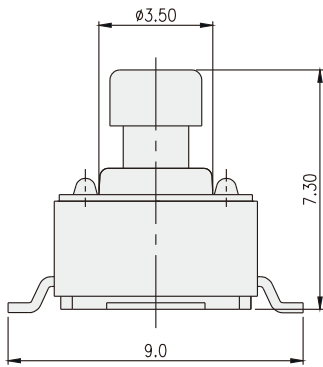
P.C.B. LAYOUT

TACT SWITCH

DTSM-644(8)



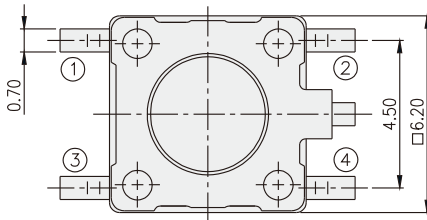
PART NO.	□A	□B
DTSM-644	2.40	1.60
DTSM-648	2.80	2.00



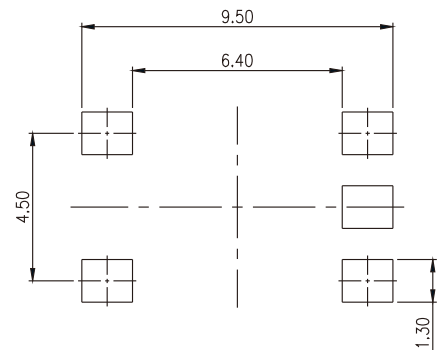
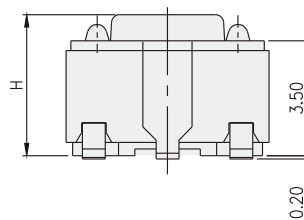
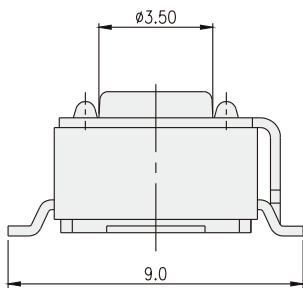
P.C.B. LAYOUT

TACT SWITCH

DTSMG-6

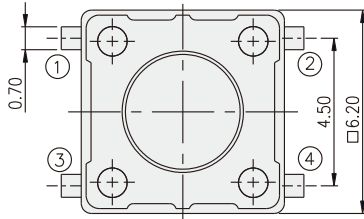


PART NO.	H
DTSMG-61	4.30
DTSMG-62	5.00
DTSMG-63	7.00
DTSMG-65	9.50
DTSMG-66	13.00
DTSMG-68	11.30

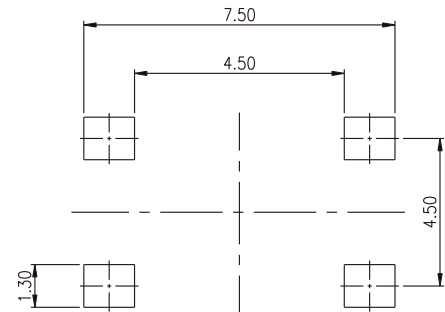
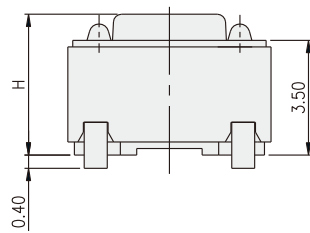
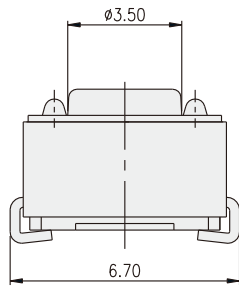


P.C.B. LAYOUT

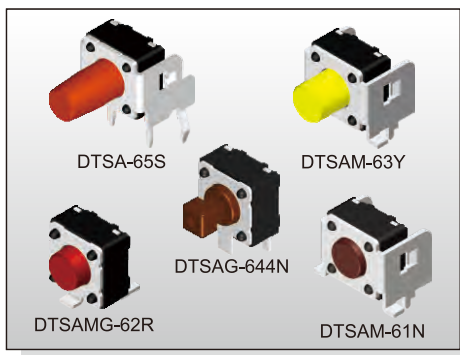
DTSJ-6



PART NO.	H
DTSJ-61	4.30
DTSJ-62	5.00
DTSJ-63	7.00
DTSJ-65	9.50
DTSJ-66	13.00
DTSJ-68	11.30



P.C.B. LAYOUT



FEATURES

- ※ Variety of actuator lengths
- ※ Optional ground pin
- ※ Cap options

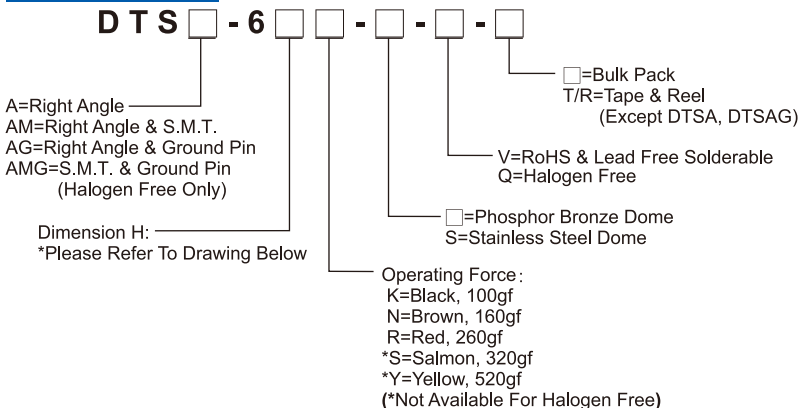
APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Setup box

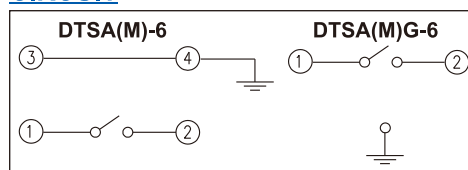
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.25mm
Operating Life	Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100gf Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160/100gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



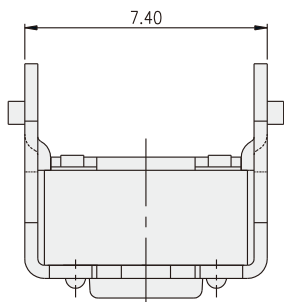
CIRCUIT



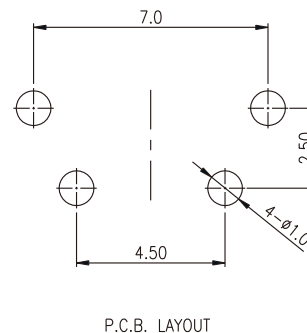
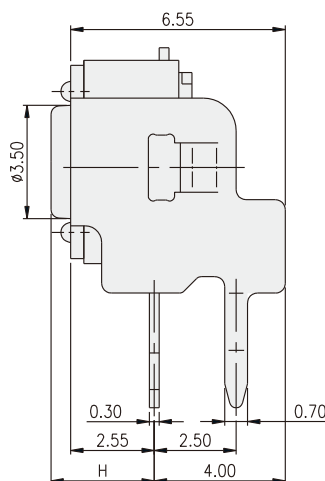
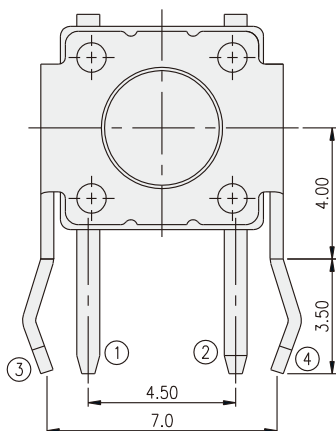
PACKAGE

<Bag>
DTSA(G)-6: 500 pcs
<Tape & Reel>
DTSA-6: 500 pcs
DTSAMG-61, 62: 500 pcs
DTSAMG-63, 64, 65: 380 pcs

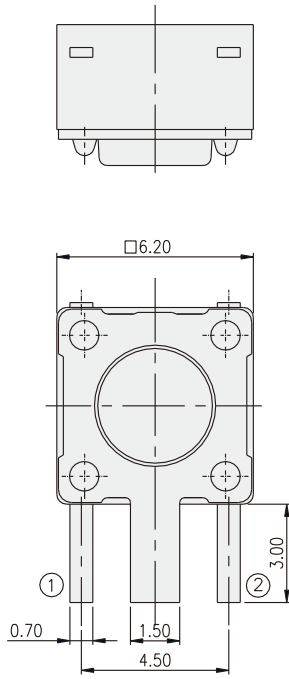
DTSA-6



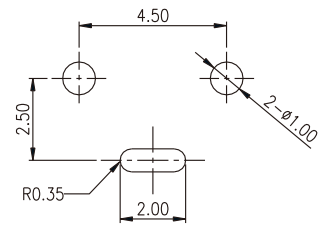
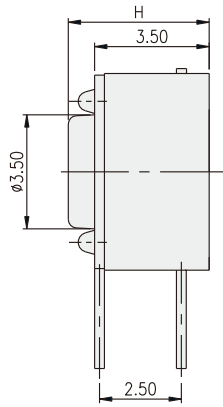
PART NO.	H
DTSA-61	3.15
DTSA-62	3.85
DTSA-63	5.85
DTSA-644	6.15(SQ.2.40)
DTSA-648	6.15(SQ.2.80)
DTSA-65	8.35
DTSA-66	11.85



DTSAG-6



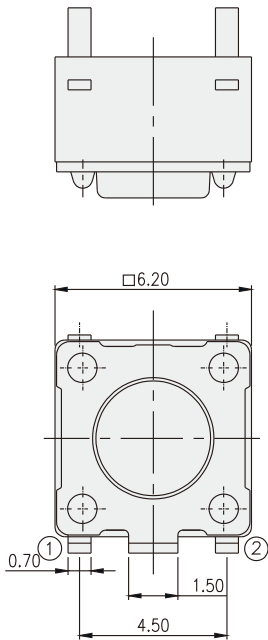
PART NO.	H
DTSAG-61	4.30
DTSAG-62	5.00
DTSAG-63	7.00
DTSAG-644	7.30(SQ.2.40)
DTSAG-648	7.30(SQ.2.80)
DTSAG-65	9.50
DTSAG-66	13.00



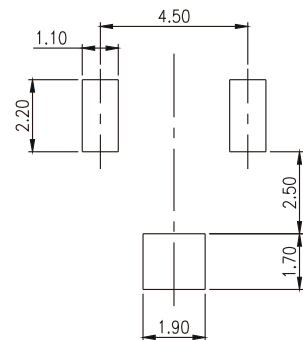
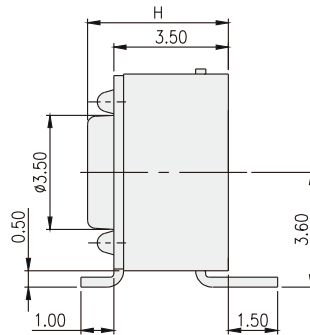
P.C.B. LAYOUT

TACT SWITCH

DTSAMG-6

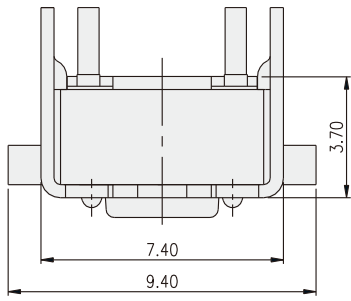


PART NO.	H
DTSAMG-61	4.30
DTSAMG-62	5.00
DTSAMG-63	7.00
DTSAMG-644	7.30(SQ.2.40)
DTSAMG-648	7.30(SQ.2.80)
DTSAMG-65	9.50
DTSAMG-66	13.00



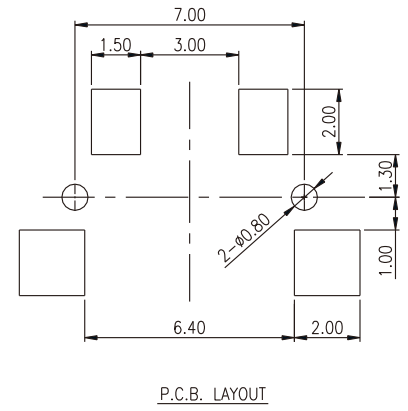
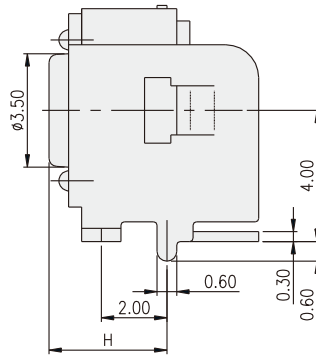
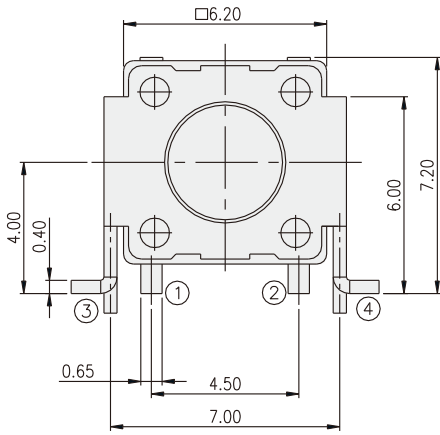
P.C.B. LAYOUT

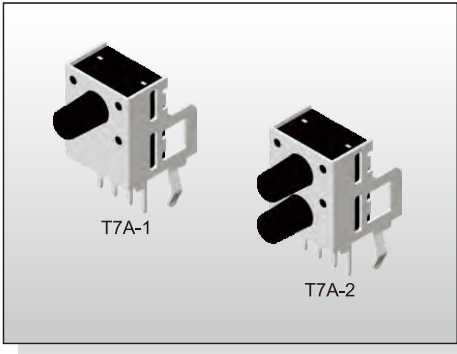
DTSAM-6



PART NO.	H
DTSAM-61	3.60
DTSAM-62	4.30
DTSAM-63	6.30
DTSAM-644	7.30(SQ.2.40)
DTSAM-648	7.30(SQ.2.80)
DTSAM-65	8.80

TACT SWITCH





FEATURES

- ※ Double switch
- ※ Two Circuit

APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Setup box

SPECIFICATION

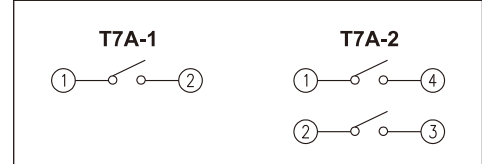
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	180±50gf
Travel	0.20mm
Operating Life	100,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

T7A-□14KQP

- 1=Single Stem
- 2=Double Stem
- Stem High: 3.80mm
- Package: Bulk Pack
- Halogen Free
- Stem Color: Black
- Operating Force: 180gf

CIRCUIT

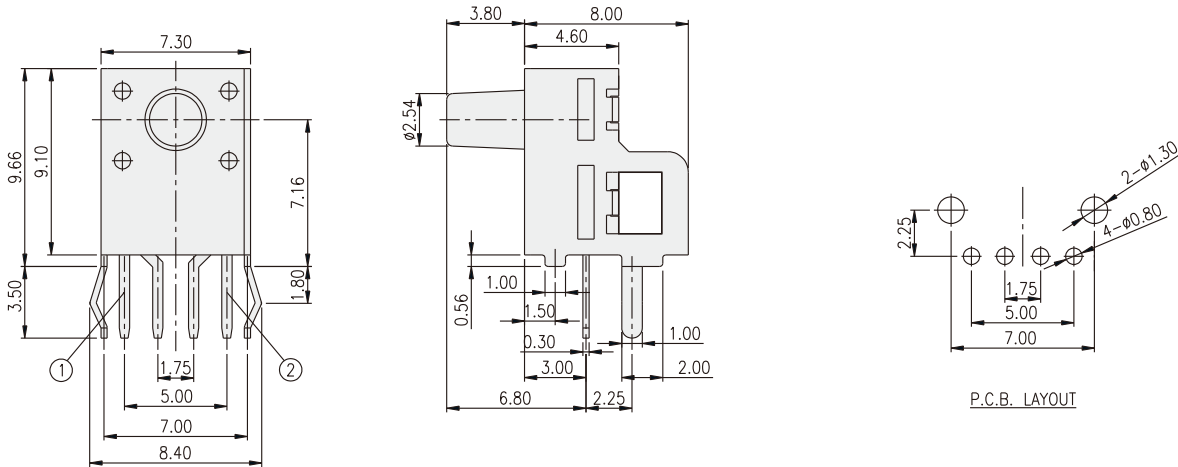


PACKAGE

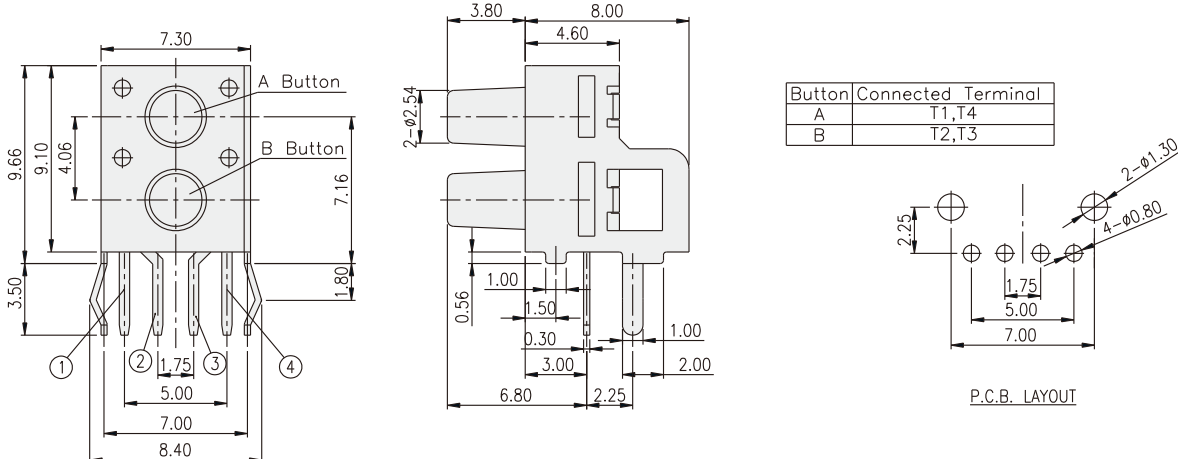
<Bag>
400 pcs

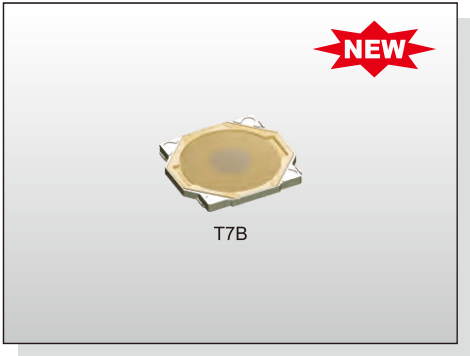
TACT SWITCH

T7A-1



T7A-2





T7B

FEATURES

- ※ Long life cycles of 5 million
- ※ Low profile with 0.60mm

APPLICATION

- ※ Automotive
- ※ Industrial equipment
- ※ Portable electronic device

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	100±50gf, 160±50gf, 200±50gf
Travel	0.25mm
Operating Life	5,000,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +90°C

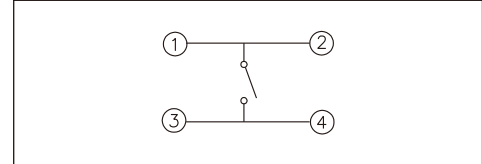
HOW TO ORDER

T 7 B □ Q R

Operating Force:
1=100gf
2=160gf
3=200gf

Package:
Reel
Halogen Free

CIRCUIT

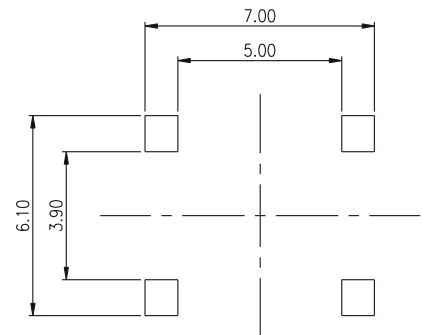
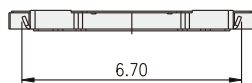
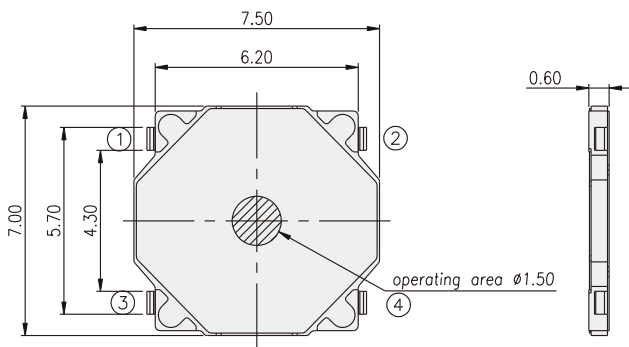


PACKAGE

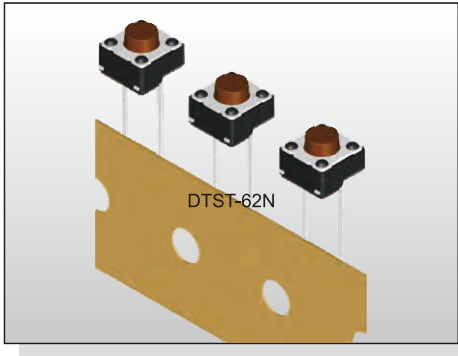
<Tape & Reel>
5200 pcs.

TACT SWITCH

T7B



P.C.B. LAYOUT



FEATURES

- ※Radial taping type
- ※Variety of actuator lengths
- ※Allow automatic insertion onto PCB.

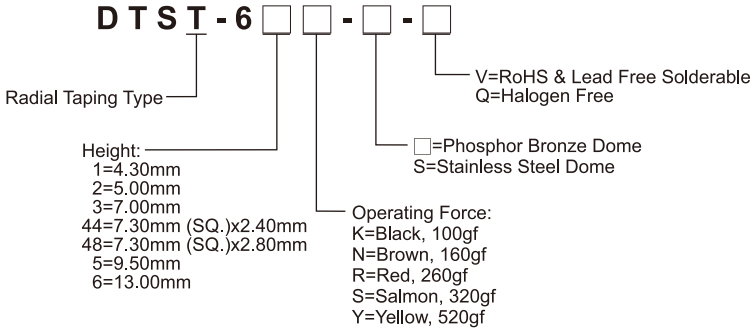
APPLICATION

- ※White goods , OA equipment
- ※Audio, DVD player, TV
- ※Instrumentation

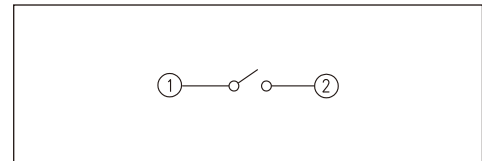
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.25mm
Operating Life	Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100gf Stainless Steel Dome 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160/100gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



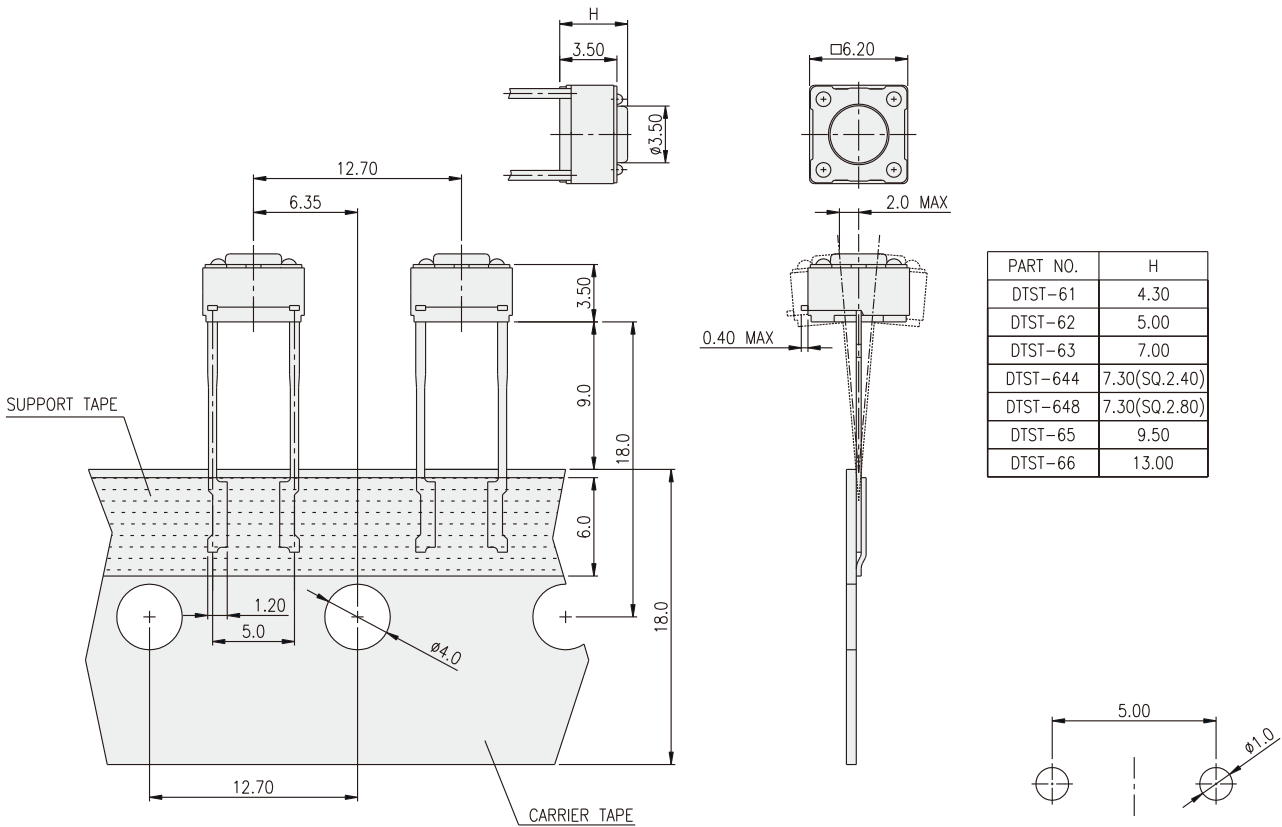
CIRCUIT



PACKAGE

<Box>
900 pcs

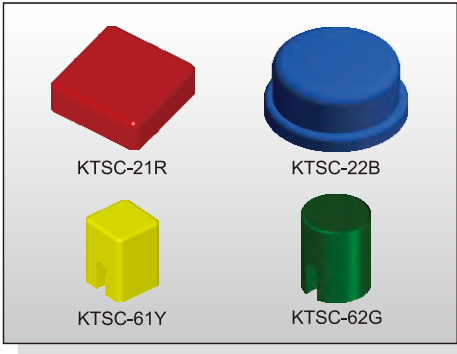
DTST-6



P.C.B. LAYOUT

TACT SWITCH
KTSC-(6)(2) SERIES

Cap for 6x6 / 12x12
 Tact Switch



HOW TO ORDER

KTSC - [] [] []

Prod. Size: <Tactile Switch>
 2=12X12mm (Can be applied on DTS□-24)
 6=6x6mm (Can be applied on DTS□-644)

Cap Type:
 1=Square
 2=Round

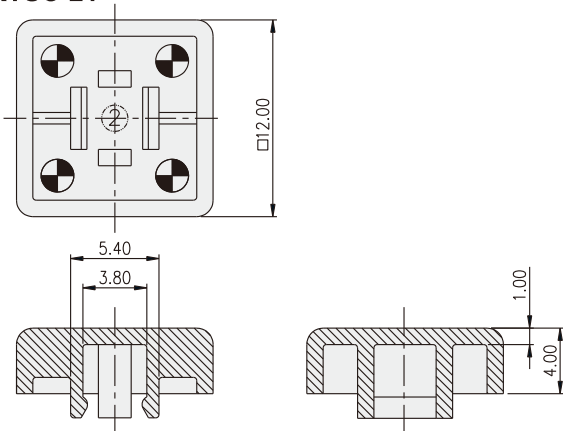
Cap color:
 Y=Yellow
 B=Blue
 R=Red
 I=Ivory
 K=Black
 G=Green
 S=Salmon
 Ge=Gray

PACKAGE

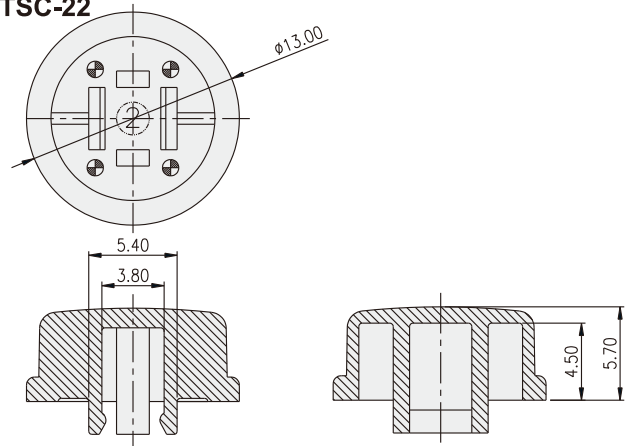
<Bag>
 KTSC-2: 500 pcs
 KTSC-6: 1500 pcs

TACT SWITCH

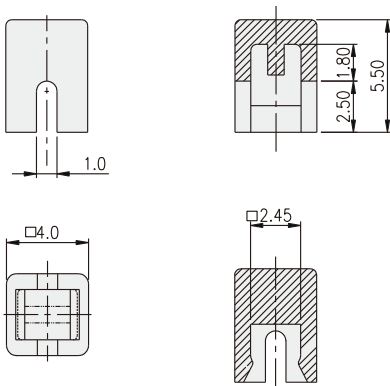
KTSC-21



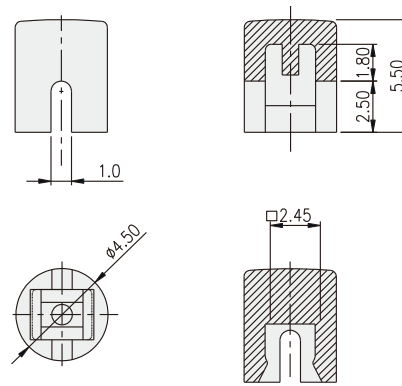
KTSC-22



KTSC-61

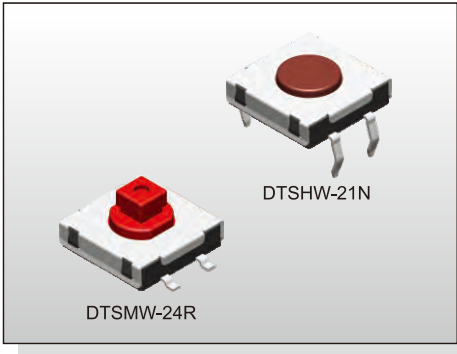


KTSC-62



TACT SWITCH
DTS()W-2 SERIES

12x12 SMT & Through Hole
 Washable Type



FEATURES

- ※ Sealed
- ※ Through hole & SMT type
- ※ 1 million operating life cycle

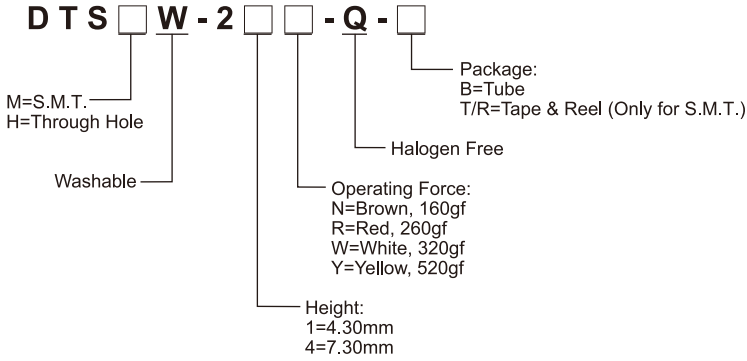
APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Industrial

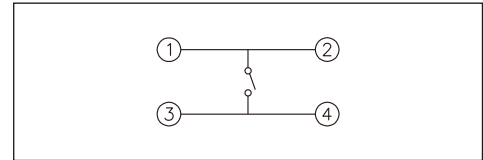
SPECIFICATION

Contact Rating	50mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 250V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.4mm
Operating Life	300,000 cycles for 520/320gf 1,000,000 cycles for 260/160gf
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

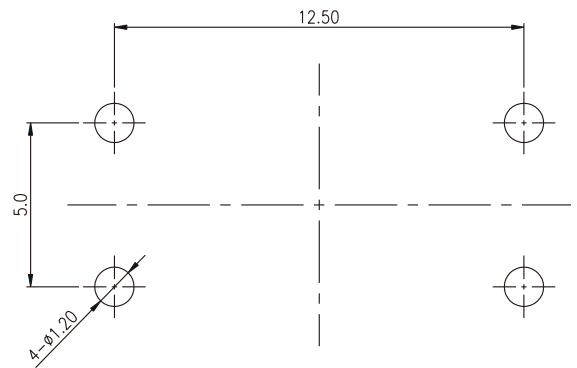
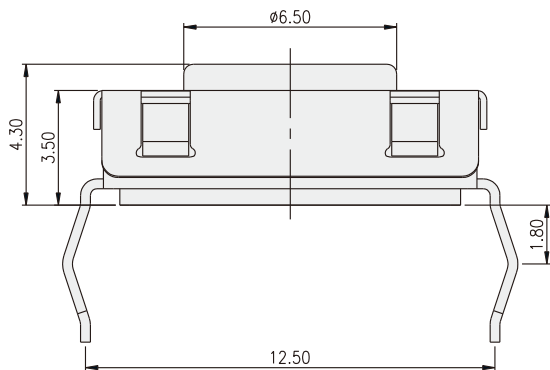
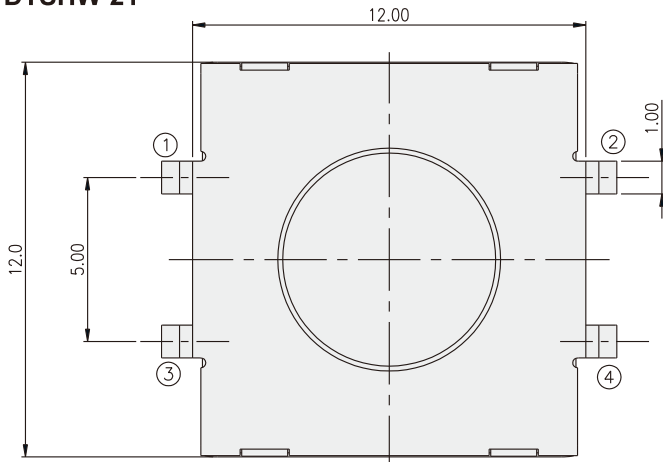


PACKAGE

- <Tube>
39 pcs
- <Tape & Reel>
DTSMW-21: 700 pcs
DTSMW-24: 500 pcs

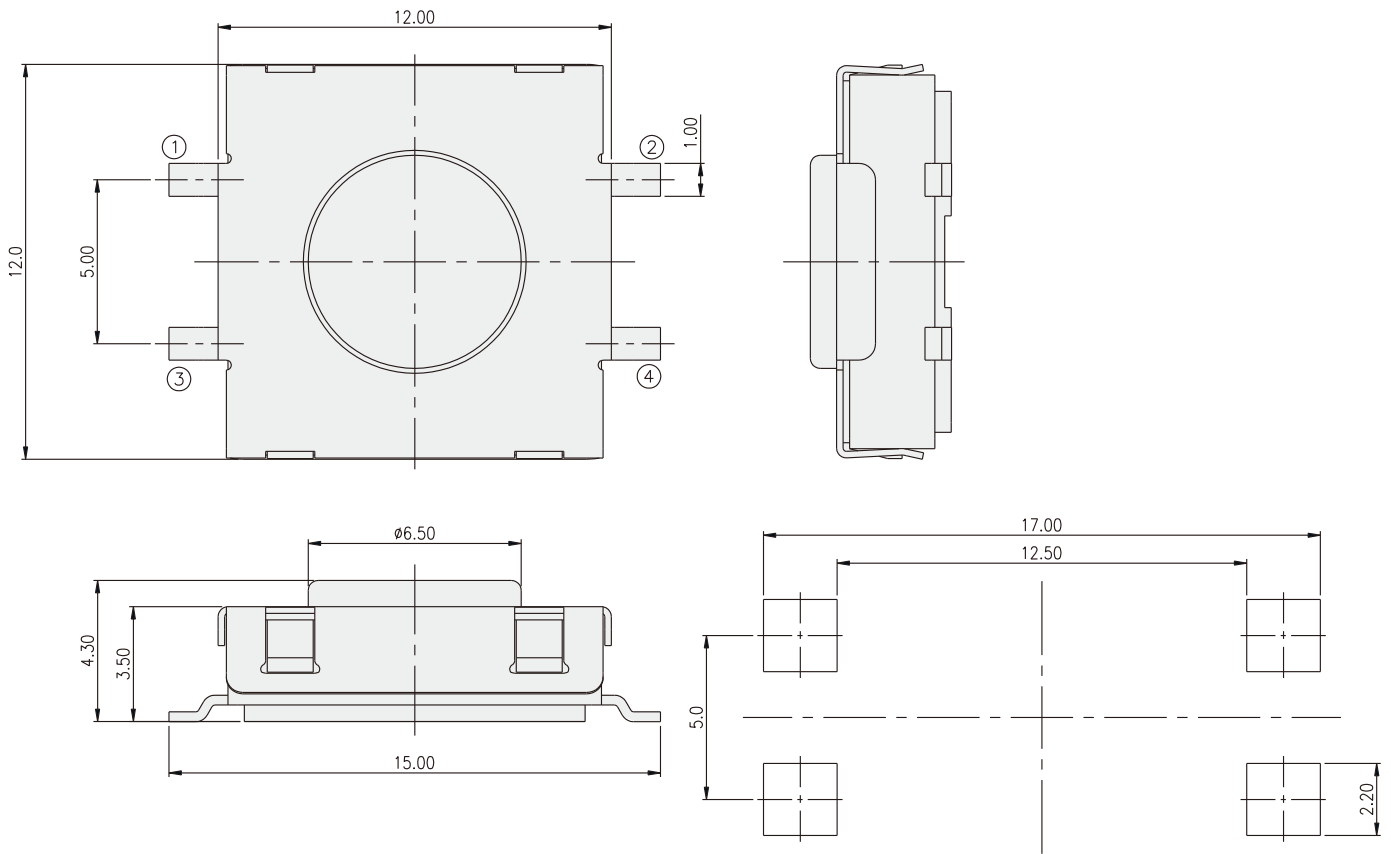
TACT SWITCH

DTSHW-21



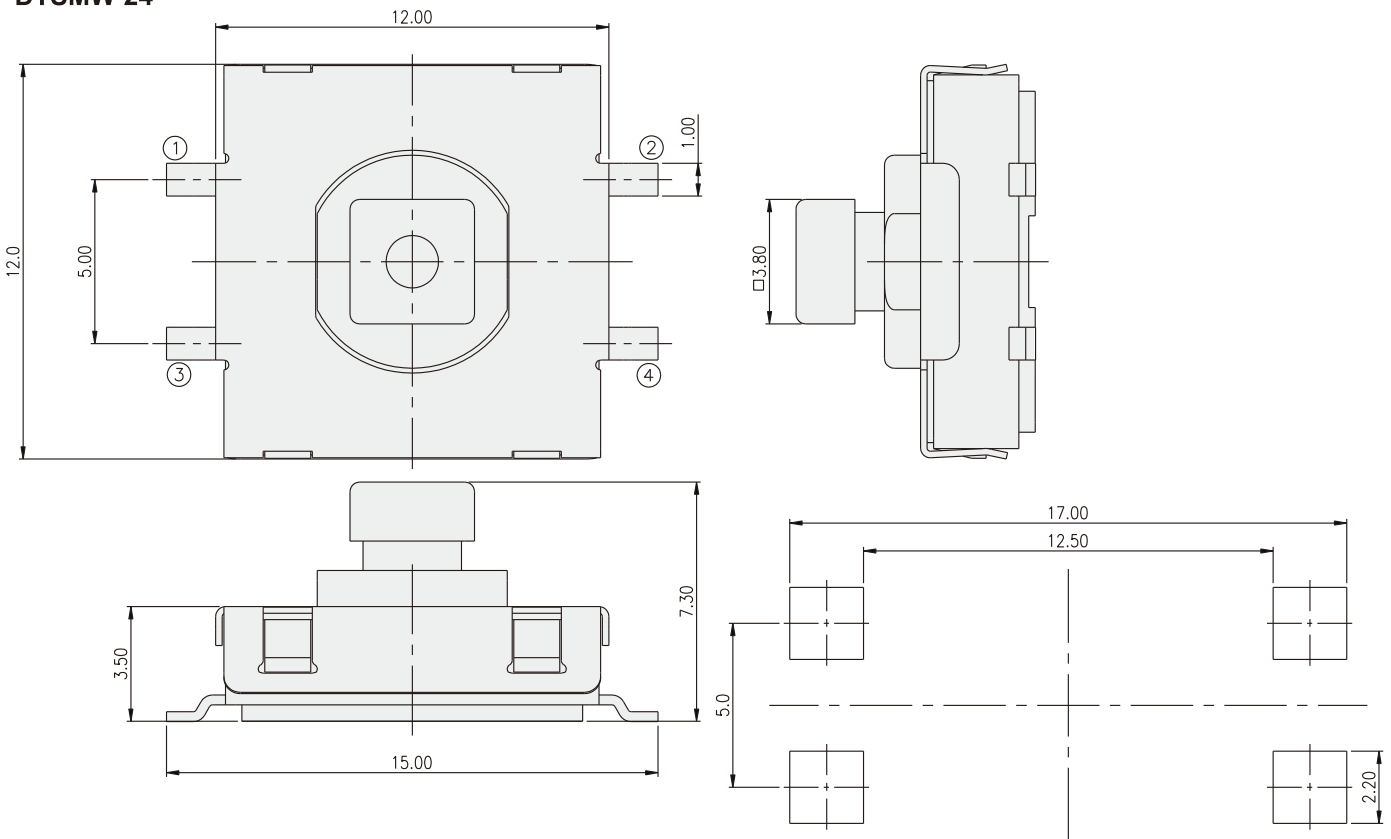
P.C.B. LAYOUT

DTSMW-21



P.C.B. LAYOUT

DTSMW-24



P.C.B. LAYOUT

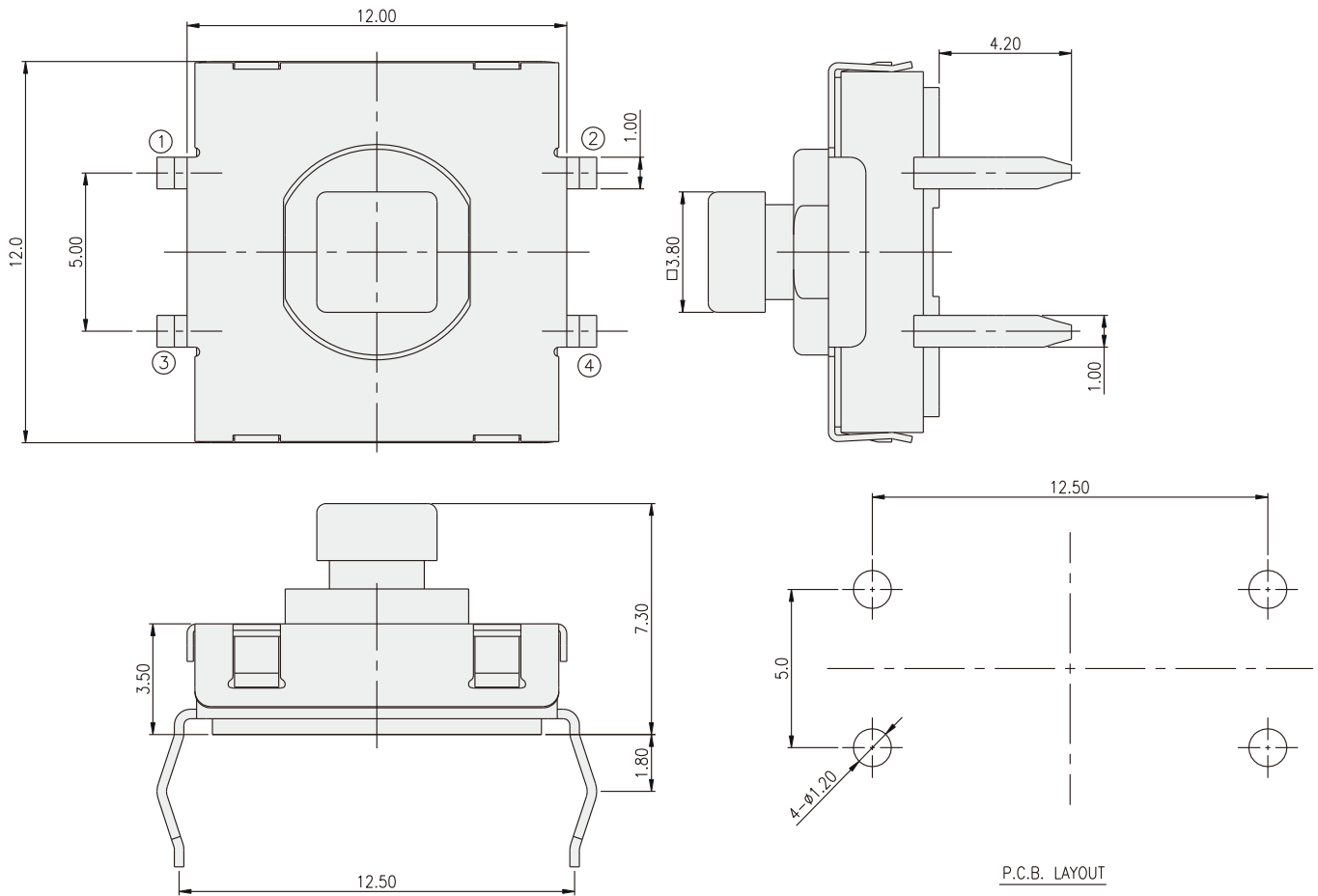
TACT SWITCH

TACT SWITCH
DTS()W-2 SERIES

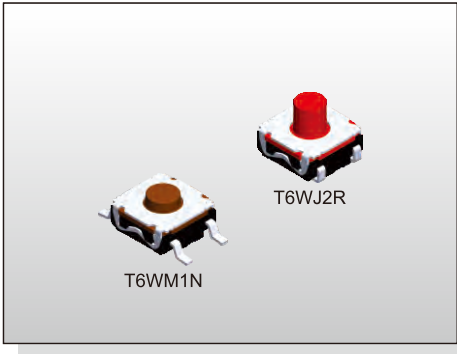
12x12 SMT & Through Hole
Washable Type



DTSHW-24



TACT SWITCH



FEATURES

- ※ J or M terminations
- ※ Long Travel type
- ※ Long operation cycles
- ※ IP67

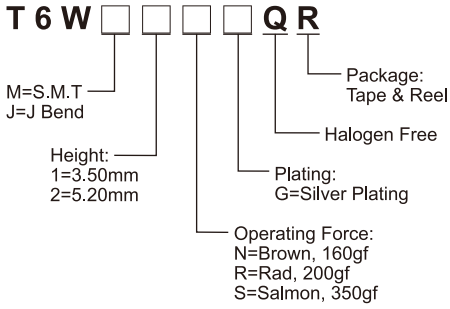
APPLICATION

- ※ Automotive
- ※ Cellular phones
- ※ Industrial electronics
- ※ Network infrastructure and IT
- ※ Elevator

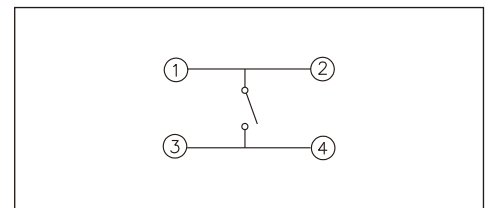
SPECIFICATION

Contact Rating	20mV DC~32V DC/1.0 mA~50 mA
Contact Resistance	100mΩ max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 200±50gf, Rad(R) 350±100gf, Salmon(S)
Travel	0.3mm (160gf) 0.35mm (200gf) 0.5mm (350gf)
Operating Life	300,000 cycles (350gf) 500,000 cycles (200gf) 5,000,000 cycles (160gf)
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-55°C(10 days) ~ +85°C(4 days)

HOW TO ORDER



CIRCUIT

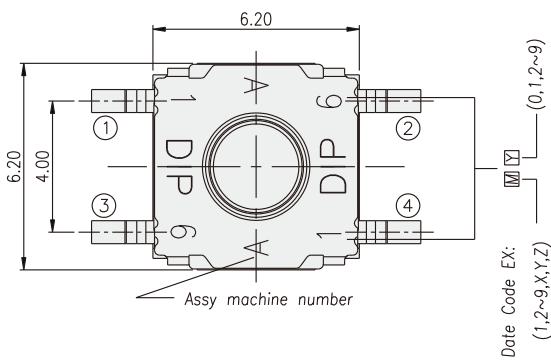


PACKAGE

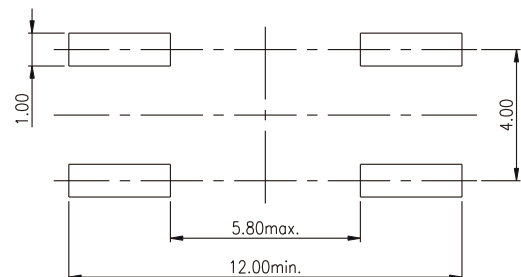
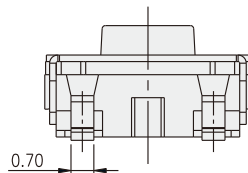
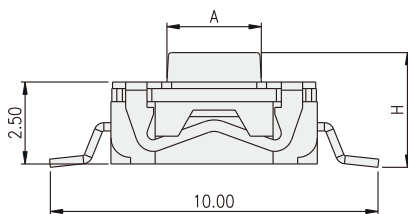
<Tape & Reel>
T6W [] 1: 2000 pcs
T6W [] 2: 1000 pcs

TACT SWITCH

T6WM



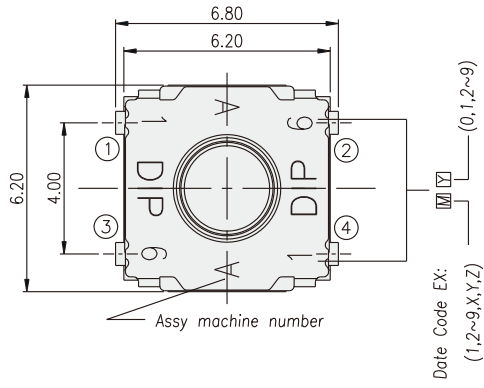
PART NO.	A	H
T6WM1	ø2.90	3.50
T6WM2	ø2.70	5.20



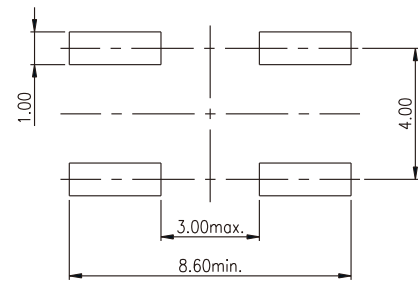
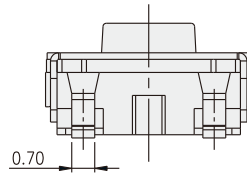
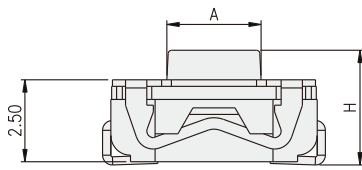
P.C.B. LAYOUT



T6WJ



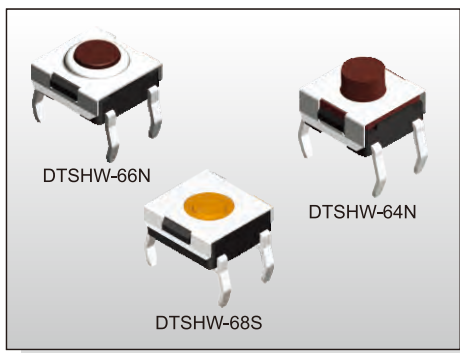
PART NO.	A	H
T6WJ1	ø2.90	3.50
T6WJ2	ø2.70	5.20



P.C.B. LAYOUT

TACT SWITCH DTSHW-6 SERIES

6x6 Through Hole
Washable Type



FEATURES

- ※Sealed
- ※Snap in type
- ※Dust proof with high reliability

APPLICATION

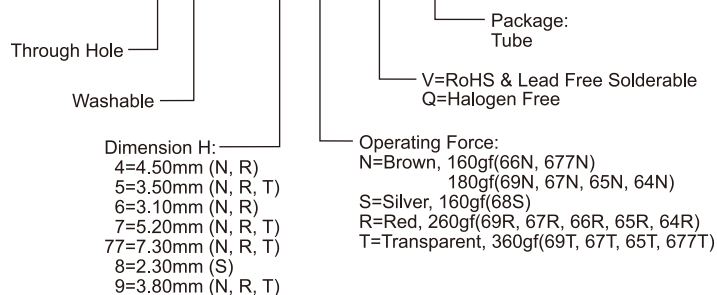
- ※Audio, OA equipment
- ※Instrumentation, Communication
- ※White goods

SPECIFICATION

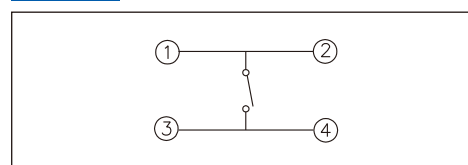
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 66/677 160±50gf, Silver(S) 68 180±50gf, Brown(N) 69/67/65/64 260±70gf, Red(R) 69/67/66/65/64 360±90gf, Transparent(T) 69/67/65/677
Travel	0.25mm 68S/66N/66R/677 0.45mm(69/67N,R)(65/64N,R,T) 0.6mm 69/67T
Operating Life	100,000 cycles min. for 66/68/677 500,000 cycles min. for 69/67/65/64
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

DTSHW-6 □ □ - □ - **B**



CIRCUIT

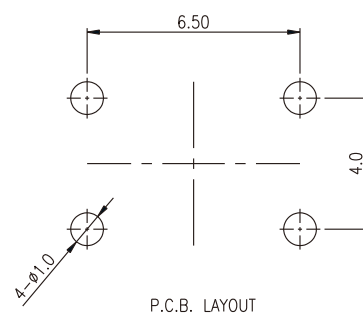
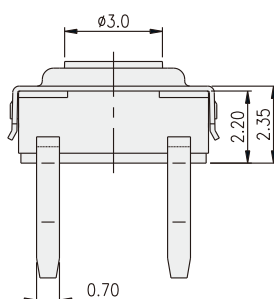
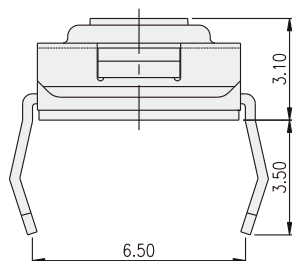
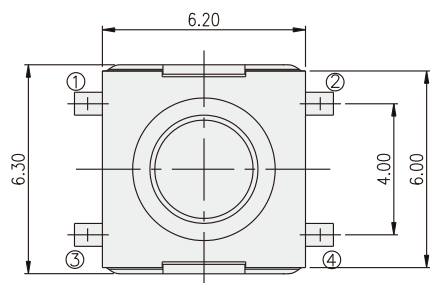


PACKAGE

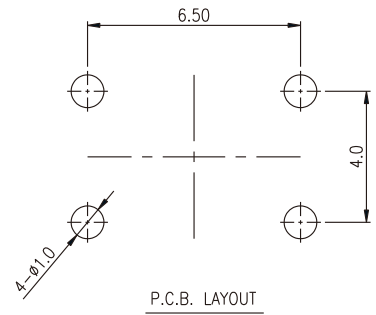
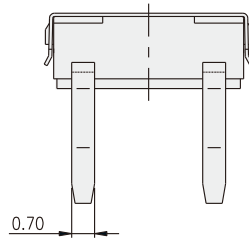
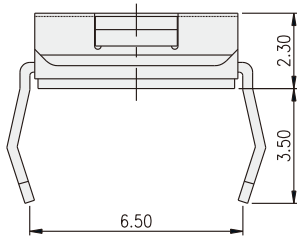
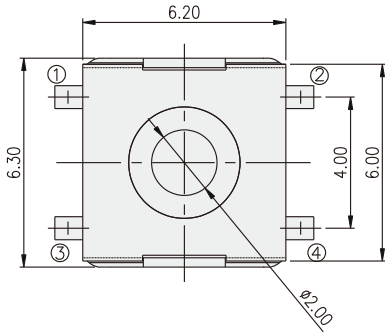
<Tube>
75 pcs

TACT SWITCH

DTSHW-66

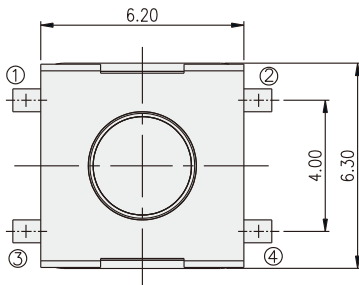


DTSHW-68

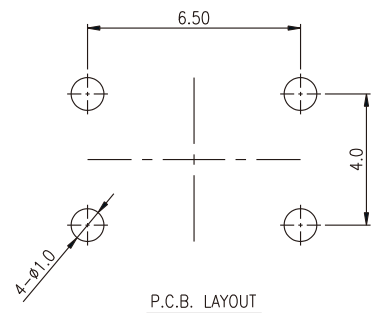
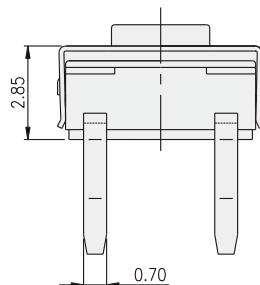
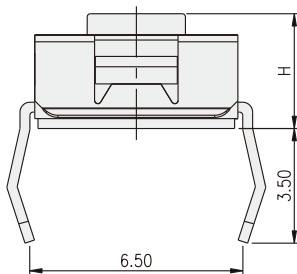


TACT SWITCH

DTSHW-6 □

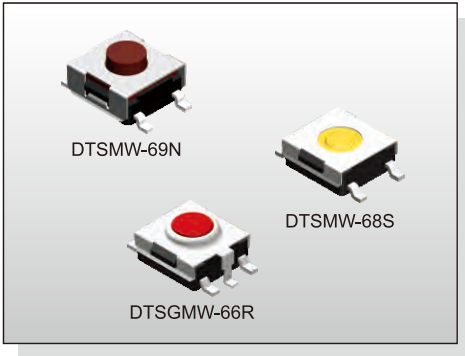


PART NO.	H
DTSHW-64	4.50
DTSHW-65	3.50
DTSHW-67	5.20
DTSHW-69	3.80
DTSHW-677	7.30



TACT SWITCH DTS(G)MW-6 SERIES

6x6 Gull-Wing SMT
Washable Type



FEATURES

- ※Sealed
- ※Reflow solderable
- ※Dust proof with high reliability

APPLICATION

- ※Audio, OA equipment
- ※Instrumentation, Communication
- ※White goods

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 66/677 160±50gf, Silver(S) 68 180±50gf, Brown(N) 69/67/65/64 260±70gf, Red(R) 69/67/66/65/64 360±90gf, Transparent(T) 69/67/65/677
Travel	0.25mm 68S/66N/66R/677 0.45mm (69/67N,R)/(65/64N,R,T) 0.6mm 69/67T
Operating Life	100,000 cycles min. for 68/66/677 500,000 cycles min. for 69/67/65/64
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

D T S **W - 6** - - - - -

M=S.M.T.
GM=S.M.T. & With Ground Pin (66 Only)

Washable

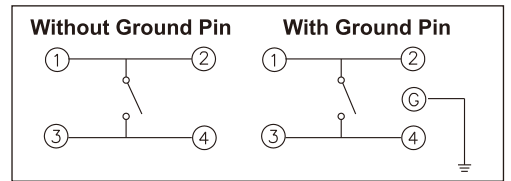
Package:
B=Tube
T/R=Tape & Reel

V=RoHS & Lead Free Solderable
Q=Halogen Free

Operating Force:
N=Brown, 160gf(66N, 677N)
 180gf(69N, 67N, 65N, 64N)
S=Silver, 160gf(68S)
R=Red, 260gf(69R, 67R, 66R, 65R, 64R)
T=Transparent, 360gf(69T, 67T, 65T, 677T)

Dimension H:
4=4.50mm (N, R)
5=3.50mm (N, R, T)
6=3.10mm (N, R)
7=5.20mm (N, R, T)
77=7.30mm (N, R, T)
8=2.30mm (S)
9=3.80mm (N, R, T)

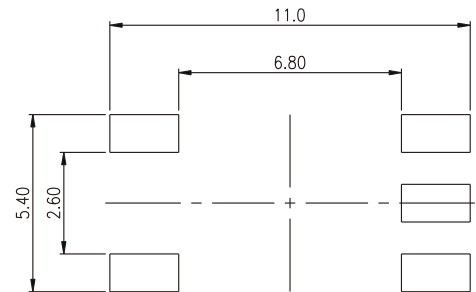
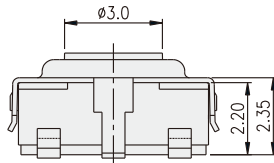
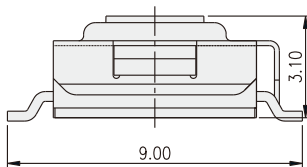
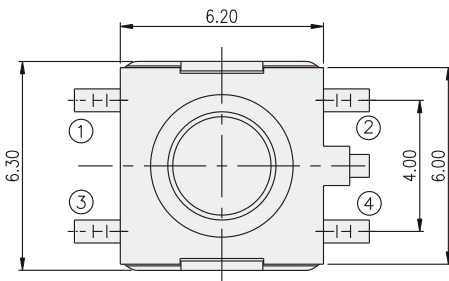
CIRCUIT



PACKAGE

- <Tube>
75 pcs
- <Tape & Reel>
DTSGMW-66: 2000 pcs
DTSMW-68, 66: 2000 pcs
DTSMW-69, 65: 1900 pcs
DTSMW-67, 64: 900 pcs
DTSMW-677: 650 pcs

DTSGMW-66



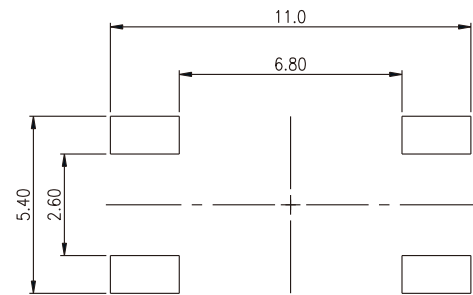
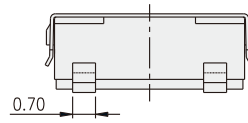
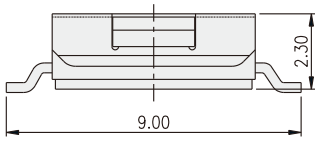
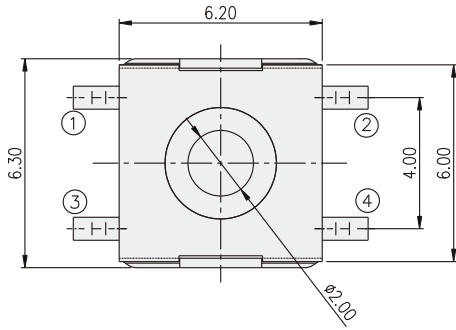
P.C.B. LAYOUT

TACT SWITCH
DTS(G)MW-6 SERIES

6x6 Gull-Wing SMT
 Washable Type



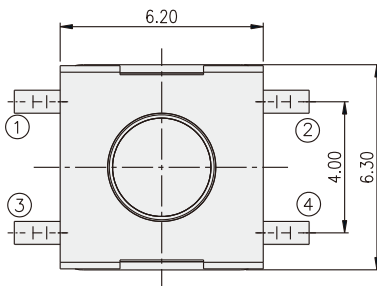
DTSMW-68



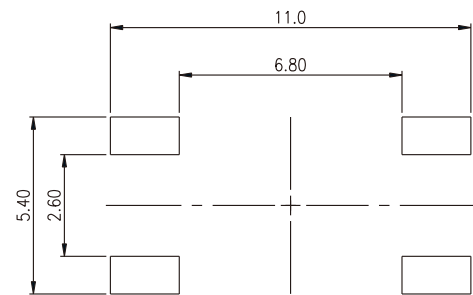
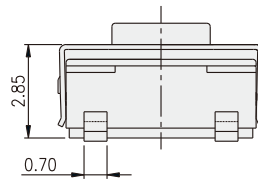
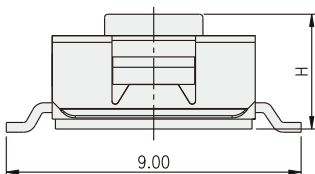
P.C.B. LAYOUT

TACT SWITCH

DTSMW-6 □



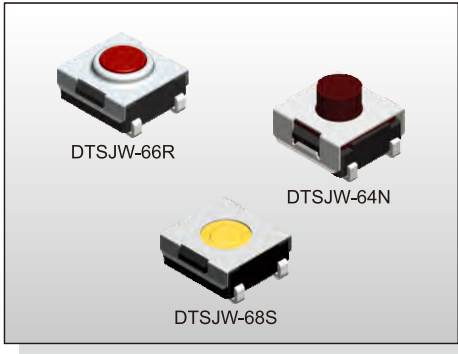
PART NO.	H
DTSMW-64	4.50
DTSMW-65	3.50
DTSMW-67	5.20
DTSMW-69	3.80
DTSMW-677	7.30



P.C.B. LAYOUT

TACT SWITCH DTSJW-6 SERIES

6x6 J SMT
Washable Type



FEATURES

- ※Sealed
- ※Reflow solderable
- ※Dust proof with high reliability

APPLICATION

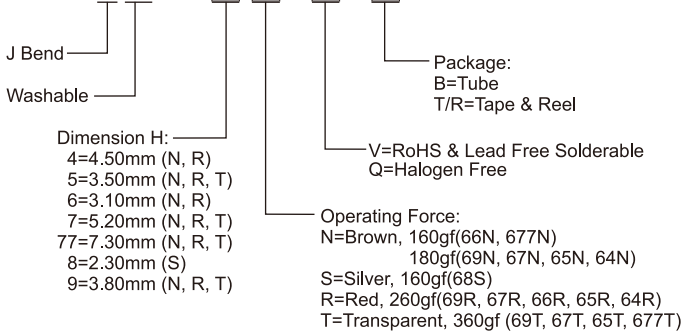
- ※Audio, OA equipment
- ※Instrumentation, Communication
- ※White goods

SPECIFICATION

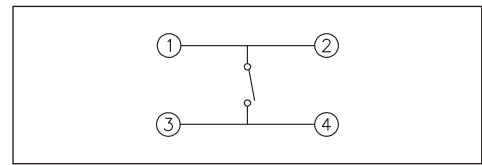
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 66/677 160±50gf, Silver(S) 68 180±50gf, Brown(N) 69/67/65/64 260±70gf, Red(R) 69/67/66/65/64 360±90gf, Transparent(T) 69/67/65/677
Travel	0.25mm 68S/66N/66R/677 0.45mm (69/67N,R)/(65/64N,R,T) 0.6mm 69/67T
Operating Life	100,000 cycles min. for 68/66/677 500,000 cycles min. for 69/67/65/64
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

D T S J W - 6



CIRCUIT



PACKAGE

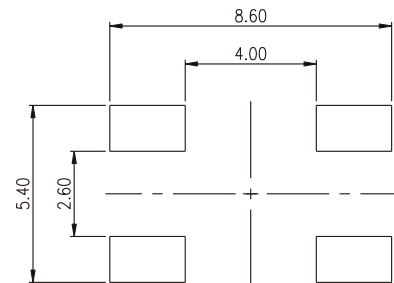
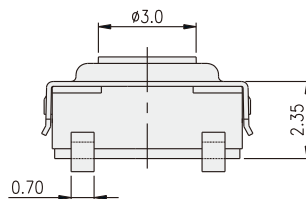
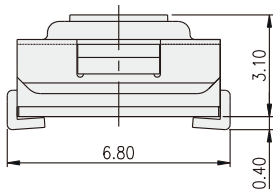
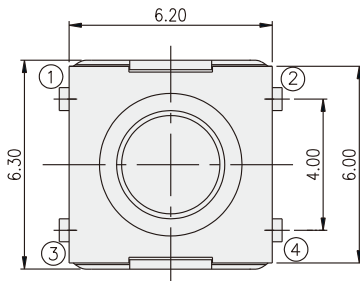
<Tube>

75 pcs

<Tape & Reel>

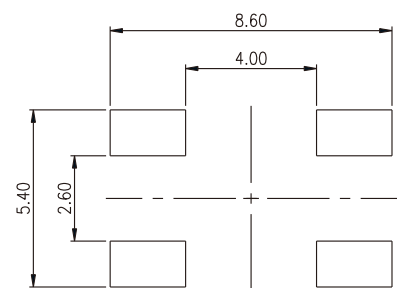
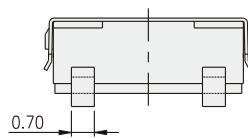
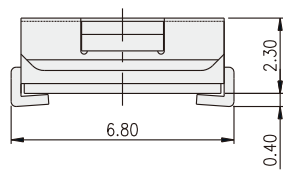
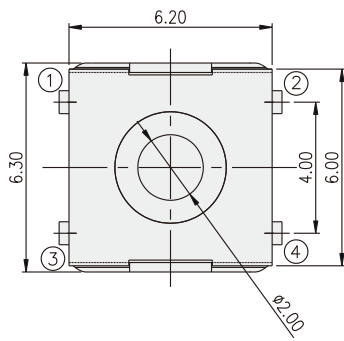
- DTSJW-64, 67: 900 pcs
- DTSJW-65, 69: 1800 pcs
- DTSJW-66: 1900 pcs
- DTSJW-68: 2000 pcs
- DTSJW-677: 650 pcs

DTSJW-66



P.C.B. LAYOUT

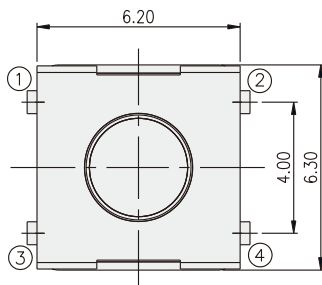
DTSJW-68



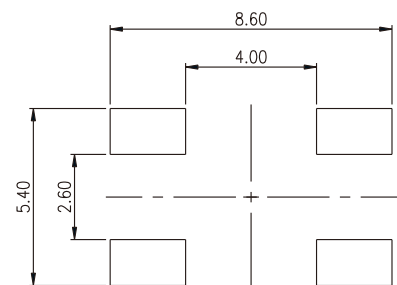
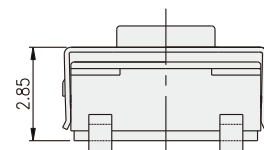
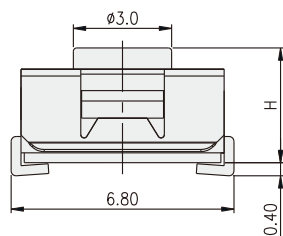
P.C.B. LAYOUT

TACT SWITCH

DTSJW-6□



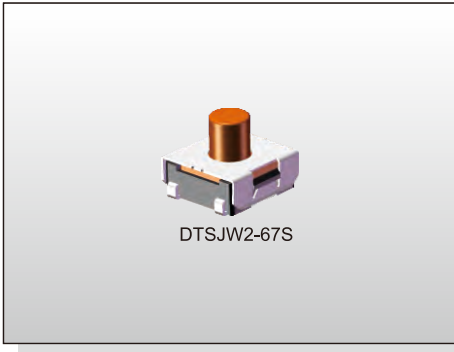
PART NO.	H
DTSJW-64	4.50
DTSJW-65	3.50
DTSJW-67	5.20
DTSJW-69	3.80
DTSJW-677	7.30



P.C.B. LAYOUT

TACT SWITCH DTSJW()-6 SERIES

6x6 J SMT
Washable Type



DTSJW2-67S

FEATURES

- ※ Sealed
- ※ Gold contact available
- ※ Dust proof with high reliability

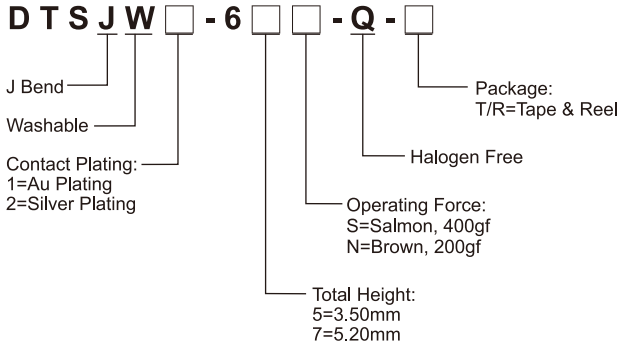
APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation, Communication
- ※ White goods

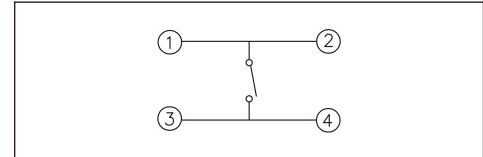
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	200±50gf, 400±100gf
Travel	0.4/0.6mm
Operating Life	300, 000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

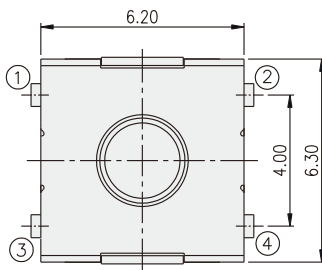


PACKAGE

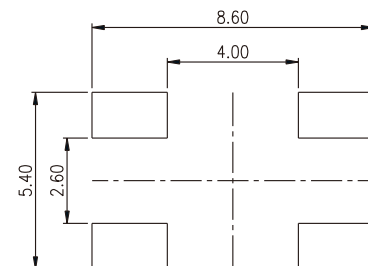
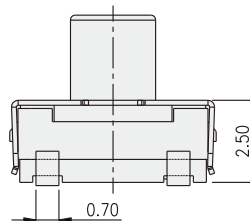
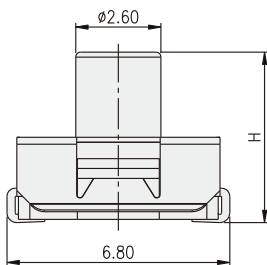
<Tape & Reel>
DTSJW□-65: 1900 pcs
DTSJW□-67: 900 pcs

TACT SWITCH

DTSJW□-6



PART NO.	H
DTSJW□-65	3.50
DTSJW□-67	5.20



P.C.B. LAYOUT

TACT SWITCH
DTSYHL-6 SERIES

**6x6 Through Hole Type
(Pitch 4.0mm)**



FEATURES

- ※Low profile with 2.5-3.5mm height
- ※Snap-in type
- ※Sharp click feeling

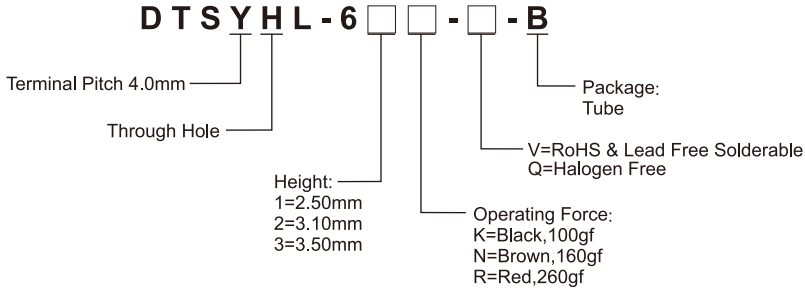
APPLICATION

- ※Audio, OA equipment
- ※Instrumentation
- ※Industrial

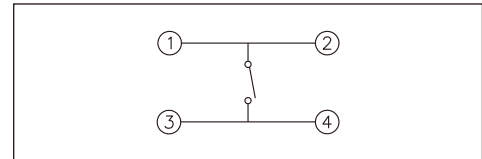
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R)
Travel	0.25mm
Operating Life	100,000 cycles for 260gf 1,000,000 cycles for 160, 100gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-40°C ~ +70°C

HOW TO ORDER



CIRCUIT

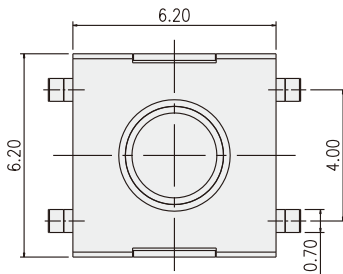


PACKAGE

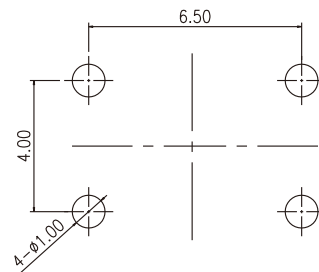
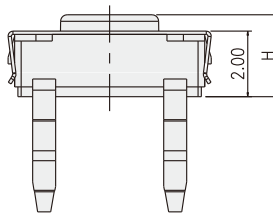
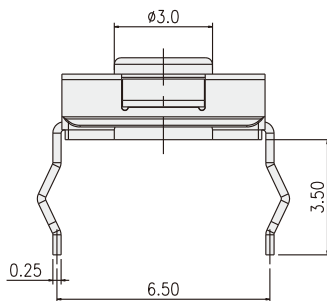
<Tube>
75 pcs

TACT SWITCH

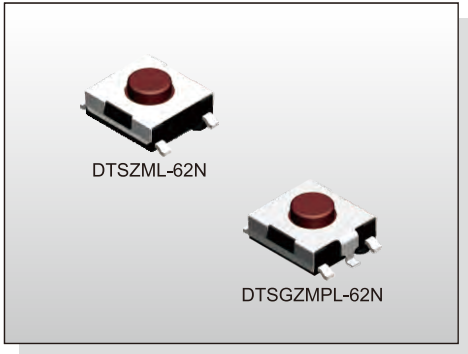
DTSYHL-6



PART NO.	H
DTSYHL-61	2.50
DTSYHL-62	3.10
DTSYHL-63	3.50



P.C.B. LAYOUT



FEATURES

- ※ Thinner type with 2.5-5.25mm height
- ※ Ground terminal available
- ※ Reflow solderable

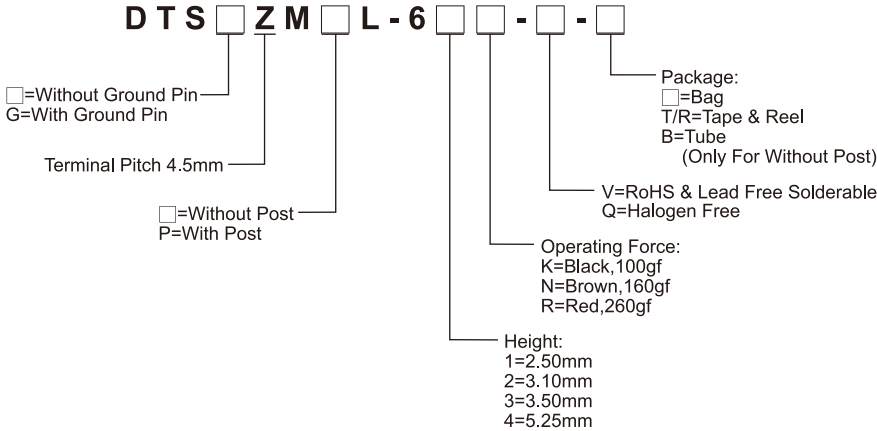
APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Consumer electronics

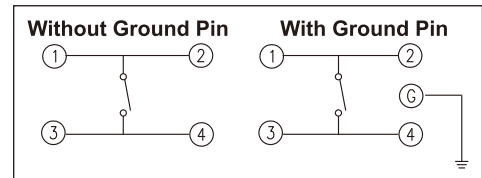
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R)
Travel	0.25mm
Operating Life	100,000 cycles for 260gf 1,000,000 cycles for 160, 100gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



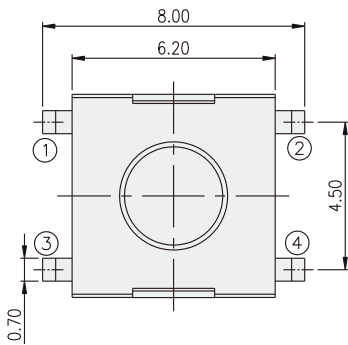
CIRCUIT



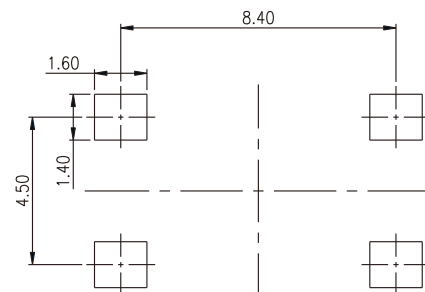
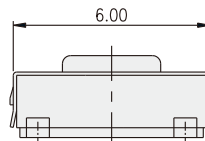
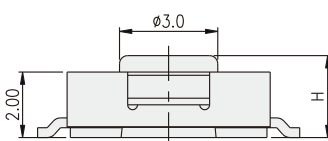
PACKAGE

- <Tube>
75 pcs
- <Tape & Reel>
DTS(G)ZML-61□: 2500 pcs
DTS(G)ZML-62□: 2500 pcs
DTS(G)ZMPL-61, 62: 1200 pcs
DTS(G)ZM(P)L-63: 1200 pcs
DTS(G)ZML(P)L-64: 900 pcs

DTSZML-6

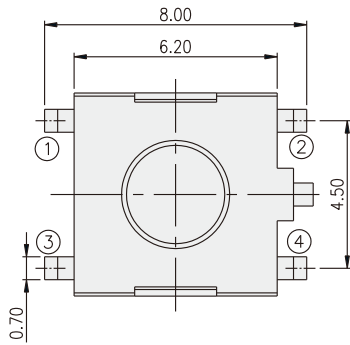


PART NO.	H
DTS□ZML-61	2.50
DTS□ZML-62	3.10
DTS□ZML-63	3.50
DTS□ZML-64	5.25

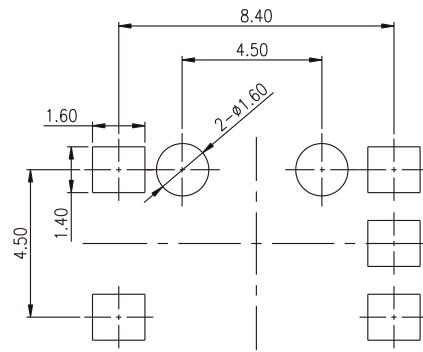
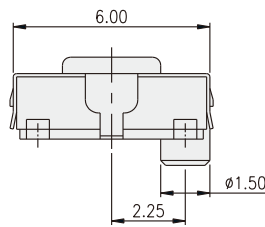
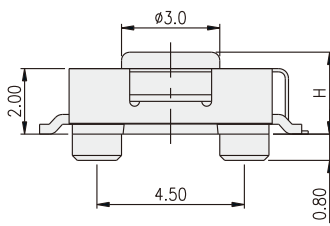


P.C.B. LAYOUT

DTSGZMPL-6



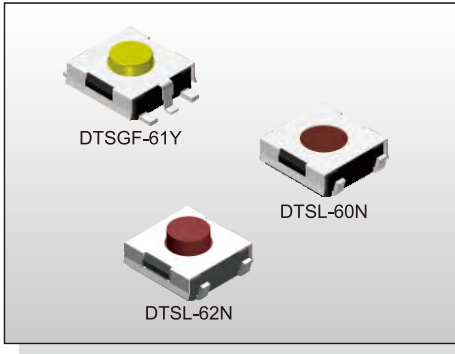
PART NO.	H
DTS□ZMPL-61	2.50
DTS□ZMPL-62	3.10
DTS□ZMPL-63	3.50
DTS□ZMPL-64	5.25



P.C.B. LAYOUT

TACT SWITCH DTS(G)(L)(F)-6 SERIES

6x6 Thinner Type With Ground Terminal
(Pitch 4.0mm)



FEATURES

- ※ Thinner type with 2.0-3.1mm height
- ※ Ground terminal available
- ※ Reflow solderable

APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ White goods

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, Black(K) 160±50gf, Brown(N) 200±50gf, Brown(N) 62 Only 260±50gf, Red(R) 320±80gf, White(S) 520±130gf, Yellow(Y)
Travel	0.25mm
Operating Life	300,000 cycles for 520/320gf 500,000 cycles for 260/200gf 1,000,000 cycles for 160/100gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

D T S - **6** - -

=Without Ground Pin
G=With Ground Pin

L=L S.M.T.
F=F S.M.T.

Total Height:
0=2.00mm
1=2.50mm
2=3.10mm

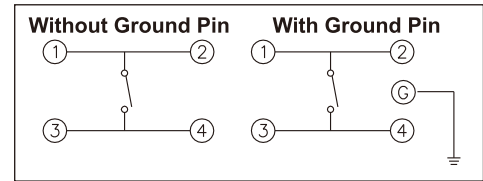
Operating Force:
K=Black, 100gf
N=Brown, 160gf
R=Red, 260gf
S=White, 320gf
Y=Yellow, 520gf
N=Brown, 200gf <Soft actuator 62 Only>

Package:
B=Tube
T/R=Tape & Reel

V=RoHS & Lead Free Solderable
Q=Halogen Free

Actuator Type:
=Soft <62> / Hard <60, 61>
P=Hard <62 Only>

CIRCUIT



PACKAGE

<Tube>

75 pcs

<Tape & Reel>

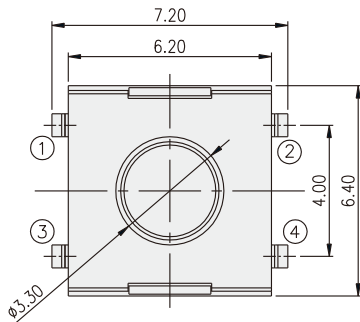
DTS(G)F-60 / DTSF-61 : 3000 pcs

DTS(G)L-60 / DTS(G)L-61 : 2700 pcs

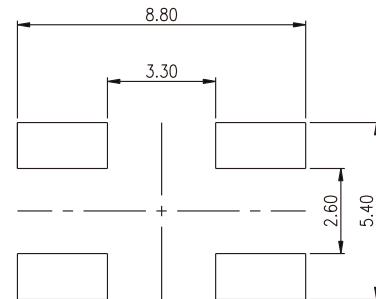
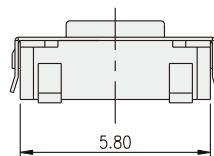
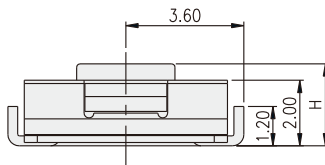
DTS(G)L-62 / DTS(G)F-62 : 2500 pcs

DTSGF-61 : 2500 pcs

DTSL-6

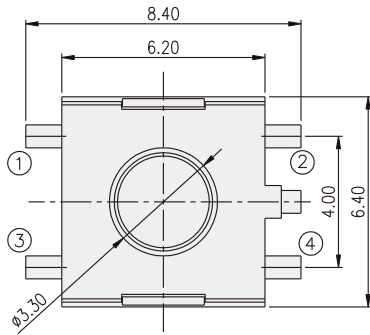


PART NO.	H
DTSL-60	2.00
DTSL-61	2.50
DTSL-62	3.10

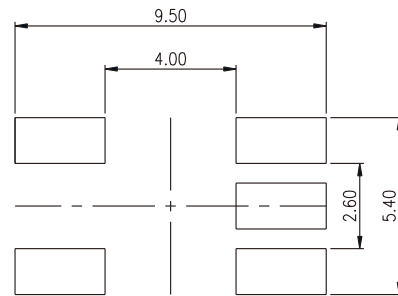
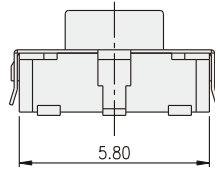
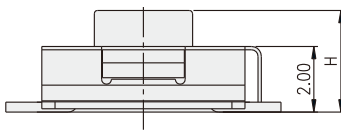


P.C.B. LAYOUT

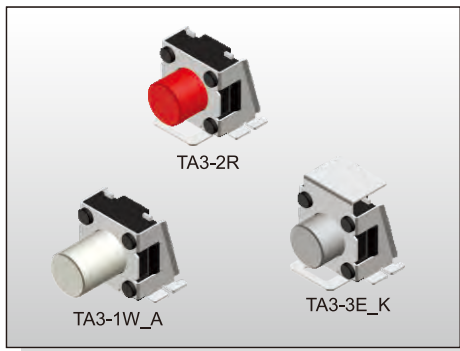
DTSGF-6



PART NO.	H
DTSGF-60	2.00
DTSGF-61	2.50
DTSGF-62	3.10



P.C.B. LAYOUT



FEATURES

- ※Extended bracket available
- ※Easy to pick & place with top tab

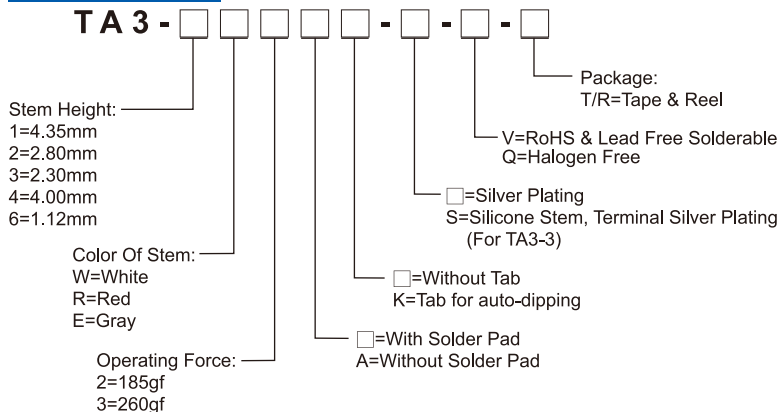
APPLICATION

- ※Data storage, Server
- ※Instrumentation
- ※Audio, OA equipment

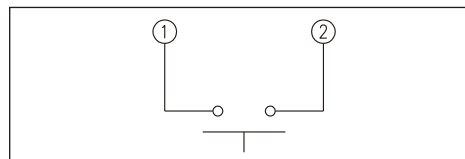
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	10MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	185±50gf, 260±50gf
Travel	0.15mm
Operating Life	200, 000 cycles
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



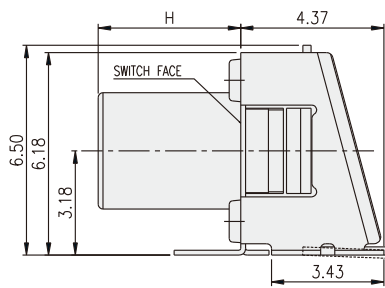
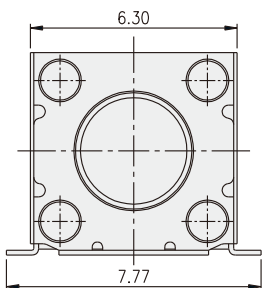
CIRCUIT



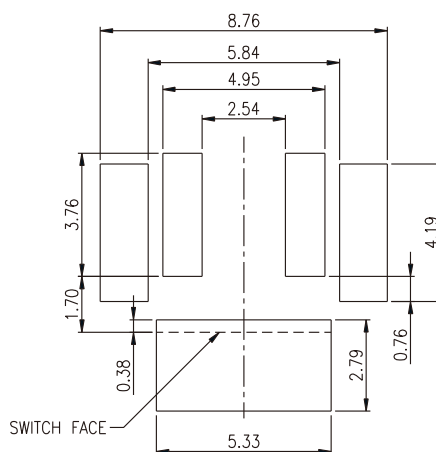
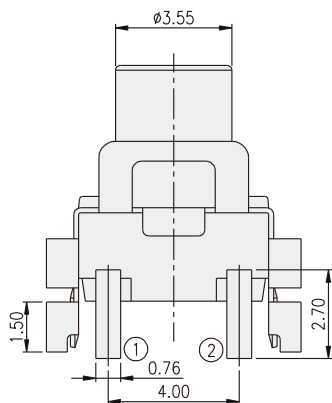
PACKAGE

<Tape & Reel>
 TA3: 600 pcs
 TA3-[]-[]-[]K: 550 pcs

TA3-[]-[]

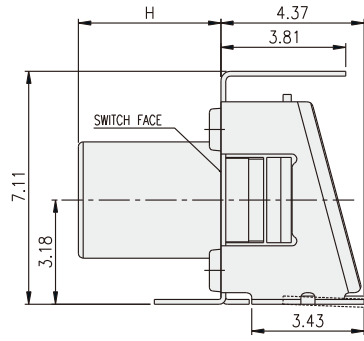
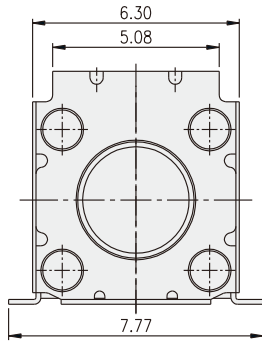


PART NO.	H
TA3-1[][]	4.35
TA3-2[][]	2.80
TA3-3[][]	2.30
TA3-4[][]	4.00
TA3-6[][]	1.12

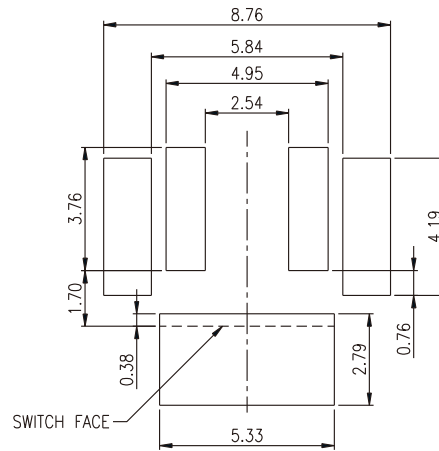
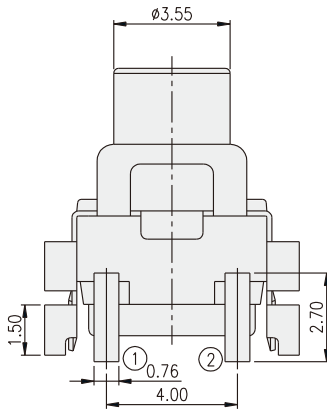


P.C.B. LAYOUT

TA3-□□K

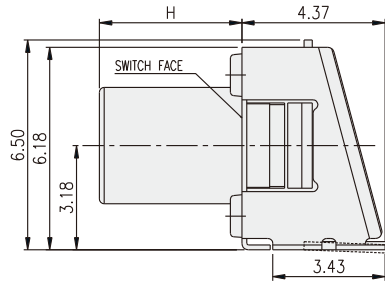
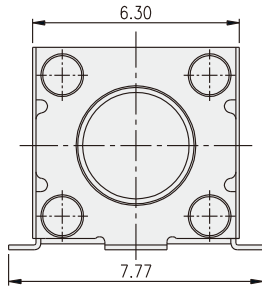


PART NO.	H
TA3-1□□K	4.35
TA3-2□□K	2.80
TA3-3□□K	2.30
TA3-4□□K	4.00
TA3-6□□K	1.12

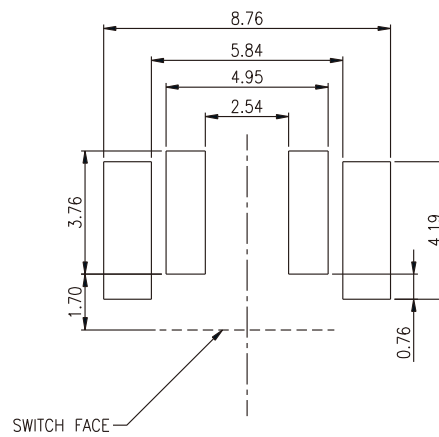
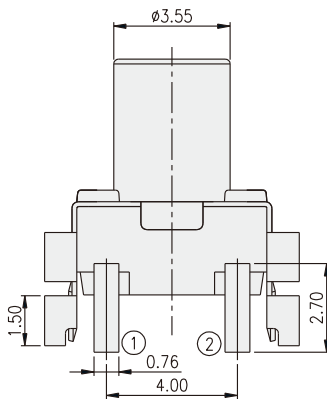


P.C.B. LAYOUT

TA3-□□A



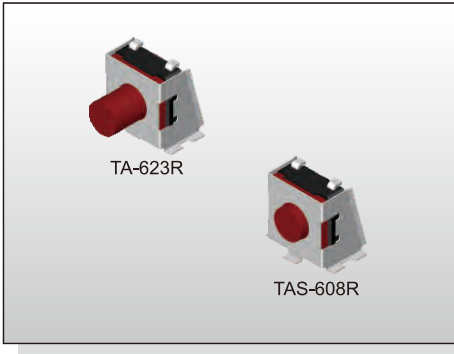
PART NO.	H
TA3-1□□A	4.35
TA3-2□□A	2.80
TA3-3□□A	2.30
TA3-4□□A	4.00
TA3-6□□A	1.12



P.C.B. LAYOUT

TACT SWITCH TA-6 SERIES

6x6 SMT & Right Angle Type Soft Stem



FEATURES

- ※Right angle (SMT type)
- ※Support terminal available
- ※Reflow solderable

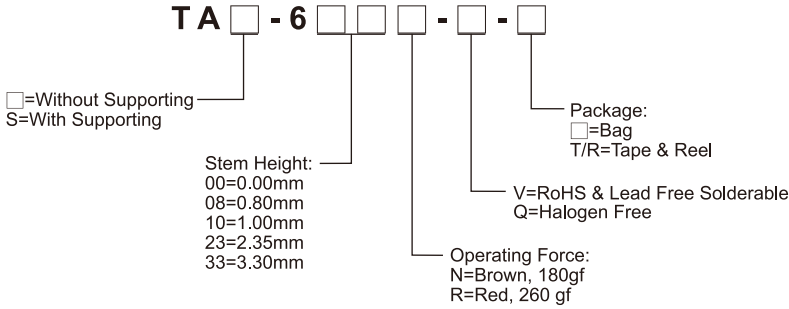
APPLICATION

- ※Audio, OA equipment
- ※Instrumentation
- ※Hair dryers

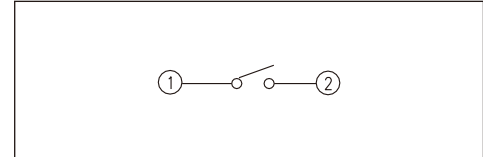
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	180±50gf, Brown(N) 260±70gf, Red(R)
Travel	0.45mm
Operating Life	500,000 cycles
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

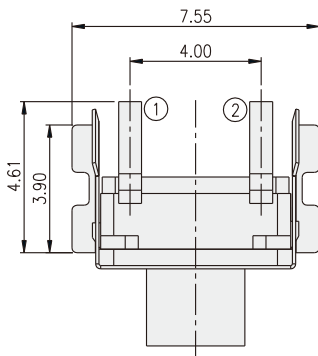


PACKAGE

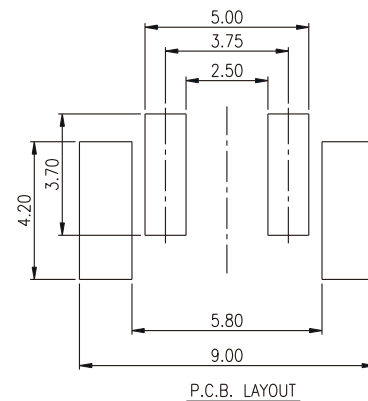
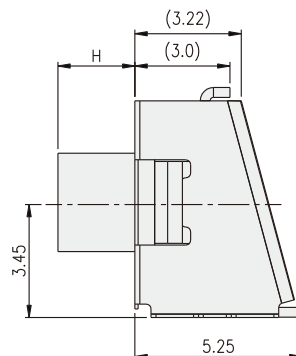
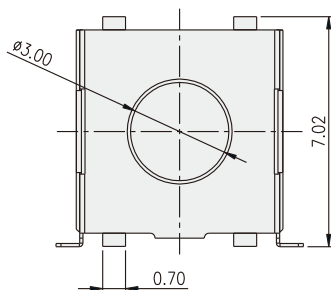
<Bag>
500 pcs
<Tape & Reel>
TA(S)-600 / 608 / 610 / 623: 700 pcs
TA(S)-633: 500 pcs

TACT SWITCH

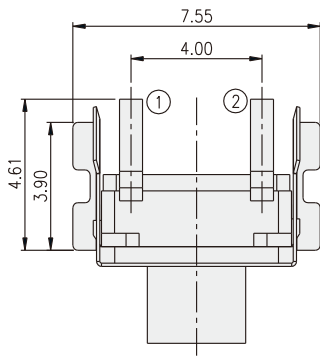
TA-6



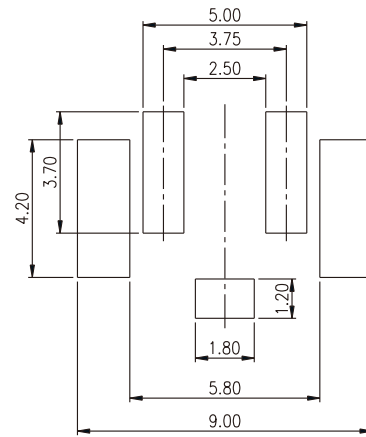
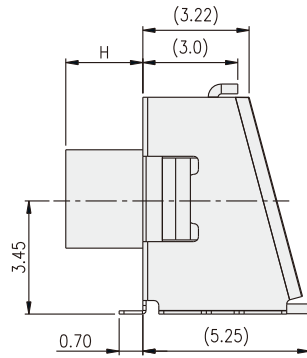
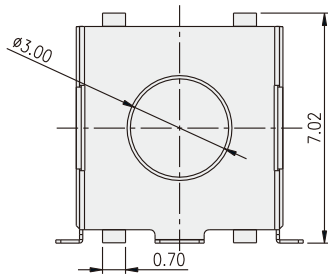
PART NO.	H
TA-600	0
TA-608	0.80
TA-610	1.00
TA-623	2.35
TA-633	3.30



TAS-6



PART NO.	H
TAS-600	0
TAS-608	0.80
TAS-610	1.00
TAS-623	2.35
TAS-633	3.30

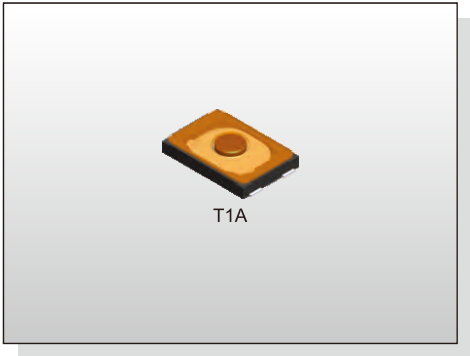


P.C.B. LAYOUT

TACT SWITCH

TACT SWITCH
T1A SERIES

2.8*1.9 SMT Type
(H=0.60mm)



FEATURES

- ※ Compact-size 2.8*1.9mm
- ※ Low profile with 0.60mm
- ※ Long operation cycles

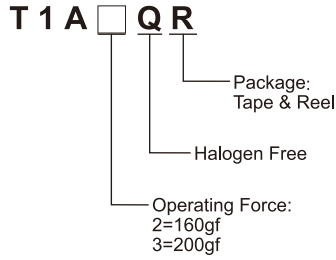
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device
- ※ 3C products

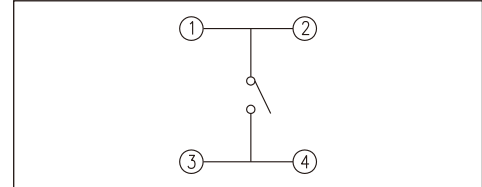
SPECIFICATION

Contact Rating	10uA, 1V DC to 50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf / 200±50gf
Travel	0.13mm
Operating Life	300,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

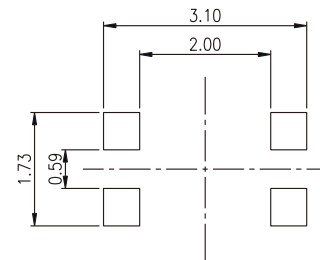
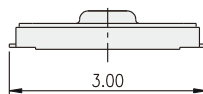
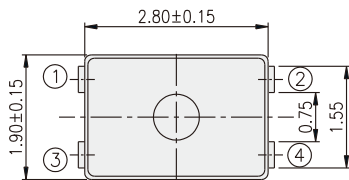


PACKAGE

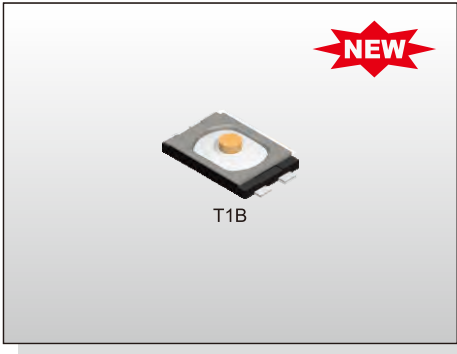
<Tape & Reel>
16000 pcs

TACT SWITCH

T1A



P.C.B. LAYOUT



T1B

FEATURES

- ※ Compact-size 2.6*1.6mm
- ※ Low profile with 0.55mm
- ※ 200,000 operation cycles

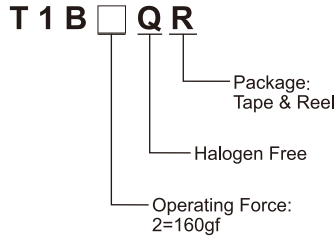
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device
- ※ 3C products

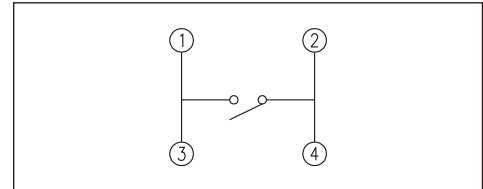
SPECIFICATION

Contact Rating	10uA, 2V DC to 20mA, 15V DC
Contact Resistance	500mΩ max.
Insulation Resistance	50MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.11mm
Operating Life	200,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

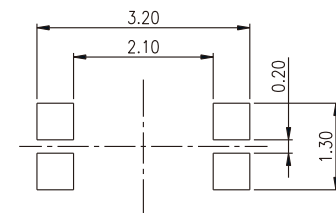
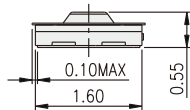
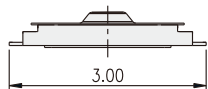
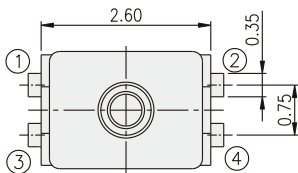


PACKAGE

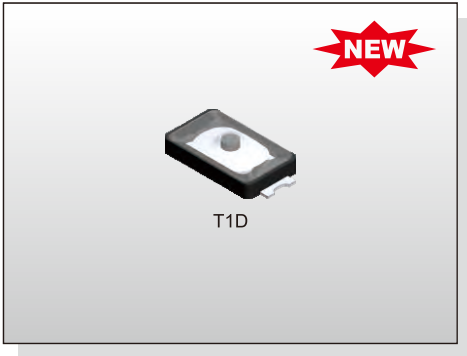
<Tape & Reel>
8000 pcs

TACT SWITCH

T1B



P.C.B. LAYOUT



T1D

FEATURES

- ※ Compact-size 2.2*1.3mm
- ※ Low profile with 0.55mm
- ※ 100,000 operation cycles

APPLICATION

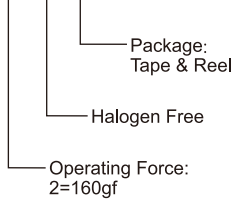
- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device
- ※ 3C products

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.11mm
Operating Life	100,000 cycles
Operating Temp.	-30°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

T 1 D □ Q R

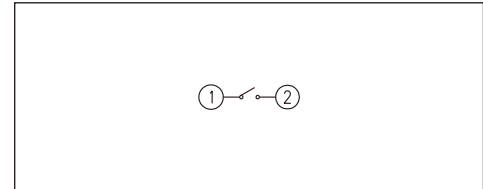


Package:
Tape & Reel

Halogen Free

Operating Force:
2=160gf

CIRCUIT

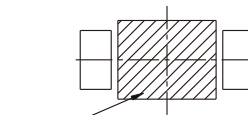
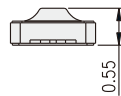
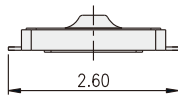
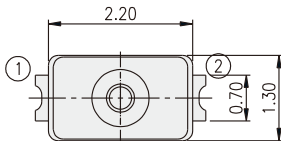


PACKAGE

To be confirmed

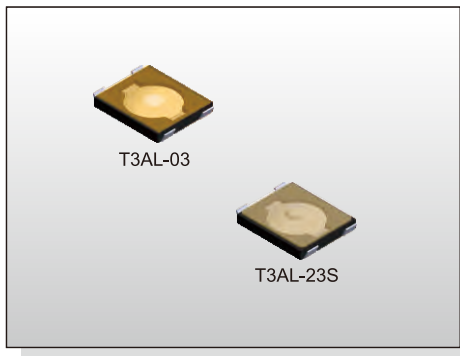
TACT SWITCH

T1D



Any land pattern or vias shall not be provided at 1.5X1.2 area.

P.C.B. LAYOUT



FEATURES

- ※ Compact-sized 2.6x3mm
- ※ Low profile with 0.45mm / 0.65mm

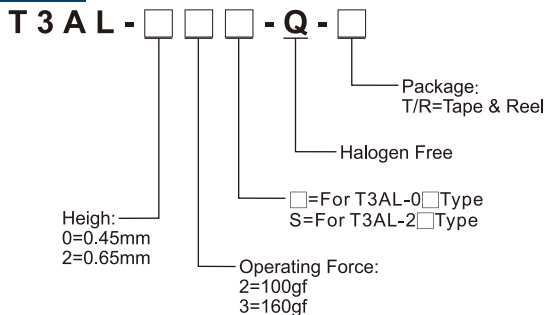
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device

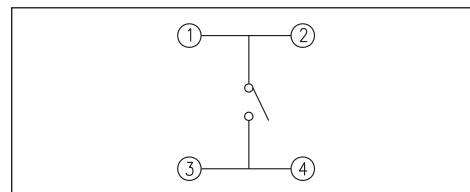
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	50MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50gf, 160±50gf
Travel	0.15mm
Operating Life	100,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

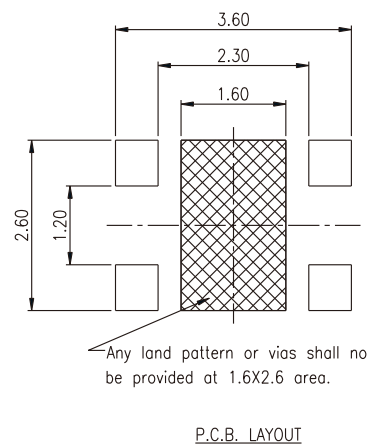
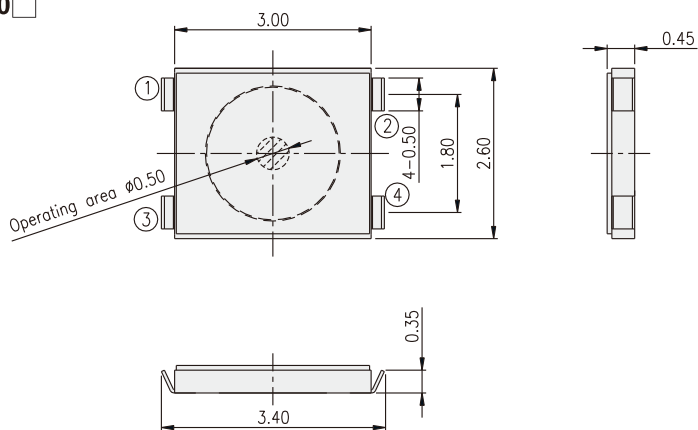


PACKAGE

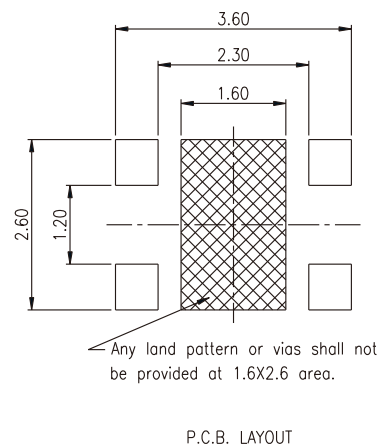
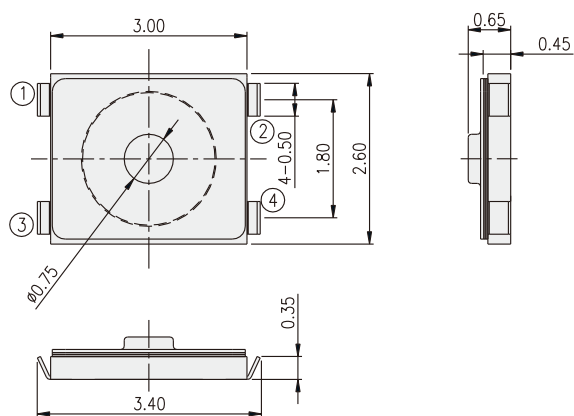
<Tape & Reel>
8000 pcs

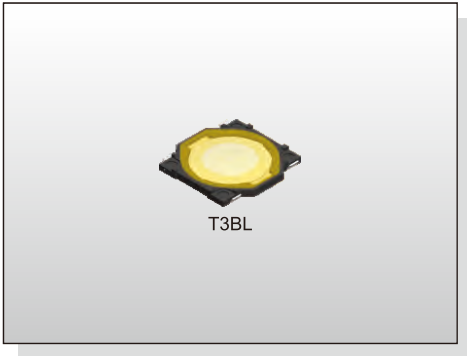
TACT SWITCH

T3AL-0□



T3AL-2□S





FEATURES

- ※ Compact-sized 3.7x3.7mm
- ※ Low profile of 0.35mm height
- ※ 500,000 life cycles operating

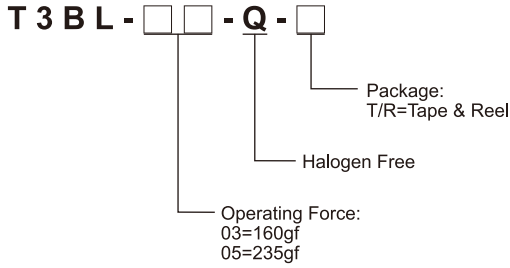
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device

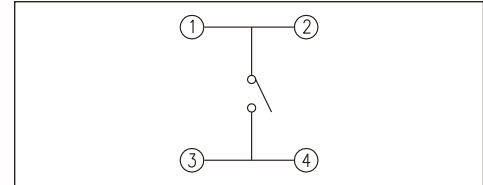
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf/235±60gf
Travel	0.15mm
Operating Life	50,000 cycles for 235gf 500,000 cycles for 160gf
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

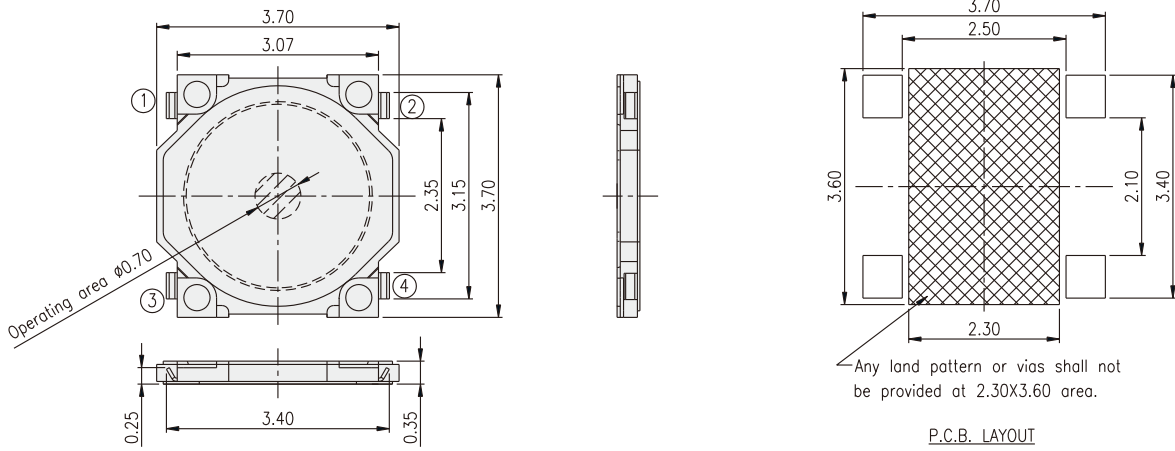


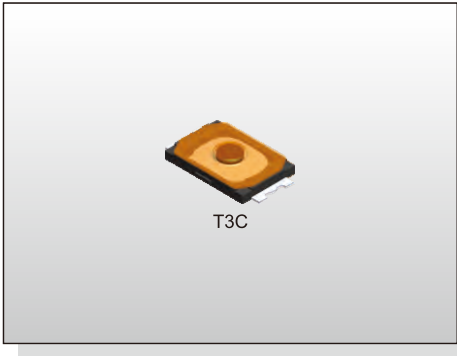
PACKAGE

<Tape & Reel>
8000 pcs

TACT SWITCH

T3BL





T3C

FEATURES

- ※ Compact-size 3.0*2.0mm
- ※ Low profile with 0.60mm
- ※ Long operation cycles

APPLICATION

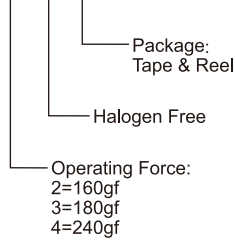
- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device
- ※ 3C products

SPECIFICATION

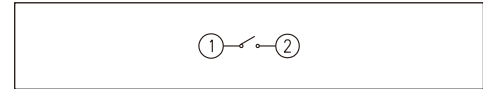
Contact Rating	10uA, 1V DC to 50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf / 180±50gf / 240±60gf
Travel	0.13mm
Operating Life	300,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

T 3 C □ Q R



CIRCUIT

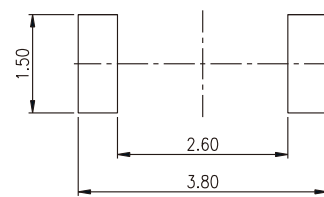
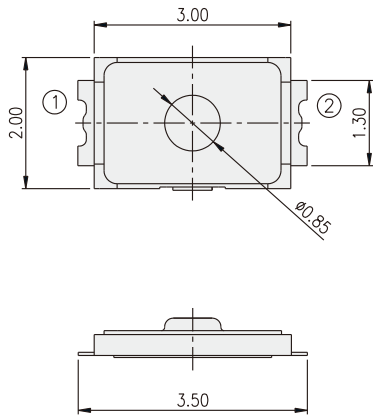


PACKAGE

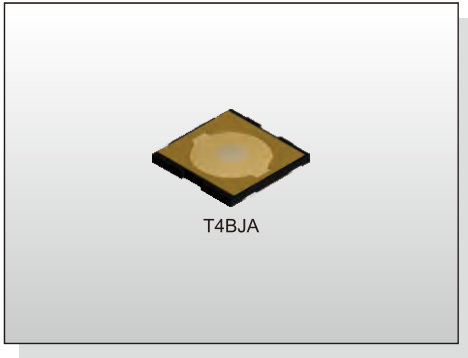
<Tape & Reel>
8000 pcs

TACT SWITCH

T3C



P.C.B. LAYOUT



FEATURES

- ※ Compact-sized 4.8x4.8mm
- ※ Low profile of 0.55mm height
- ※ Long operating life

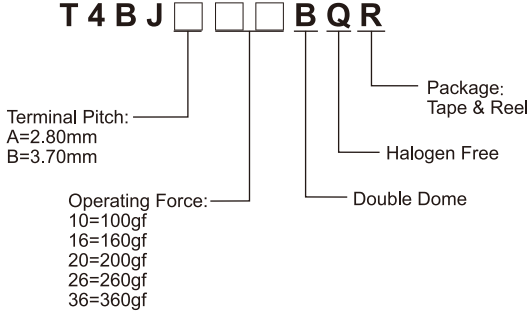
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device

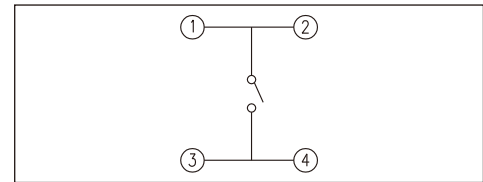
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	100±50gf/160±50gf/200±50gf 260±50gf/360±60gf
Travel	0.2mm
Operating Life	200,000 cycles for 360gf 500,000 cycles for 260/200gf 1,000,000 cycles for 160/100gf
Operating Temp.	-30°C ~ +80°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

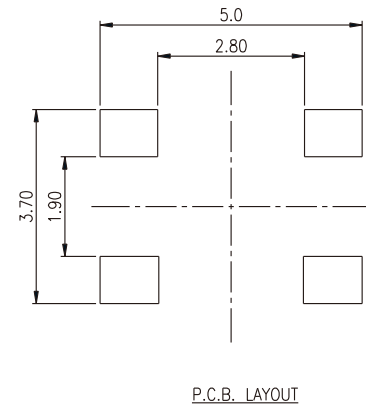
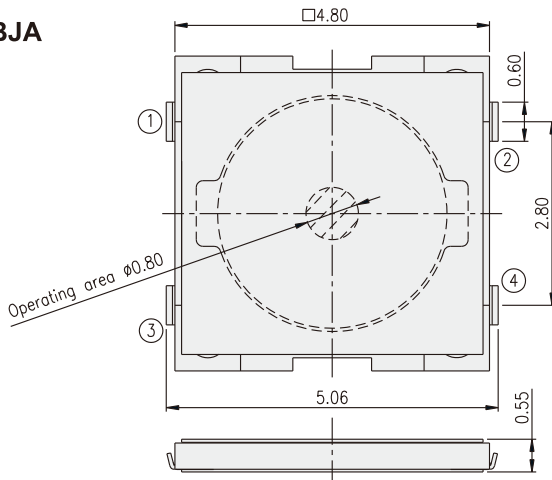


PACKAGE

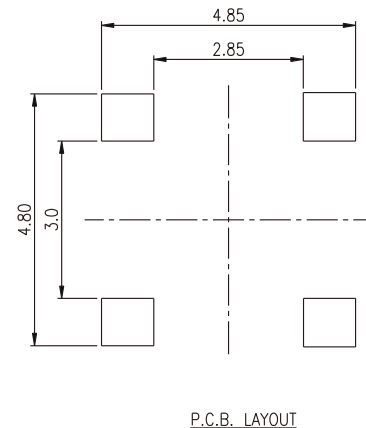
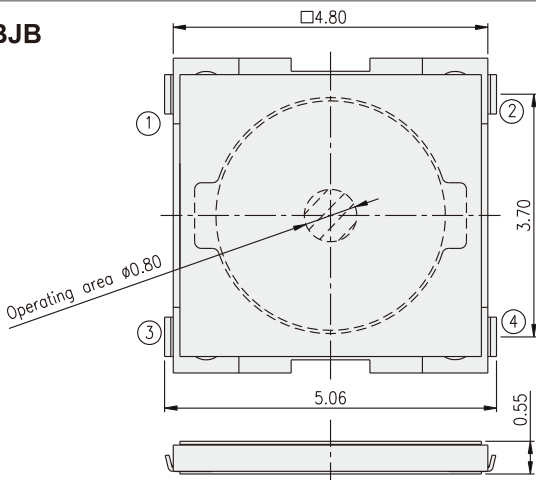
<Tape & Reel>
8000 pcs

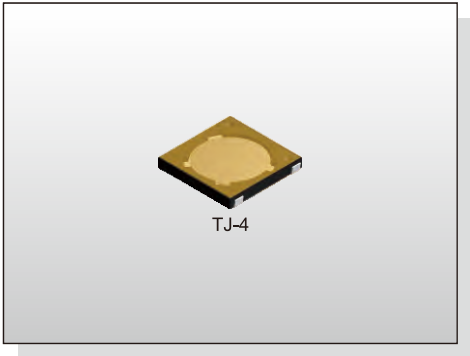
TACT SWITCH

T4BJA



T4BJB





FEATURES

- ※ Compact-sized 4.4x4.4mm
- ※ Low profile of 0.55mm height
- ※ Long operating life

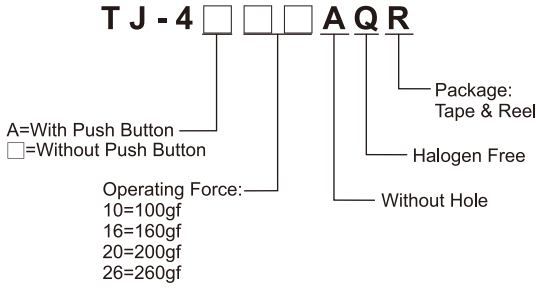
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device

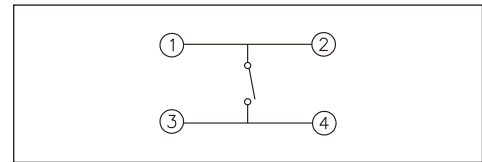
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	100±50gf/160±50gf/200±50gf 260±50gf
Travel	0.2mm
Operating Life	500,000 cycles for 260/200gf 1,000,000 cycles for 160/100gf
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

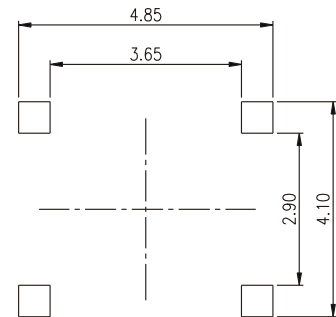
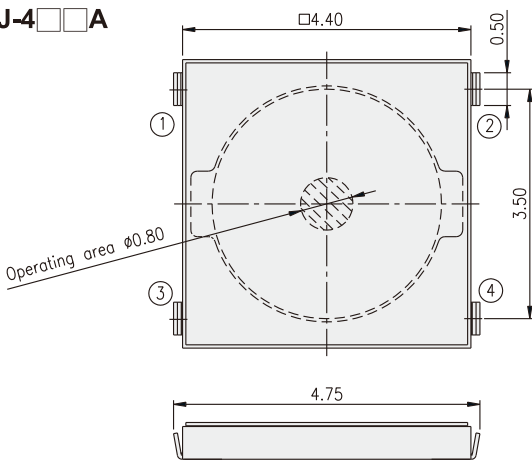


PACKAGE

<Tape & Reel>
 TJ-4: 8000 pcs
 TJ-4A: 5000 pcs

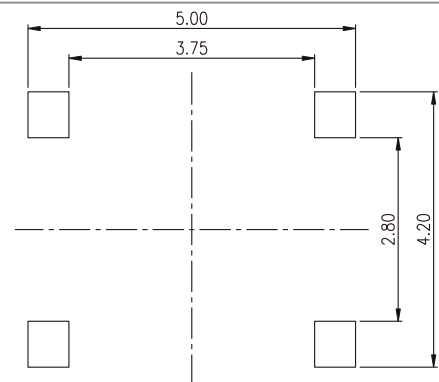
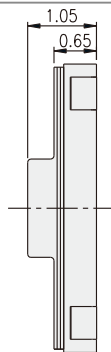
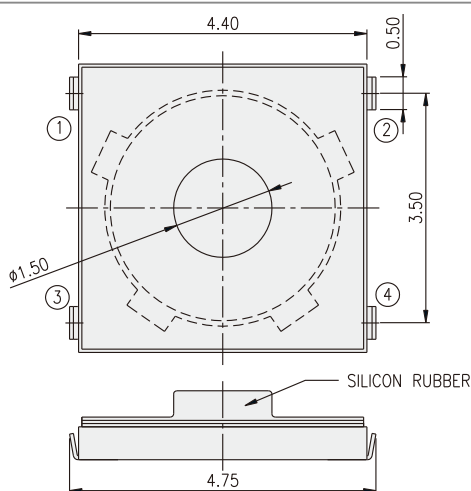
TACT SWITCH

TJ-4 **A**

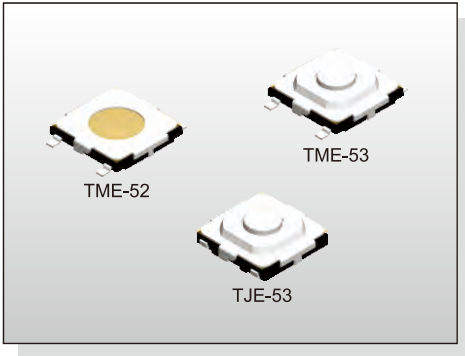


P.C.B. LAYOUT

TJ-4A



P.C.B. LAYOUT



FEATURES

- ※ Compact-sized 5.2x5.2mm
- ※ Long operating life
- ※ With ground terminal

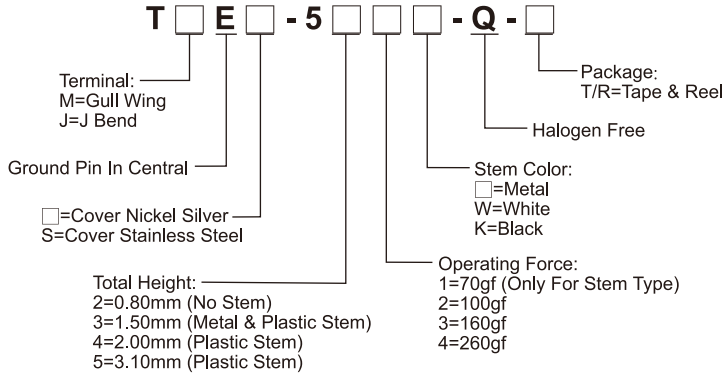
APPLICATION

- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device

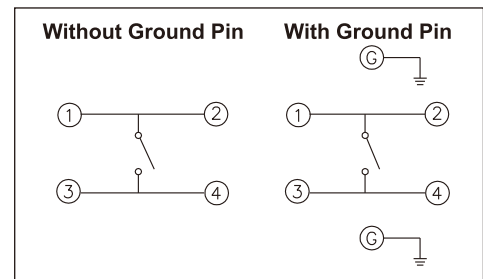
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	70±50gf/ 100±50gf/160±50gf
Travel	0.25mm
Operating Life	200,000 cycles for 260gf 1,000,000 cycles for 160/100/70gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

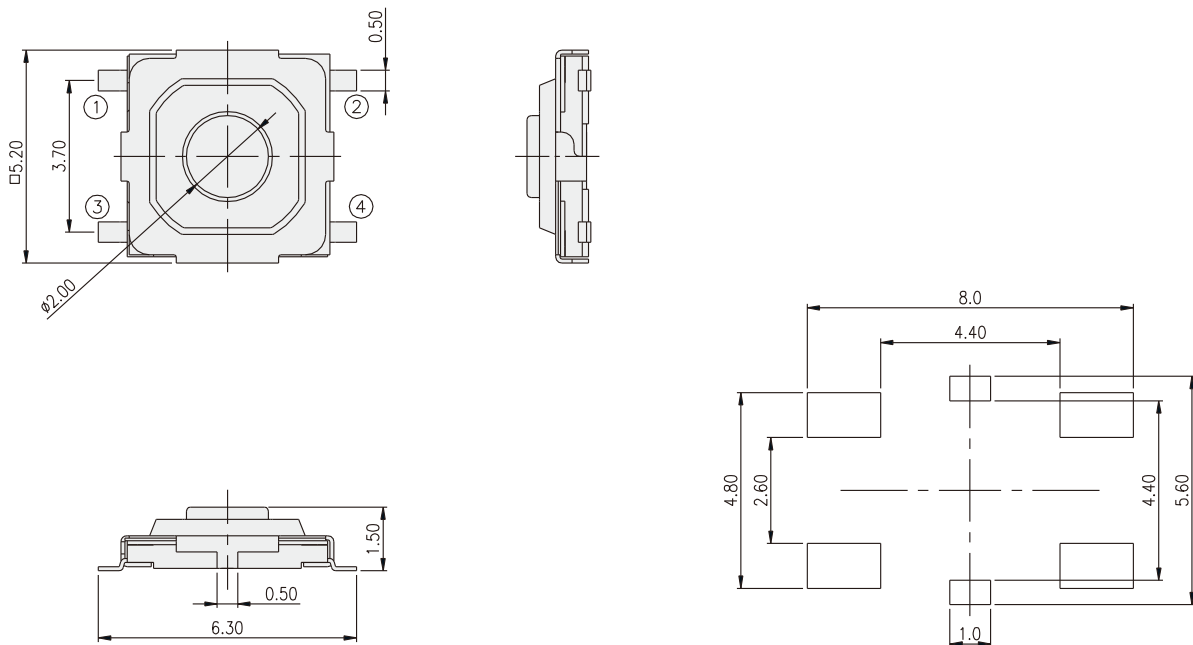


PACKAGE

- <Tape & Reel>
T□E-52, 53=4000 pcs
T□E-54=3000 pcs
T□E-55=2000 pcs

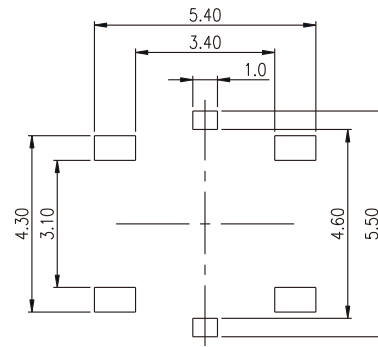
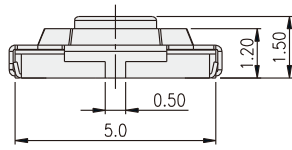
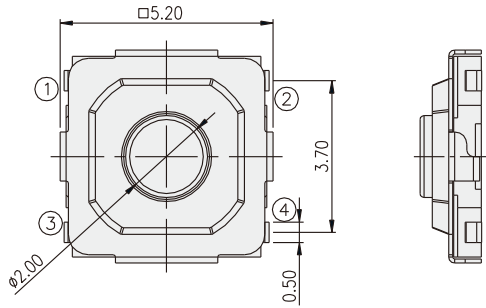
TACT SWITCH

TME-5



P.C.B. LAYOUT

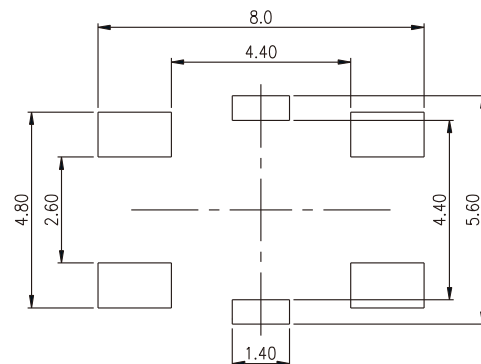
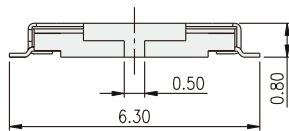
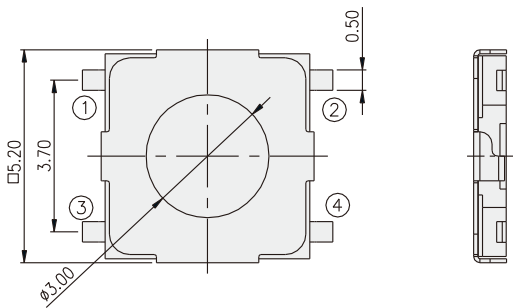
TJE-53



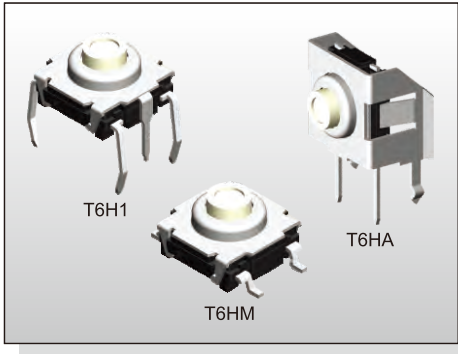
P.C.B. LAYOUT

TACT SWITCH

TME-52



P.C.B. LAYOUT



FEATURES

- ✘ Support automatic insertion
- ✘ Vertical actuation
- ✘ Dust proof structure

APPLICATION

- ✘ Automotive
- ✘ Industrial
- ✘ Instrumentation

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	130±50gf / 160±50gf 300±50gf / 500±100gf
Travel	0.5mm
Operating Life	200,000 cycles for 500gf 500,000 cycles for 300gf 1,000,000 cycles for 160/130gf
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

T 6 H [] - [] [] [] Q []

A=Right angle series
H=Through holes
M=S.M.T Type
1=6x6 ground terminal type
2=S.M.T ground terminal type

Package Style:
R=Tape & Reel (S.M.T. Type Only)
B=Tube

Halogen Free

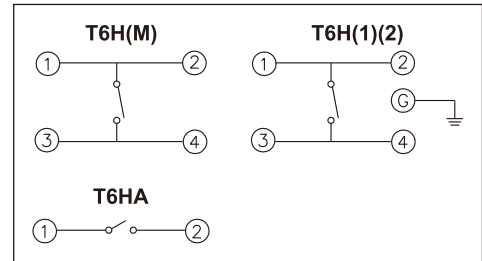
Contact Plating:
G = Plating Ag
A= Plating Au

Operating Force:
2=130gf
3=160gf
5=300gf
6=500gf

Total Height :

SMT/Through hole	Right angle
1=4.70mm	1=6.04mm
2=5.20mm	2=6.54mm
3=6.90mm	3=8.24mm
5=10.0mm	5=11.34mm

CIRCUIT

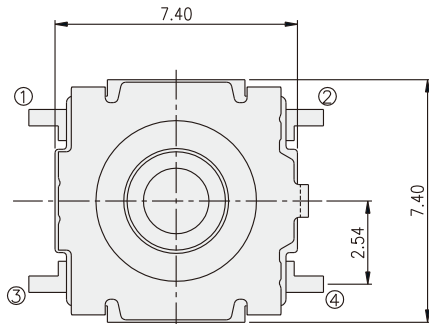


PACKAGE

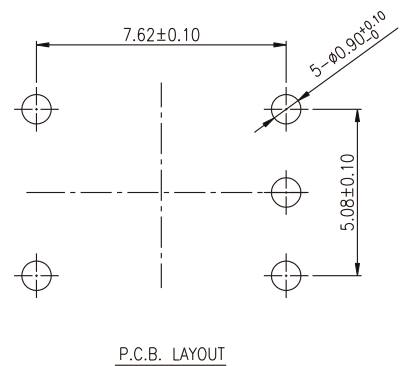
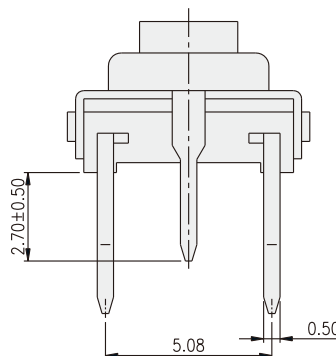
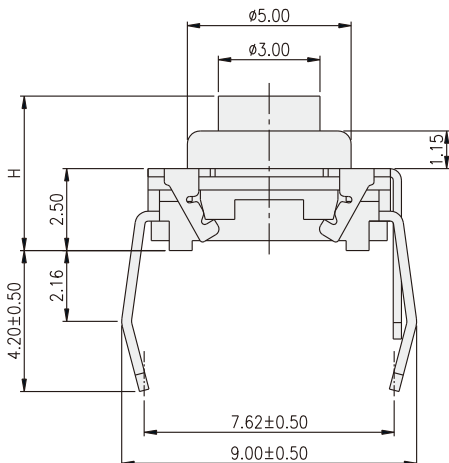
<Tube>
T6HH, T6H1: 60 pcs
T6HA: 52 pcs

<Tape & Reel>
T6HM-(1)(2): 700 pcs
T6HM-3: 500 pcs
T6HM-5: 350 pcs

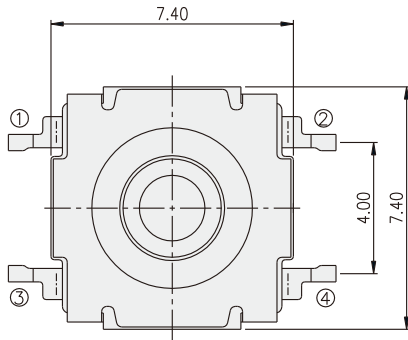
T6H1



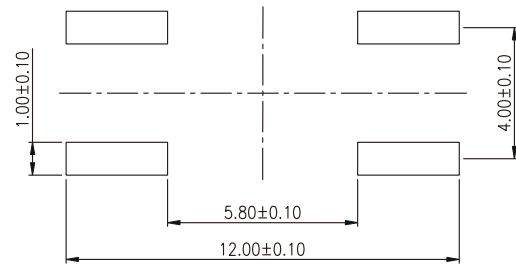
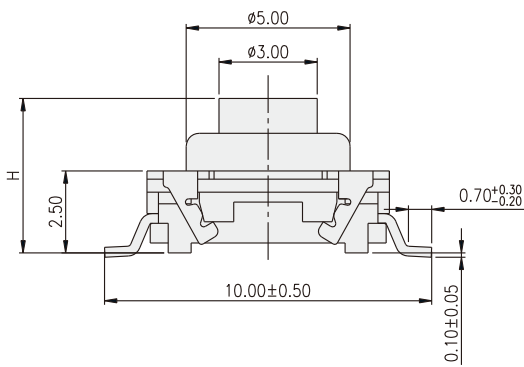
PART NO.	H
T6H1-1	4.70
T6H1-2	5.20
T6H1-3	6.90
T6H1-5	10.00



T6HM



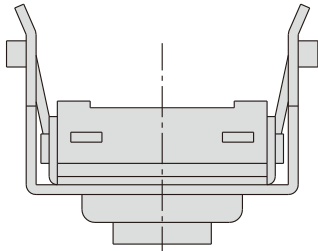
PART NO.	H
T6HM-1	4.70
T6HM-2	5.20
T6HM-3	6.90
T6HM-5	10.00



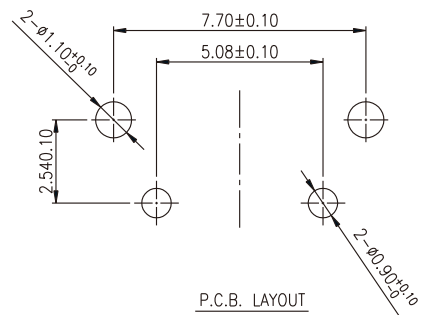
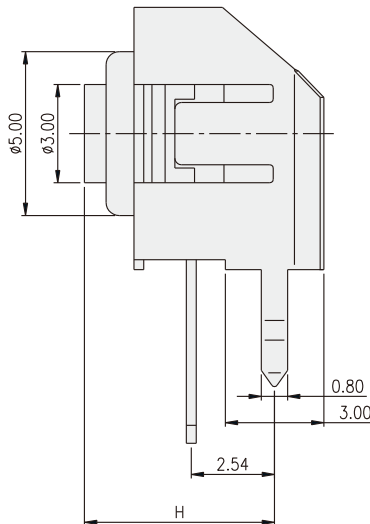
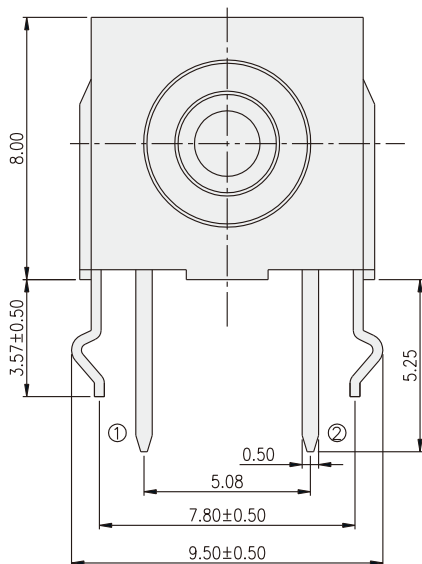
P.C.B. LAYOUT

TACT SWITCH

T6HA



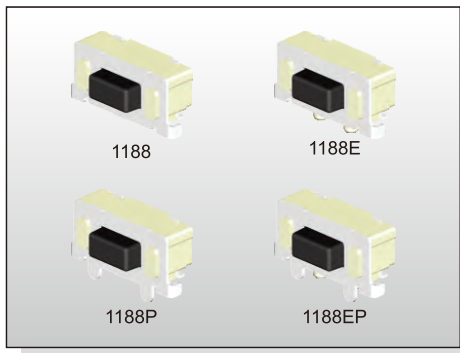
PART NO.	H
T6HA-1	6.04
T6HA-2	6.54
T6HA-3	8.24
T6HA-5	11.34



P.C.B. LAYOUT

TACT SWITCH 1188 SERIES

3.5x7
SMT & Side Push Type



FEATURES

- ※Side actuated
- ※Support / Ground pins options
- ※High solder strength

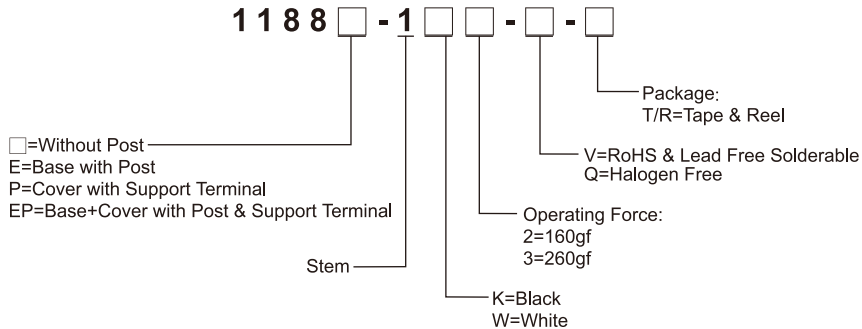
APPLICATION

- ※Audio, OA equipment
- ※Instrumentation
- ※Remote control

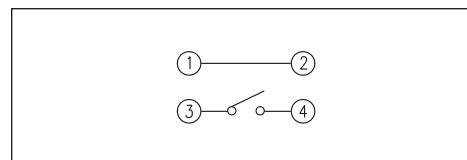
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf/260±50gf
Travel	0.25mm
Operating Life	30,000 cycles for 260gf 50,000 cycles for 160gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-40°C ~ +80°C

HOW TO ORDER



CIRCUIT

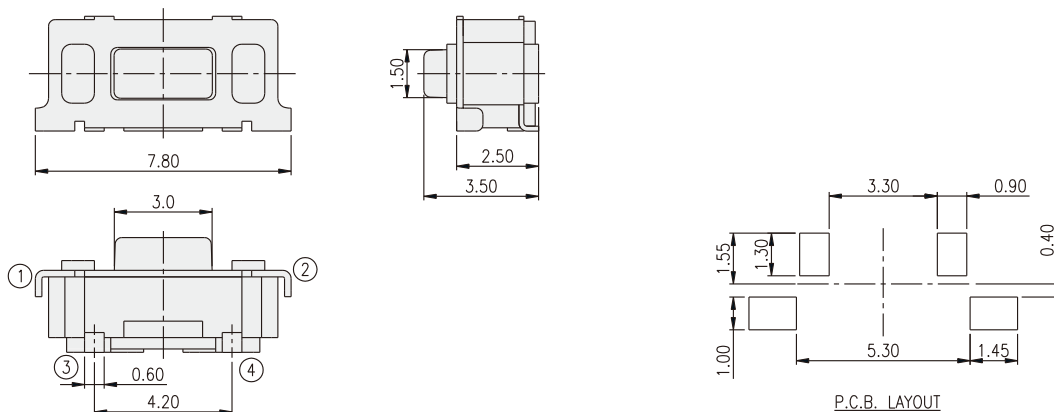


PACKAGE

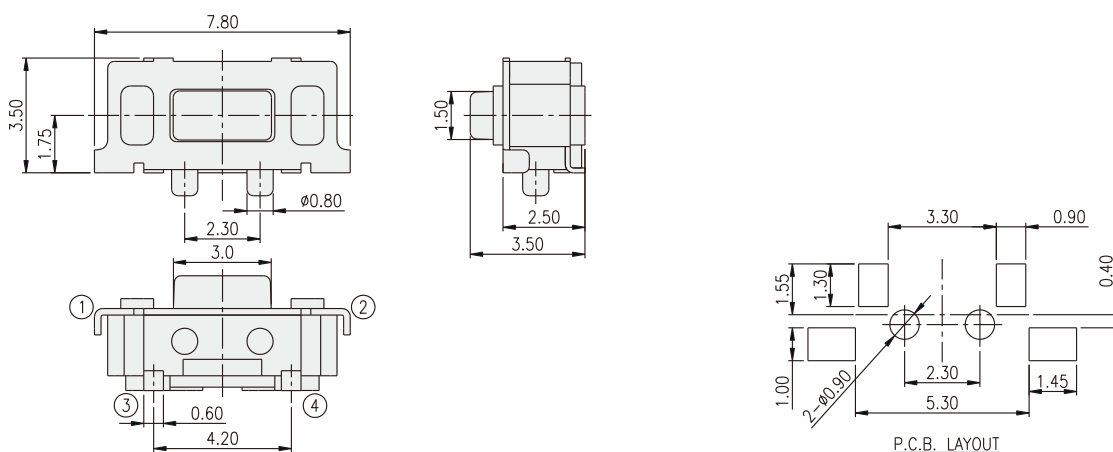
<Tape & Reel>
1500 pcs

TACT SWITCH

1188



1188E

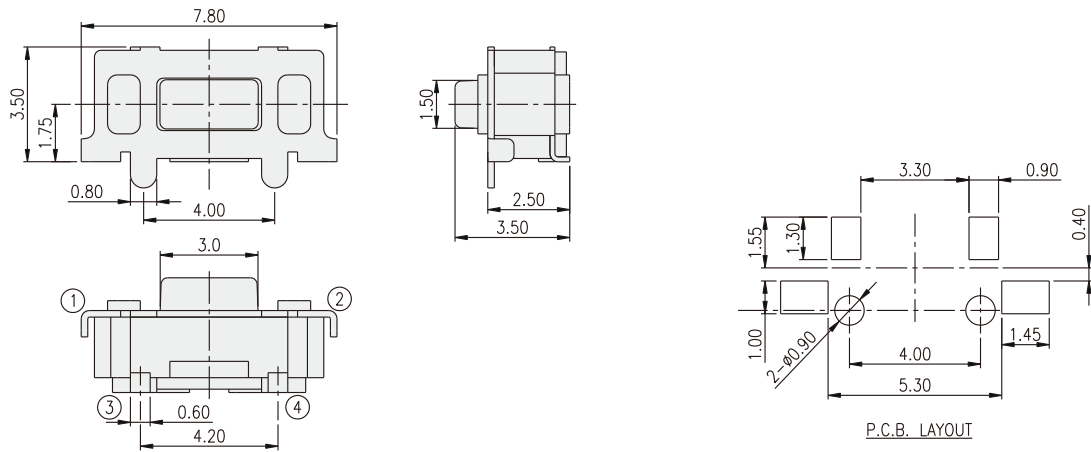


TACT SWITCH
1188 SERIES

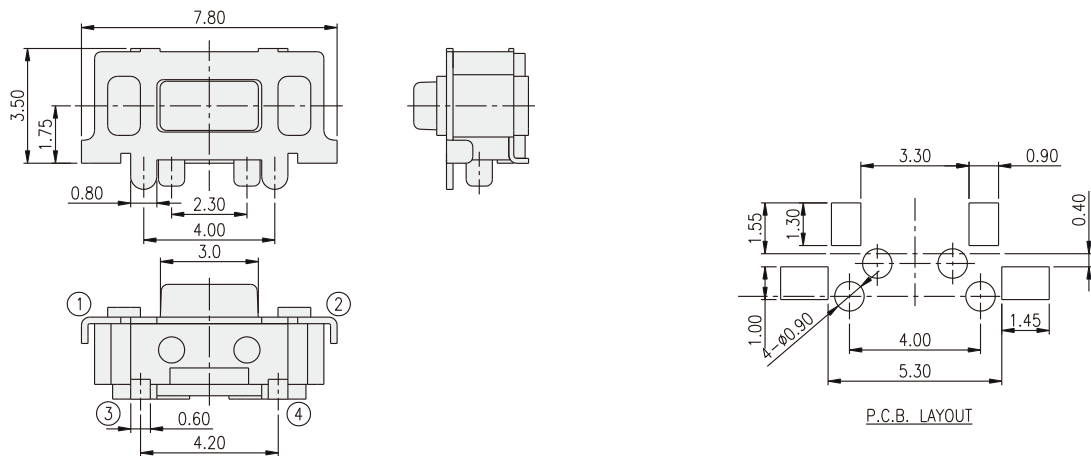
3.5x7
SMT & Side Push Type



1188P



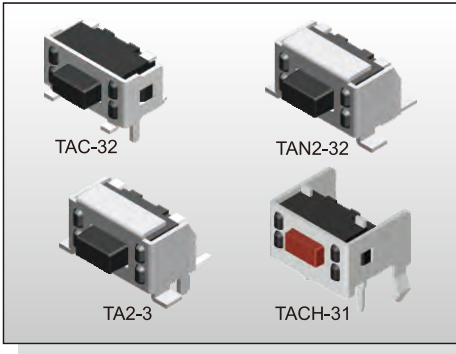
1188EP



TACT SWITCH

TACT SWITCH TA(C)(2)-3 SERIES

3.95x7.3 / 4.65x7.0
SMT & Side Push Type



FEATURES

- ※Side actuated
- ※Support/Ground pin option
- ※High solder strength

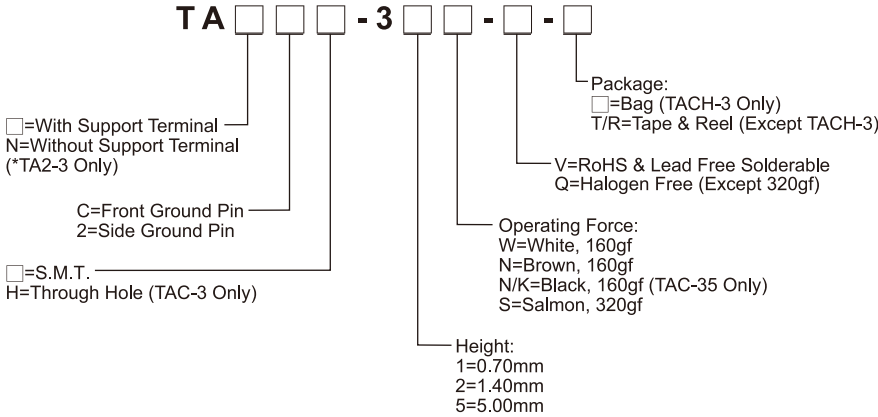
APPLICATION

- ※Data storage, Server
- ※Instrumentation
- ※Audio, OA equipment

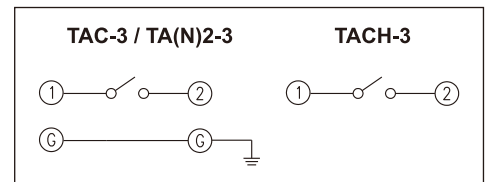
SPECIFICATION

Contact Rating	50mA, 12V DC	
Contact Resistance	100mΩ max.	
Insulation Resistance	100MΩ min. 500V DC	
Dielectric Strength	250V AC/1 minute	
Operating Force	160±50gf, 260±50gf	TAC-3
	160±50gf, White(W)	TA2-3
	160±50gf, Brown(N)	
	320±50gf, Salmon(S)	
Travel	0.25mm	
Operating Life	50,000 cycles	
Operating Temp.	-25°C ~ +70°C	
Storage Temp.	-40°C ~ +80°C	

HOW TO ORDER



CIRCUIT

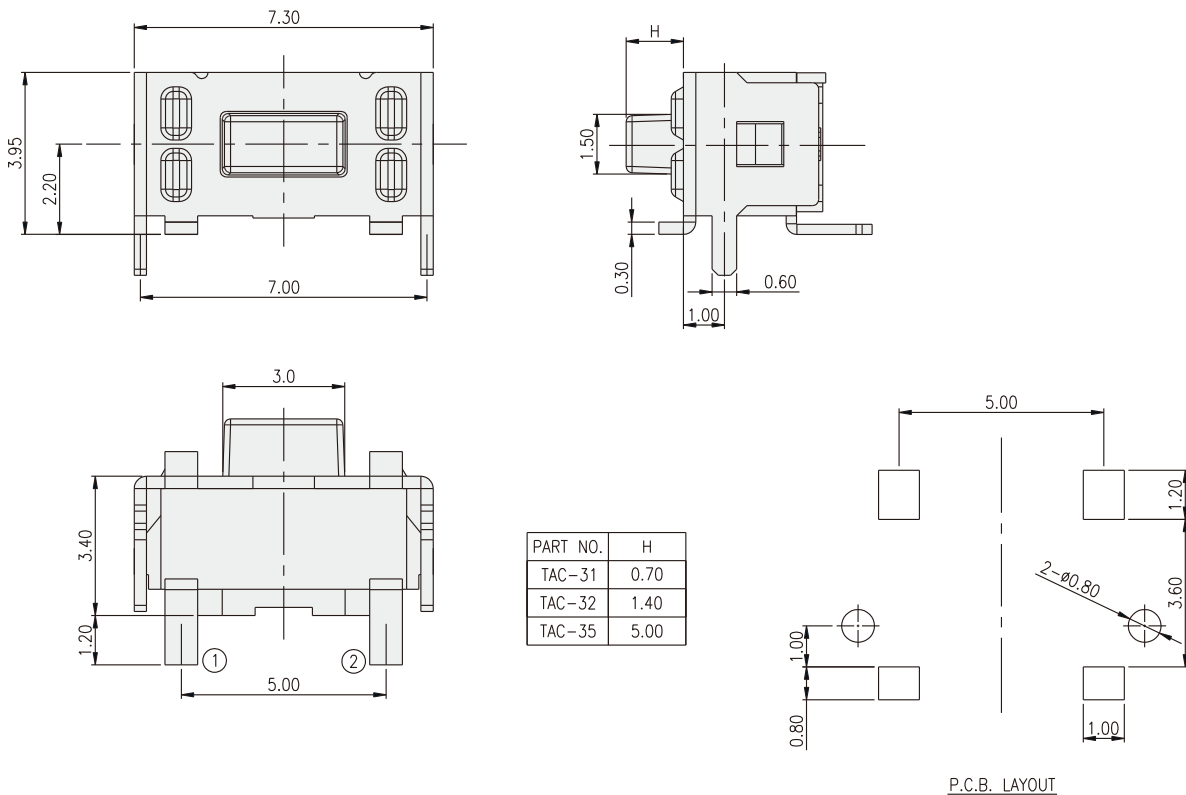


PACKAGE

<Bag>
500 pcs(TACH-3 Only)

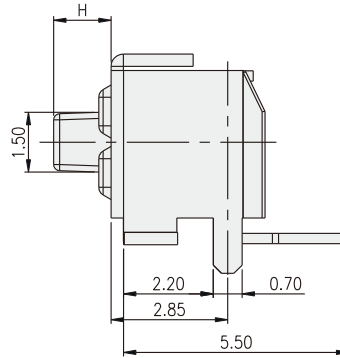
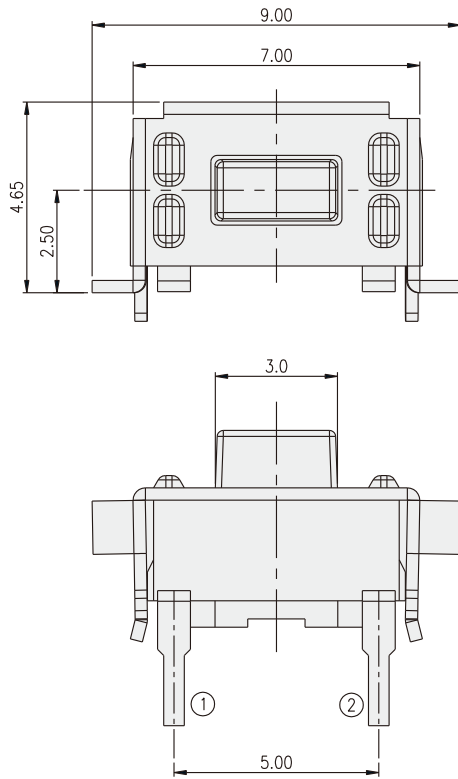
<Tape & Reel>
900 pcs

TAC-3

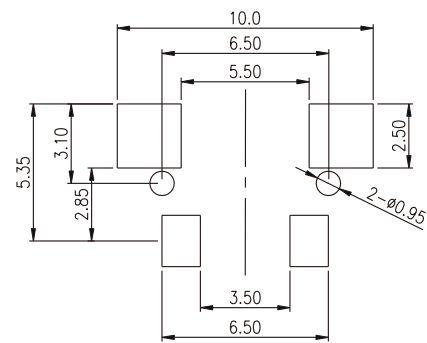


TACT SWITCH

TA2-3



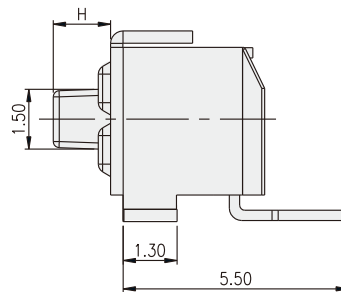
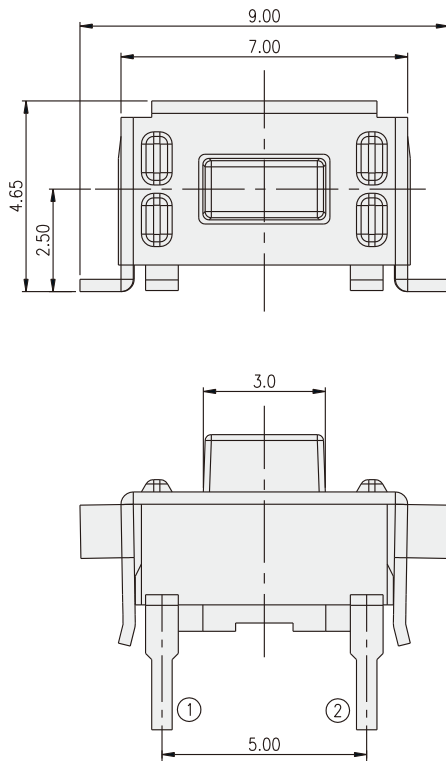
PART NO.	H
TA2-31	0.70
TA2-32	1.40
TA2-35	5.00



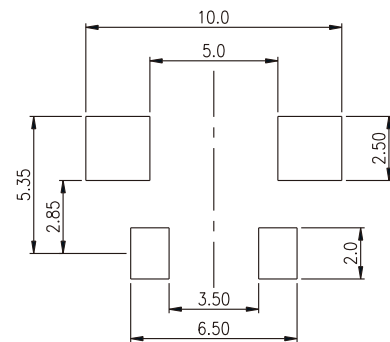
P.C.B. LAYOUT

TACT SWITCH

TAN2-3



PART NO.	H
TAN2-31	0.70
TAN2-32	1.40
TAN2-35	5.00



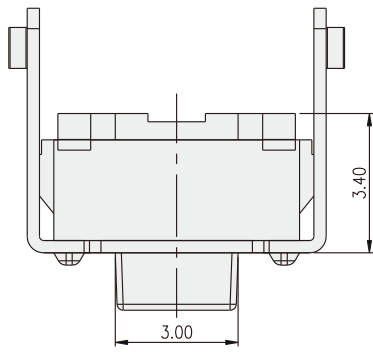
P.C.B. LAYOUT

TACT SWITCH
TA(C)(2)-3 SERIES

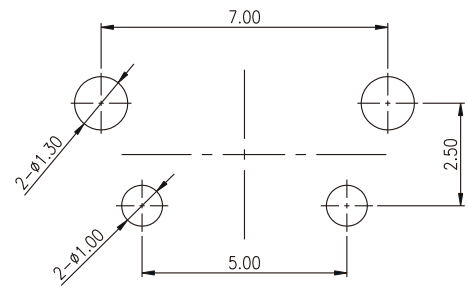
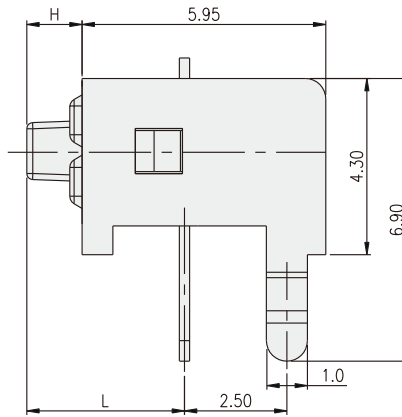
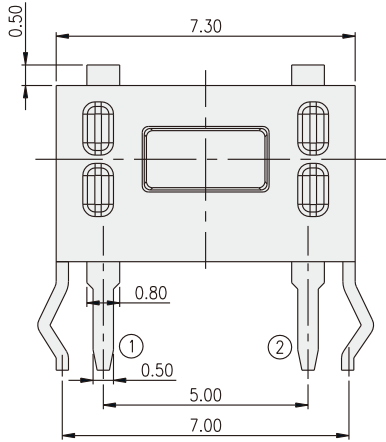
3.95x7.3 / 4.65x7.0
 SMT & Side Push Type



TACH-3

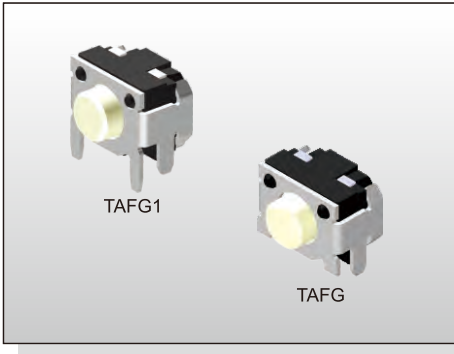


PART NO.	H	L
TACH-31	0.70	3.15
TACH-32	1.40	3.85
TACH-35	5.00	7.45



P.C.B. LAYOUT

TACT SWITCH



FEATURES

- ※Miniature 3.3x4.5mm side push type
- ※High solder strength
- ※Sharp click feeling

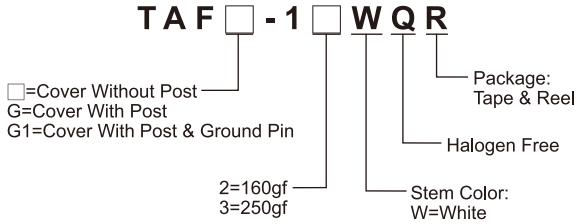
APPLICATION

- ※Smart phone
- ※Tablet
- ※Portable personal audio

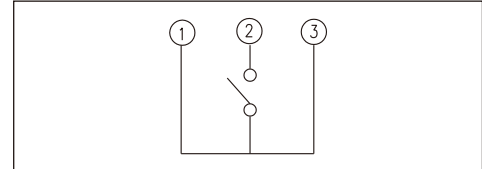
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf/250±50gf
Travel	0.2mm
Operating Life	100,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

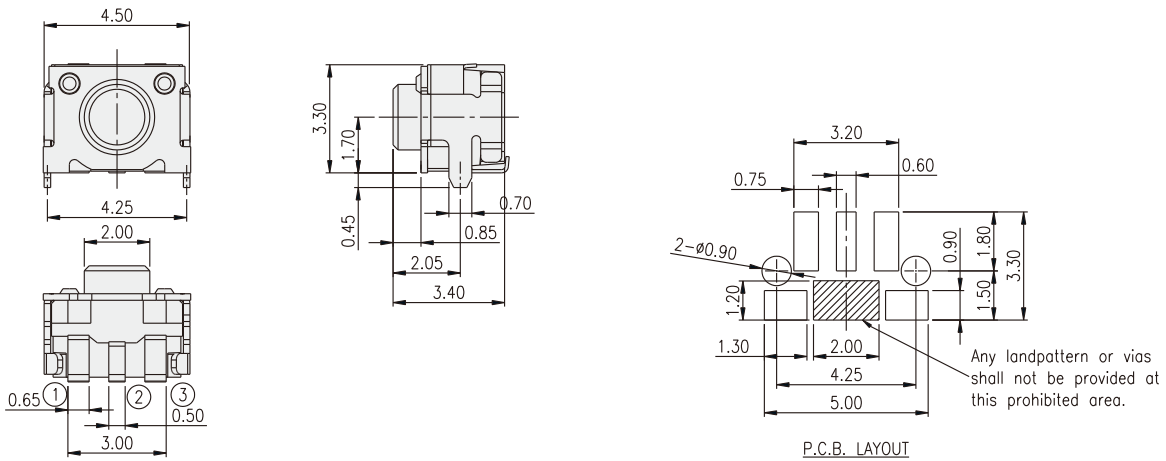


PACKAGE

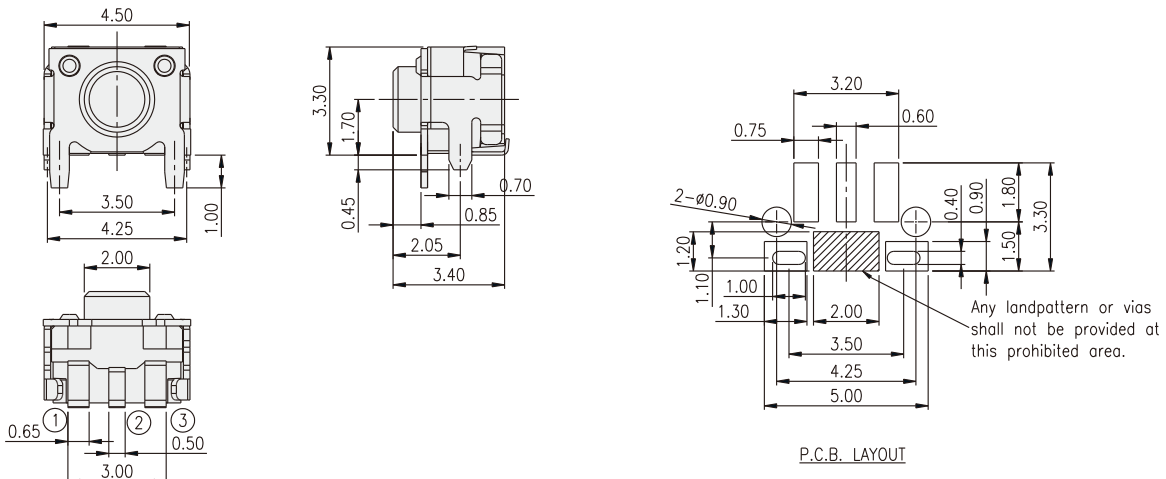
<Tape & Reel>
1800 pcs

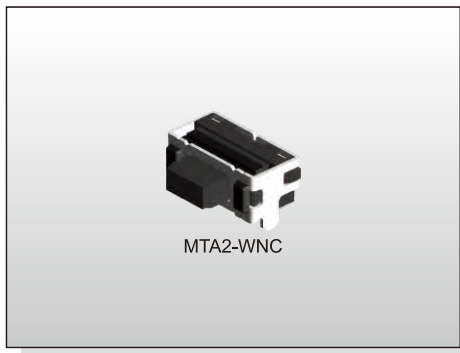
TACT SWITCH

TAFG



TAFG1





FEATURES

- ※ Compact-sized 1.9x4.5mm
- ※ Side actuated
- ※ Sealed with dust proof structure

APPLICATION

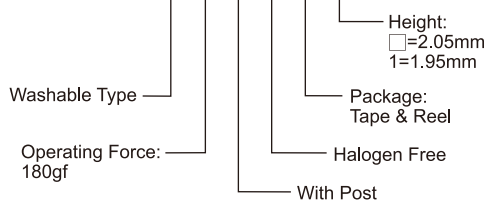
- ※ Smart phone
- ※ Digital camera, Medical
- ※ Portable electronic device

SPECIFICATION

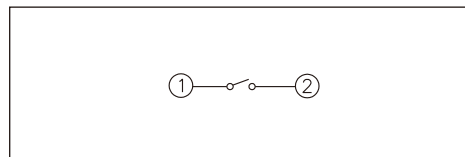
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	180±50gf
Travel	0.20mm
Operating Life	100,000 cycles
Operating Temp.	-30°C ~ +80°C
Storage Temp.	-40°C ~ +90°C

HOW TO ORDER

MTA2 - WNCQR □



CIRCUIT

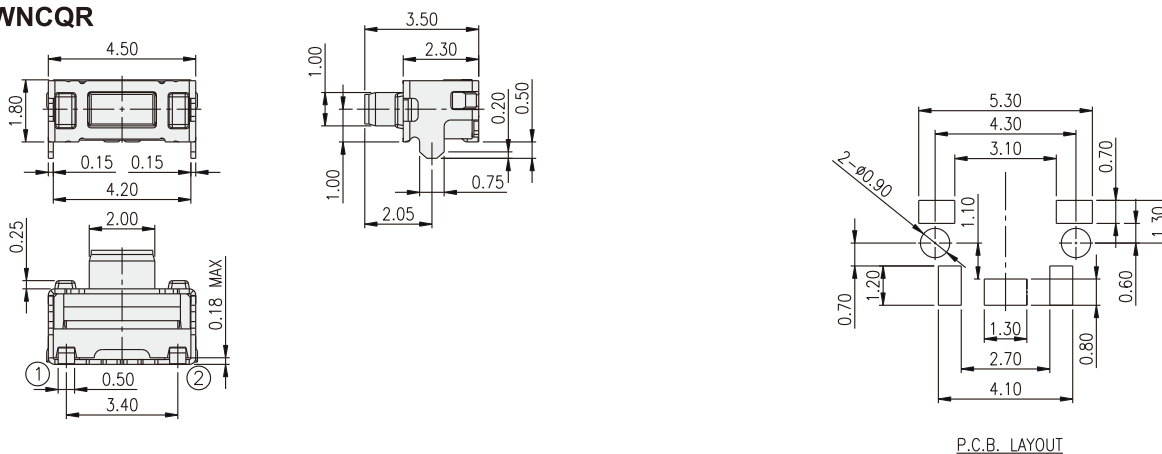


PACKAGE

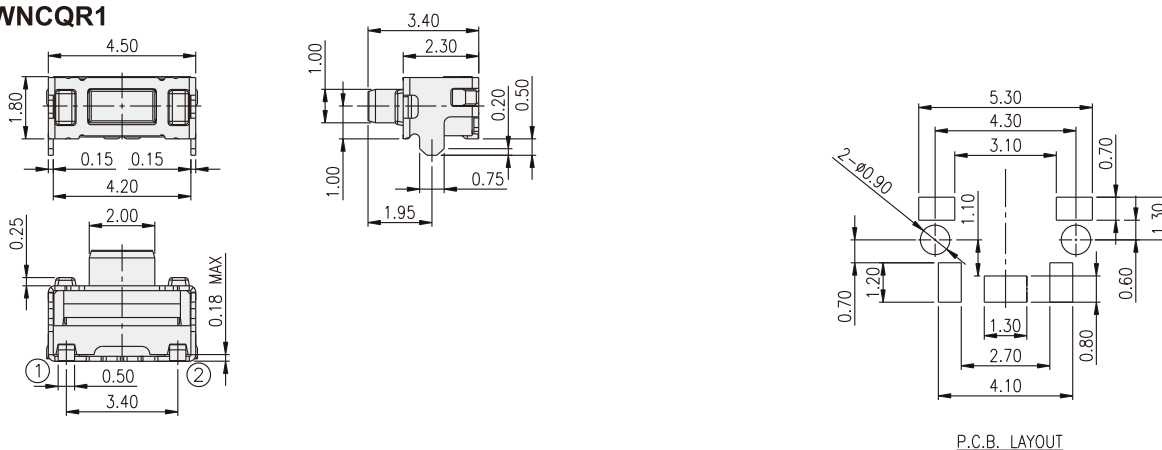
<Tape & Reel>
3000 pcs

TACT SWITCH

MTA2-WNCQR

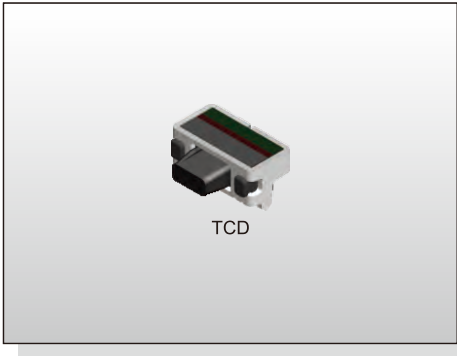


MTA2-WNCQR1



TACT SWITCH
TCD SERIES

1.7x4.5
PCB Sealed Type Side Push



FEATURES

- ※ Compact-sized
- ※ Side actuated
- ※ Sealed with dust proof
- ※ PCB-base structure

APPLICATION

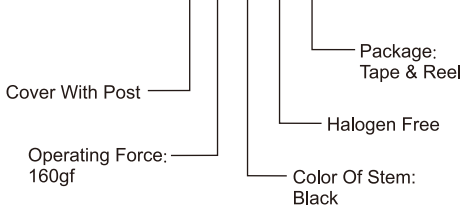
- ※ Smart phone
- ※ Digital Camera, Medical
- ※ Portable electronic device

SPECIFICATION

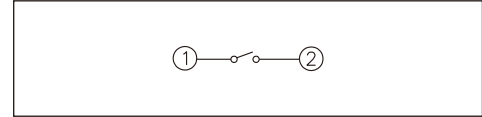
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.2mm
Operating Life	100,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

TCD-C2KQR



CIRCUIT

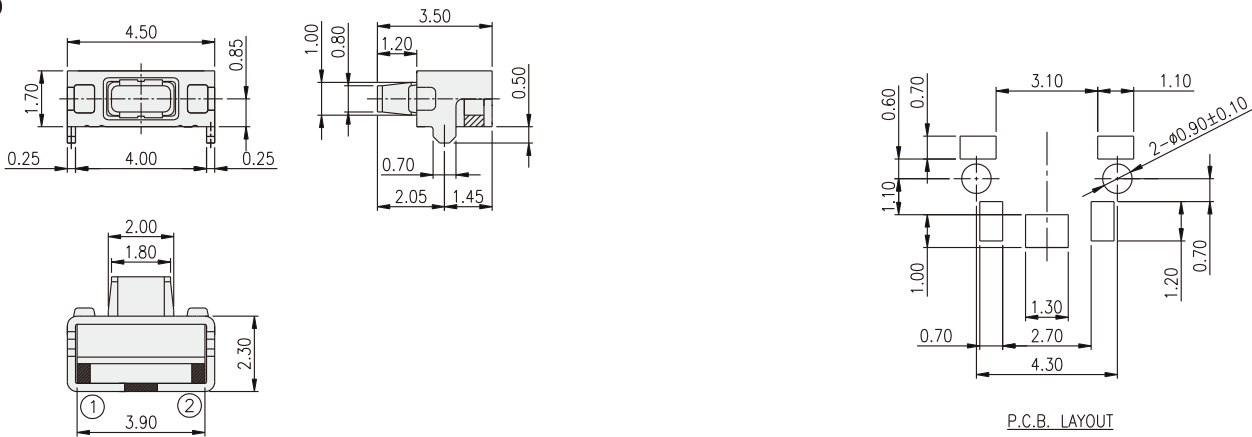


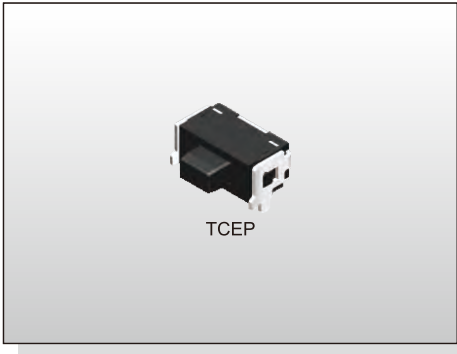
PACKAGE

<Tape & Reel>
3000 pcs

TACT SWITCH

TCD





FEATURES

- ※ 1.65mm above PCB
- ※ High solder strength

APPLICATION

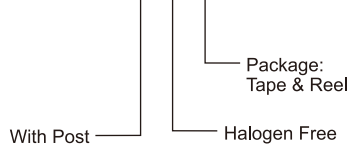
- ※ Personal audio
- ※ Mobile phone
- ※ Audio, OA equipment

SPECIFICATION

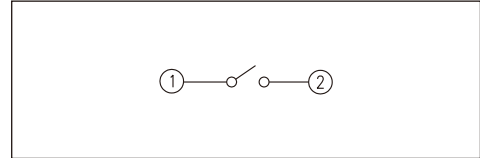
Contact Rating	20mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.2mm
Operating Life	100,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +90°C

HOW TO ORDER

TCEPQR



CIRCUIT

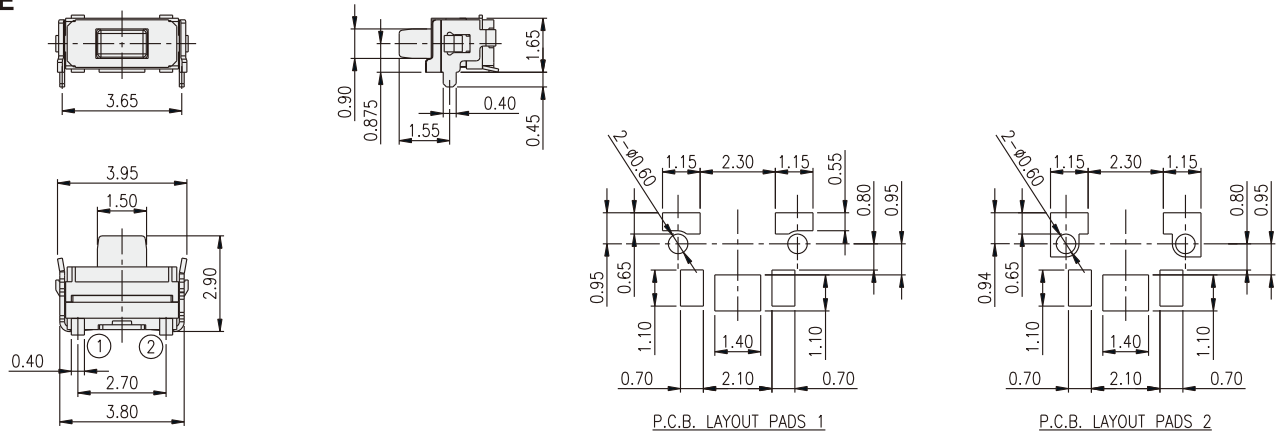


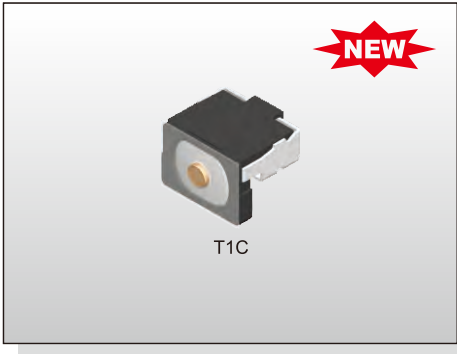
PACKAGE

<Tape & Reel>
3000 pcs

TACT SWITCH

TCE





T1C

FEATURES

- ※Miniature 2.8*1.95mm
- ※Side push mid-mount type
- ※300,000 operation life cycles
- ※Better soldering peeling strength
- ※Height from surface of PCB:0.975mm

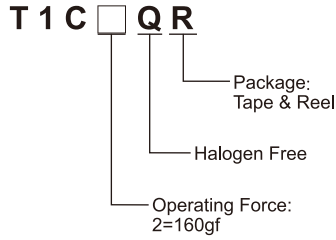
APPLICATION

- ※Smart phone
- ※Medical
- ※Portable electronic device
- ※3C products

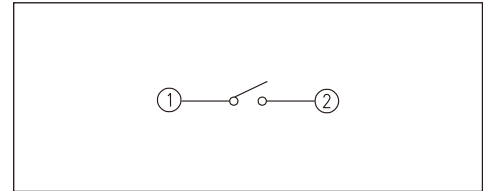
SPECIFICATION

Contact Rating	10uA,2V DC to 20mA,15V DC
Contact Resistance	500mΩ max.
Insulation Resistance	50MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf
Travel	0.13mm
Operating Life	300,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

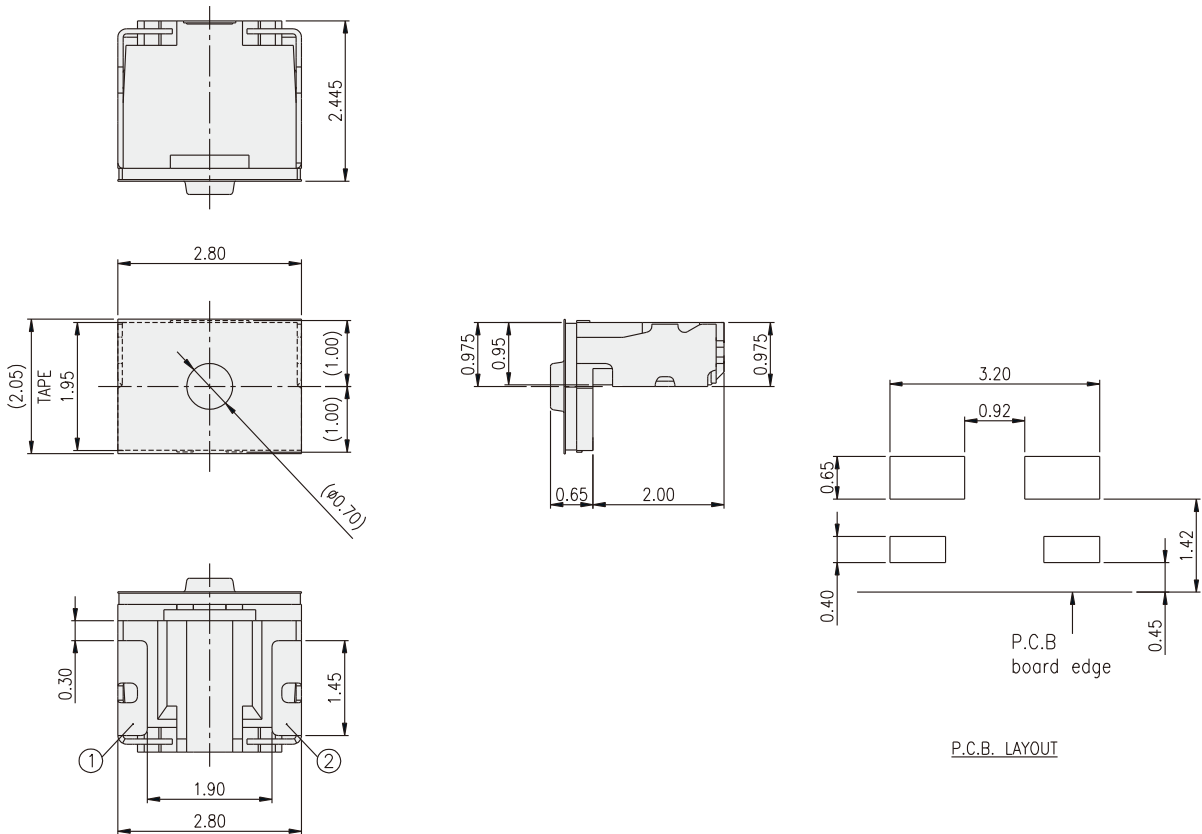


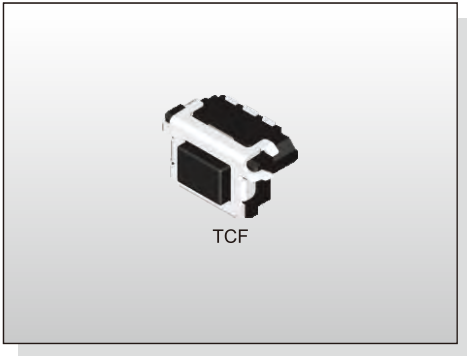
PACKAGE

<Tape & Reel>
5000 pcs

TACT SWITCH

T1C





TCF

FEATURES

- ※Miniature 2.9x4.5mm
- ※Side push mid-mount type
- ※200,000 operating life cycles

APPLICATION

- ※Smart phone
- ※Portable personal audio
- ※Digital camera

SPECIFICATION

Contact Rating	10μA, 2V DC to 20mA, 15V DC
Contact Resistance	1000mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf/240±70gf
Travel	0.15mm
Operating Life	200,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

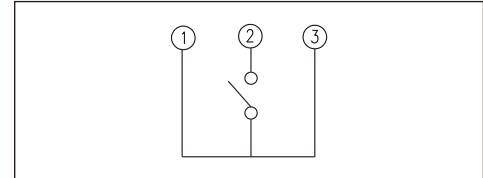
TCF □ QR

Package:
Tape & Reel

Halogen Free

Operating Force:
2=160gf
3=240gf

CIRCUIT

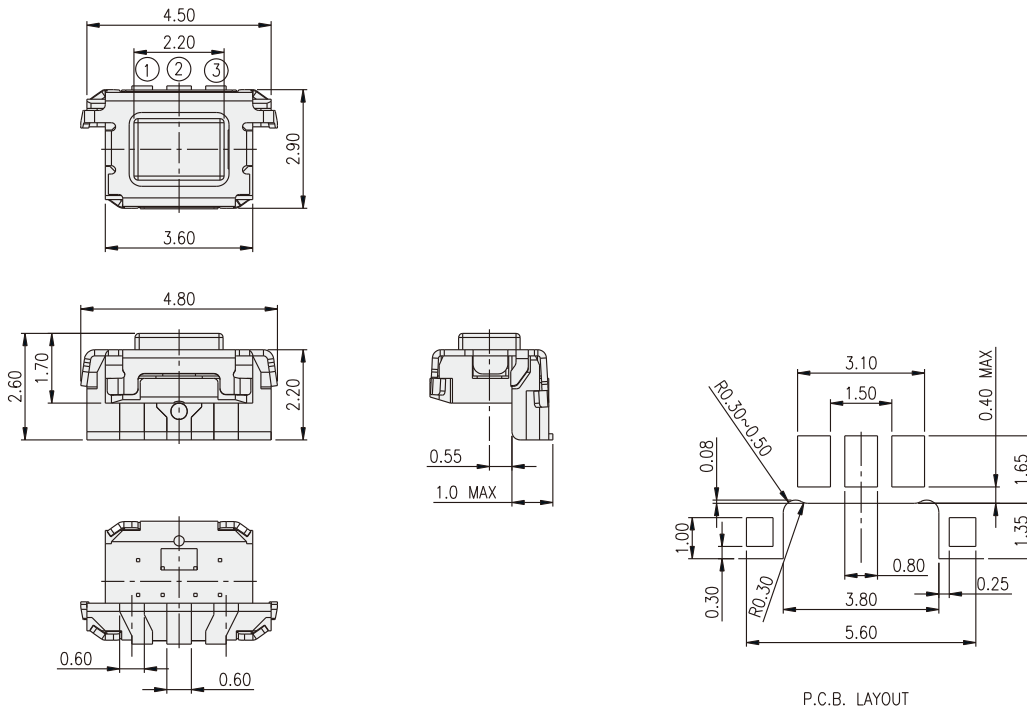


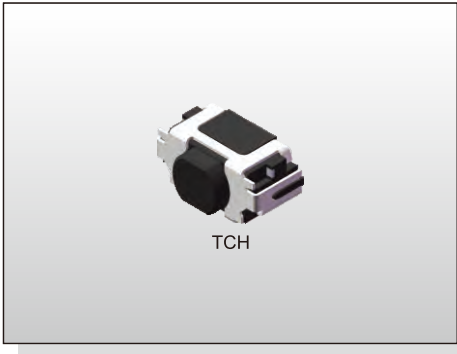
PACKAGE

<Tape & Reel>
2400 pcs

TACT SWITCH

TCF





FEATURES

- ※Miniature 4.5*2.2mm
- ※Side push mid-mount type
- ※600,000 operation life cycles

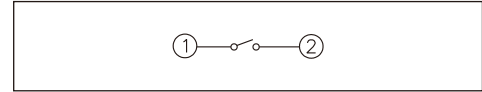
APPLICATION

- ※Smart phone
- ※Portable personal audio
- ※Digital camera
- ※3C products

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf
Travel	0.15mm
Operating Life	600,000 cycles
Operating Temp.	-30°C ~ +85°C
Storage Temp.	-40°C ~ +90°C

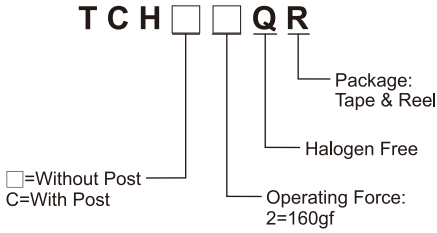
CIRCUIT



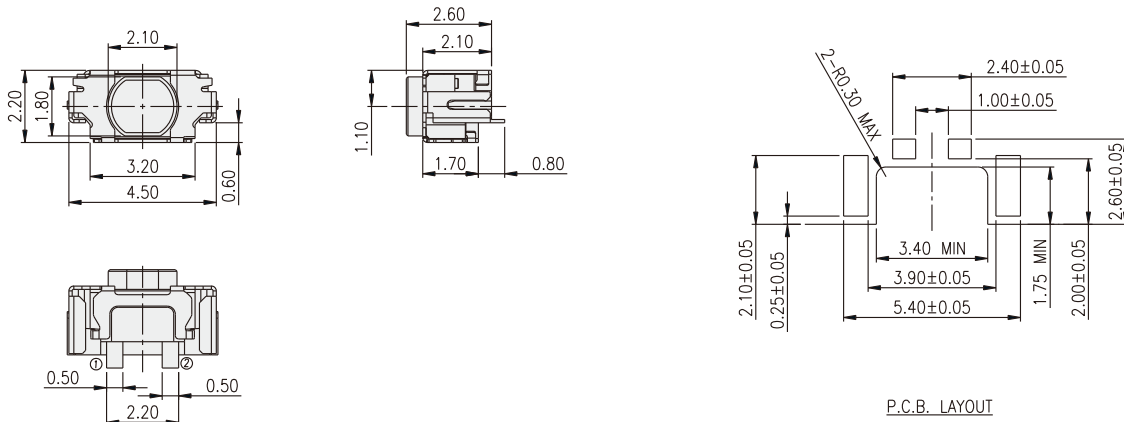
PACKAGE

<Tape & Reel>
3000 pcs

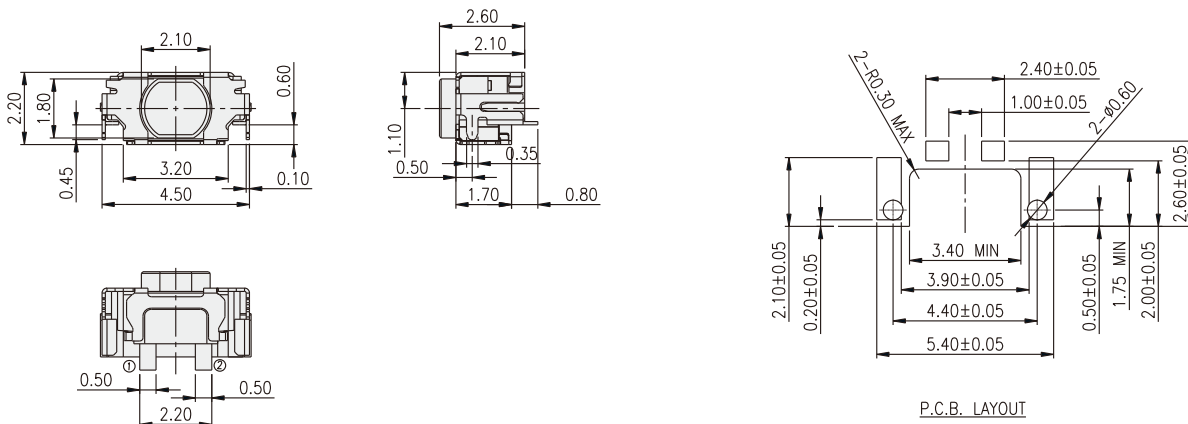
HOW TO ORDER

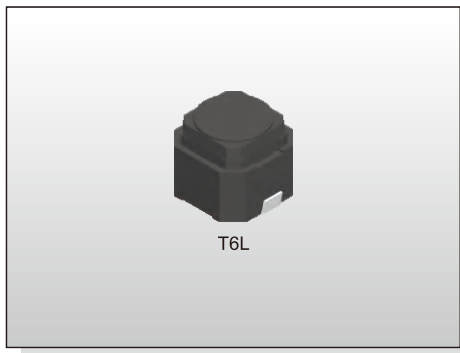


TCH



TCHC





FEATURES

- ※Miniature 5.9*6.0mm
- ※Long Travel type
- ※100,000 operation life cycles

APPLICATION

- ※Automotive
- ※Instrumentation
- ※Audio

SPECIFICATION

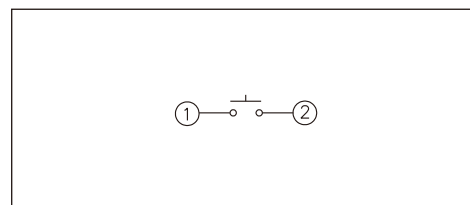
Contact Rating	10uA, 1V DC to 50mA, 16V DC
Contact Resistance	100mΩ max. 500V DC
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf/200±50gf 250±80gf/300±80gf
Travel	1.3mm
Operating Life	100,000 cycles (160gf/200gf/250gf/300gf)
Operating Temp.	-40°C ~ +90°C
Storage Temp.	-40°C ~ +90°C

HOW TO ORDER

T 6 L - □ K Q R

- Operating Force:
2=160±50gf
3=200±50gf
4=250±80gf
5=300±80gf
- Package:
Tape & Reel
- Halogen Free
- Button Color:
Black

CIRCUIT

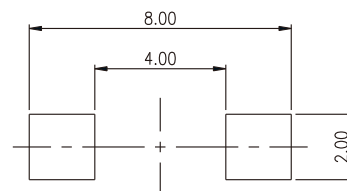
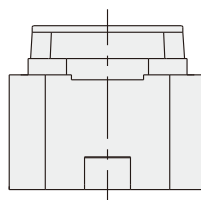
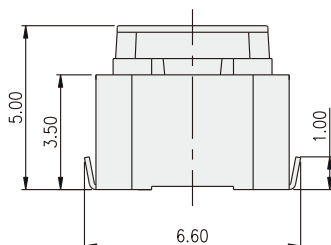
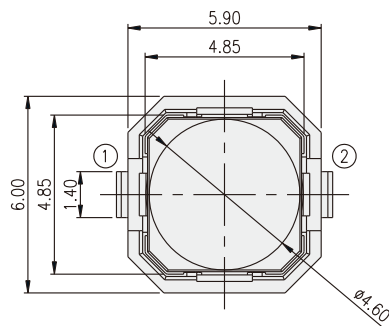


PACKAGE

<Tape & Reel>
1200 pcs

TACT SWITCH

T6L



P.C.B. LAYOUT



LTL

FEATURES

- ※Soft actuation feeling
- ※Long travel of 1.3mm
- ※Wide stem for easy operation

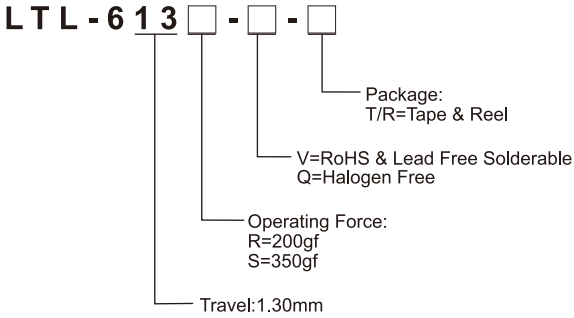
APPLICATION

- ※Automotive
- ※Instrumentation
- ※Audio

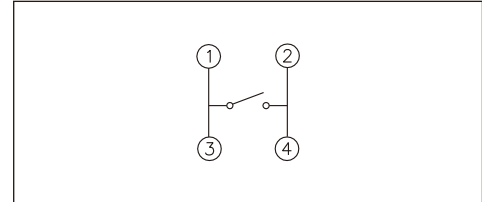
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max. 500V DC
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	200±50gf/350±100gf
Travel	1.3mm
Operating Life	30,000 cycles (350gf) 100,000 cycles (200gf)
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

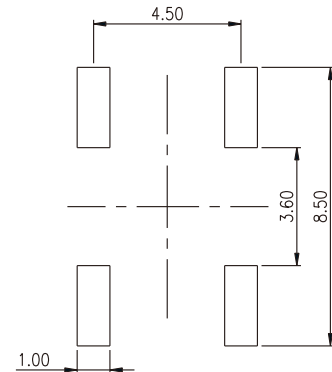
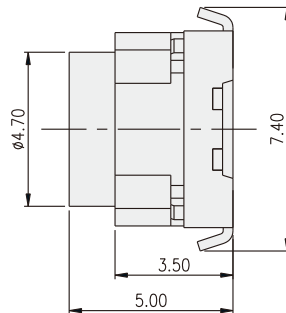
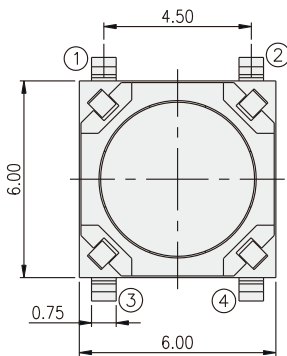


PACKAGE

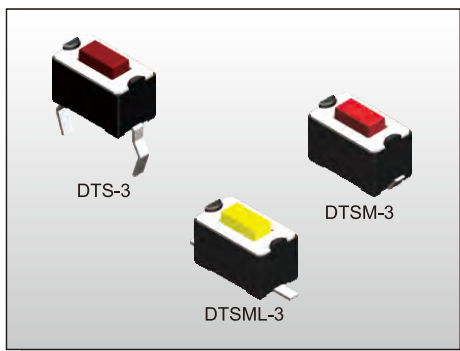
<Tape & Reel>
900 pcs

TACT SWITCH

LTL-6



P.C.B. LAYOUT



FEATURES

- ※ Compact size 3.5x6 mm
- ※ Sharp click feeling
- ※ Choice of SMT terminal type

APPLICATION

- ※ Audio, OA equipment
- ※ Instrumentation
- ※ Industrial

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	125±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.25mm
Operating Life	30,000 cycles for 520/320/260gf 50,000 cycles for 160/125gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER

D T S □ - 3 □ □ - □ □

□: Through Hole
M: J Bend Outward
ML: S.M.T./Flat
MF: S.M.T./Gull-wing

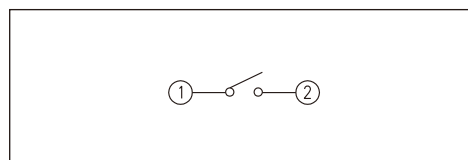
Package:
□=Bag(Through Hole Only)
B=Tube Package(Except DTSMF-3)
T/R=Tape & Reel

V=RoHS & Lead Free Solderable
Q=Halogen Free

Dimension H:
1=4.30mm
2=5.00mm

Operating Force:
K=Black, 125gf
N=Brown, 160gf
R=Red, 260gf
S=Salmon, 320gf
Y=Yellow, 520gf >Not Available For Halogen Free

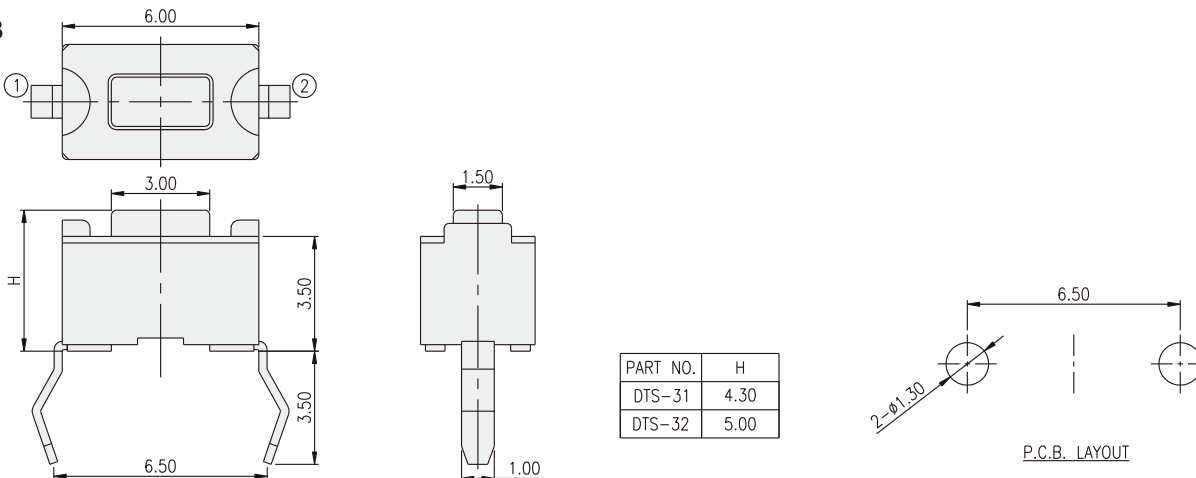
CIRCUIT



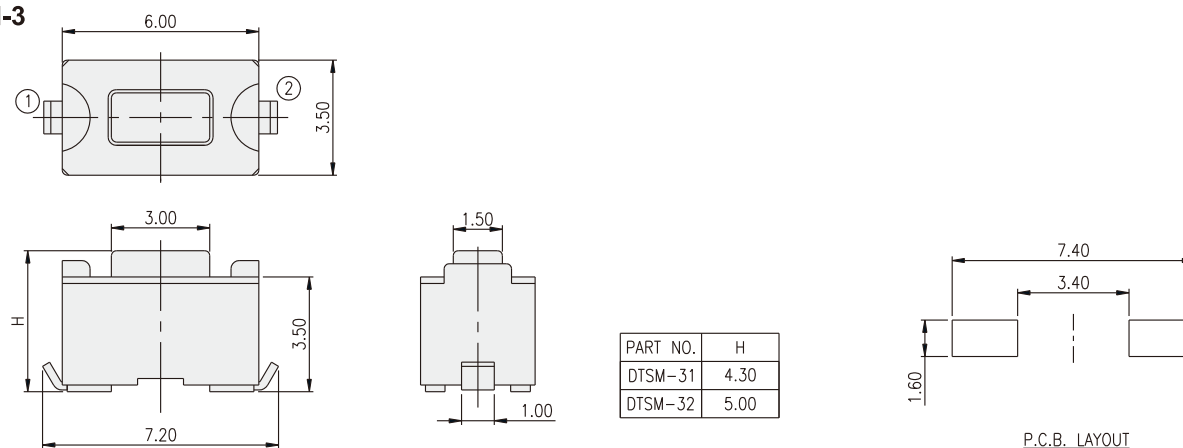
PACKAGE

- <Tube>
DTS(M)(L)-3: 135 pcs
- <Bulk>
1000 pcs
- <Tape & Reel>
DTSM(L)(F)-31: 1800 pcs
DTSM(L)(F)-32: 1600 pcs

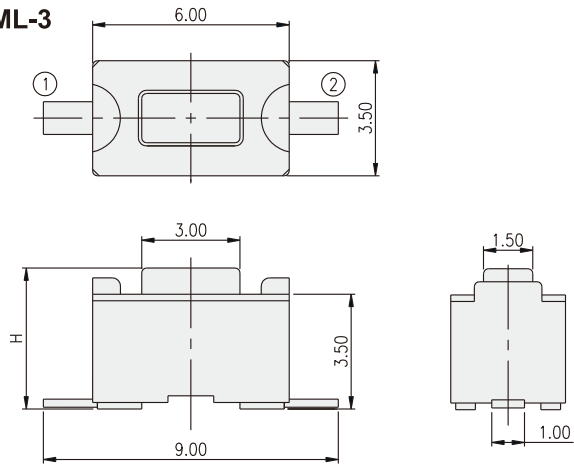
DTS-3



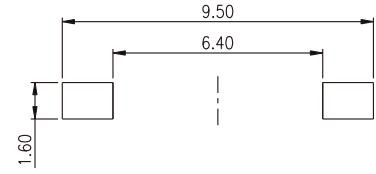
DTSM-3



DTSMML-3

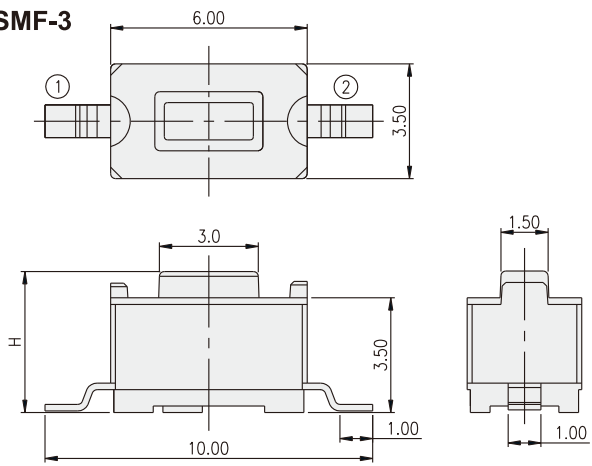


PART NO.	H
DTSMML-31	4.30
DTSMML-32	5.00

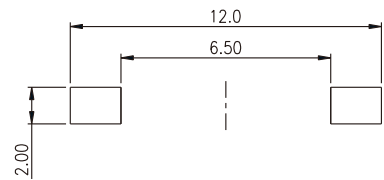


P.C.B. LAYOUT

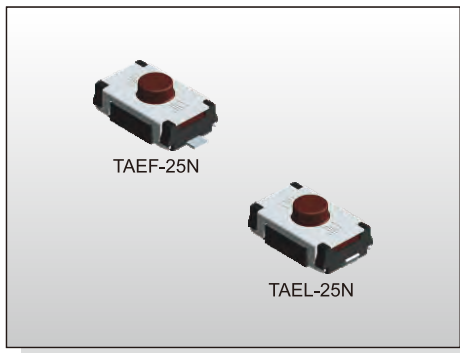
DTSMF-3



PART NO.	H
DTSMF-31	4.30
DTSMF-32	5.00



P.C.B. LAYOUT



FEATURES

- ※3.8x6mm of thinner type 2.5mm height
- ※Soft actuator with long travel
- ※Choice of actuation force

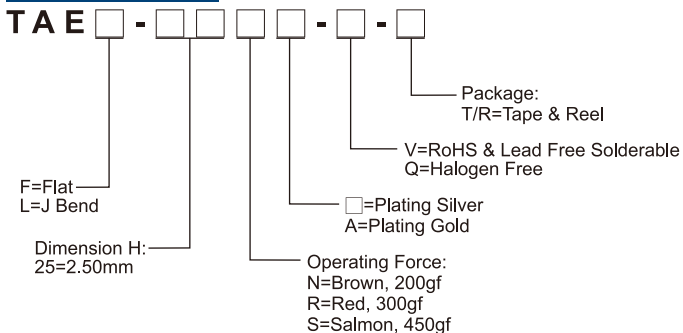
APPLICATION

- ※Car remote control
- ※Audio, OA equipment
- ※Instrumentation

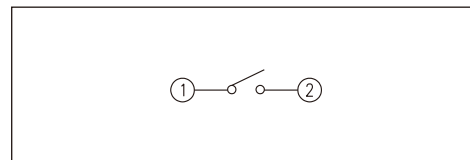
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	300V AC/1 minute
Operating Force	200gf, Brown(N) 300gf, Red(R) 450gf, Salmon(S)
Travel	0.30mm, Brown(N) 0.35mm, Red(R) 0.45mm, Salmon(S)
Operating Life	100,000 cycles (S) 200,000 cycles (N/R)
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

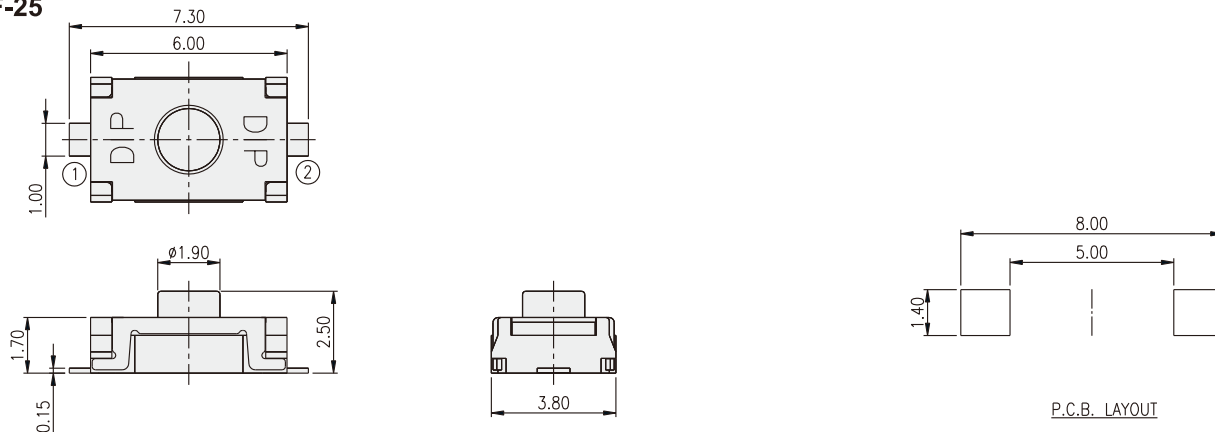


PACKAGE

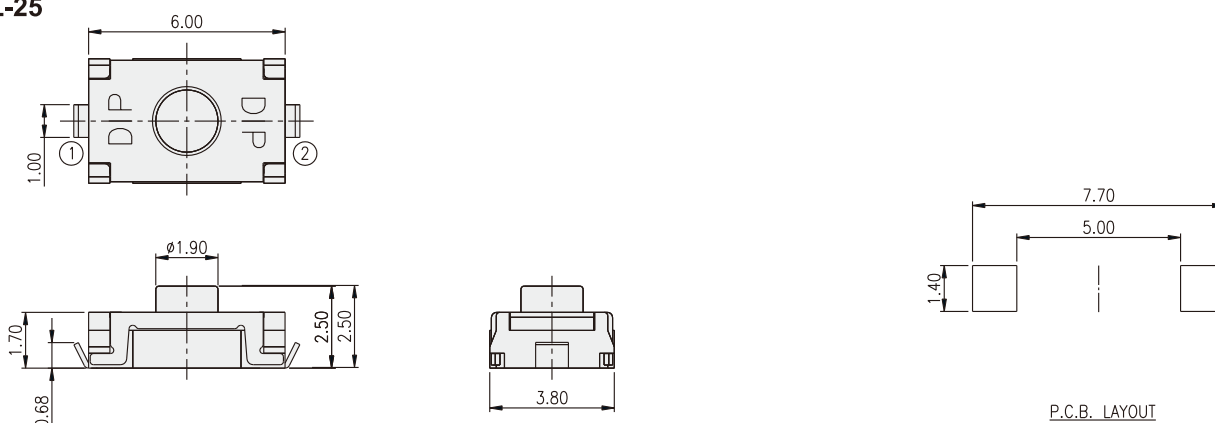
<Tape & Reel>
2700 pcs

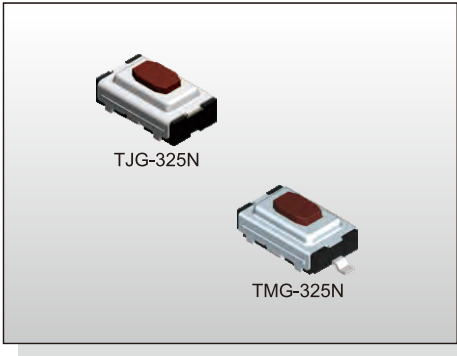
TACT SWITCH

TAEF-25



TAEL-25





FEATURES

- ※ Thinner type 2.5mm height
- ※ High density mounting
- ※ With anti-ESD of ground terminal

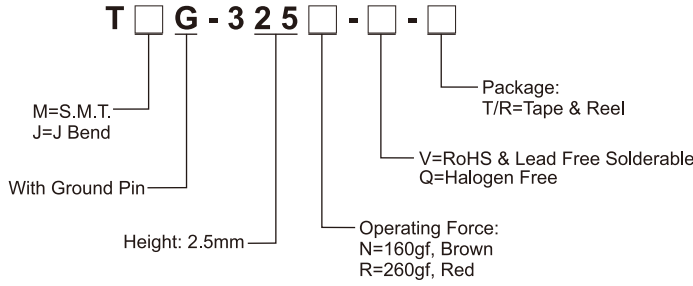
APPLICATION

- ※ Consumer products
- ※ Instrumentation
- ※ Industrial

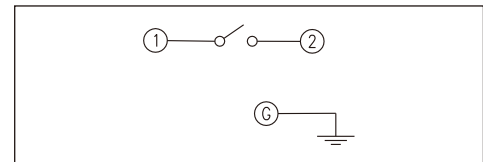
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	160±50gf, Brown(N) 260±50gf, Red(R)
Travel	0.25mm
Operating Life	20,000 cycles for 260gf 50,000 cycles for 160gf
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

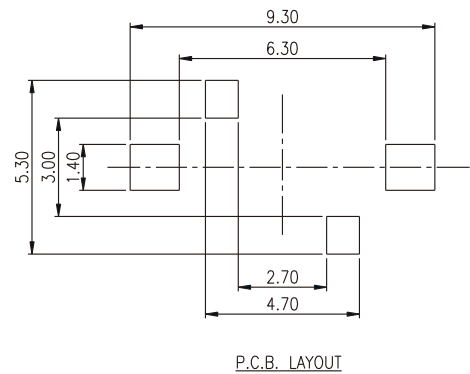
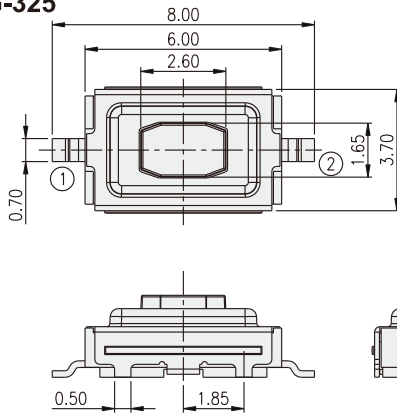


PACKAGE

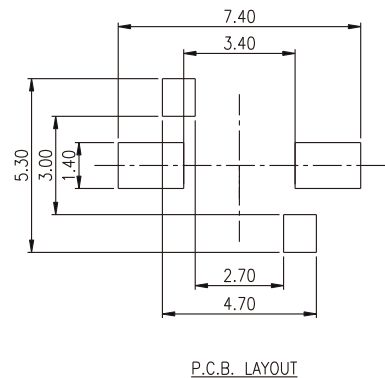
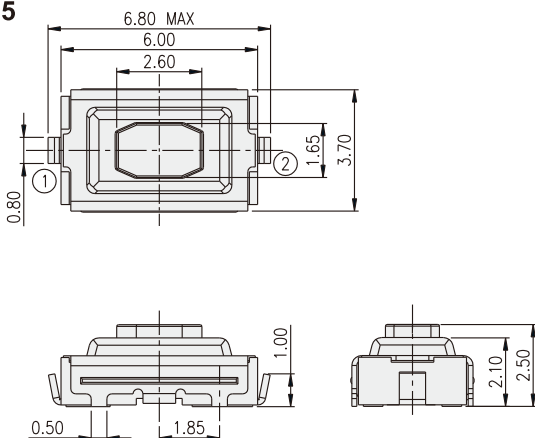
<Tape & Reel>
 2800 pcs

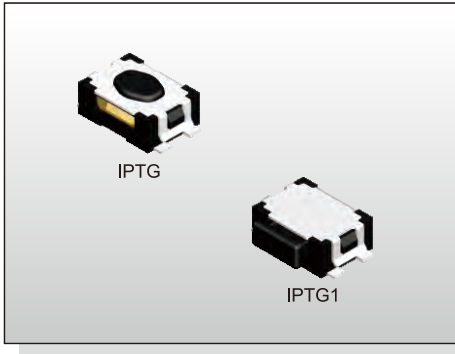
TACT SWITCH

TMG-325



TJG-325





FEATURES

- ※ Compact-sized 2.8x3.8mm
- ※ Vertical or side actuation
- ※ Wide stem

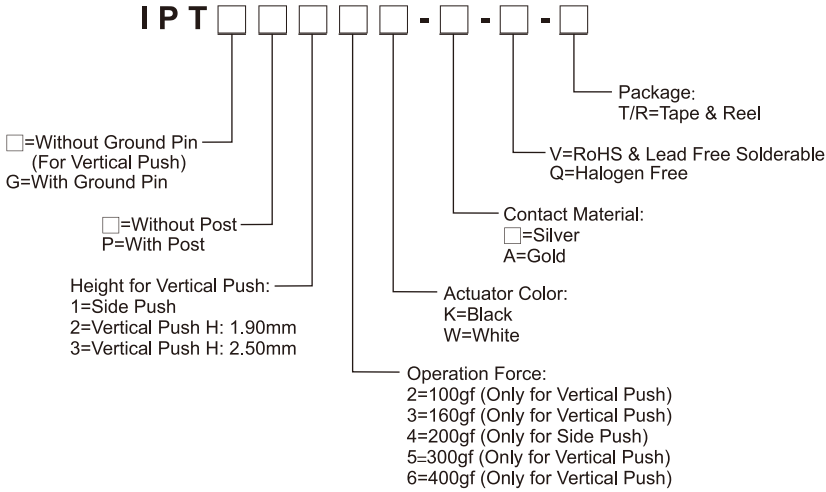
APPLICATION

- ※ Automotive
- ※ Portable electronic device
- ※ Control panel

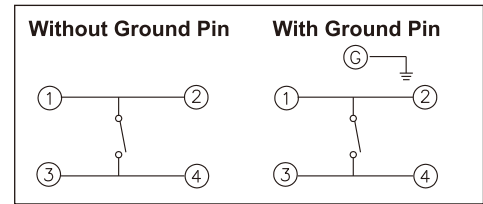
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	100V AC/1 minute
Operating Force	100±50gf, 160±50gf (Vertical Push) 200±65gf (Side Push) 300±80gf, 400±80gf (Vertical Push)
Travel	0.13mm (Vertical Push) 0.20mm (Side Push)
Operating Life	50,000 cycles for 300/400gf 100,000 cycles for 100/160/200gf
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

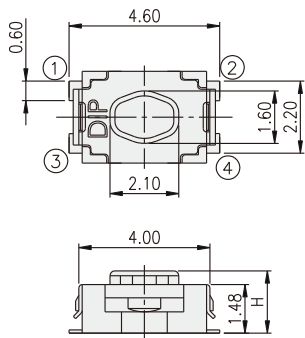


PACKAGE

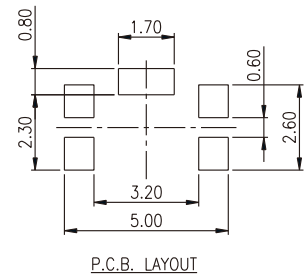
<Tape & Reel>
IPTGP1: 3000 pcs
IPTG1: 3500 pcs
IPTG2: 7000 pcs
IPTG3: 6000 pcs

TACT SWITCH

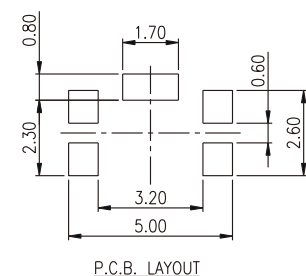
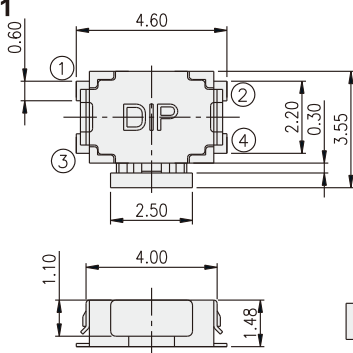
IPTG

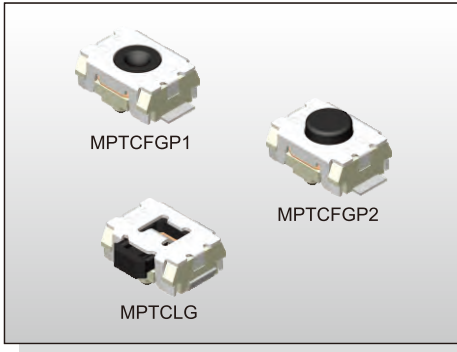


PART NO.	H
IPTG2	1.90
IPTG3	2.50



IPTG1





FEATURES

- ※ Compact-sized 2.9x3.9mm
- ※ Vertical or side actuation
- ※ Reflow solderable

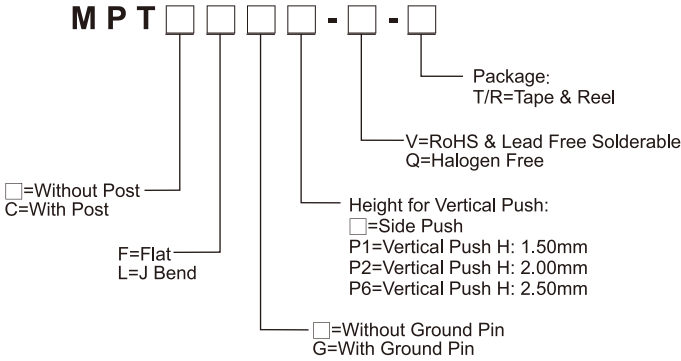
APPLICATION

- ※ Automotive
- ※ Portable electronic device
- ※ Control panel

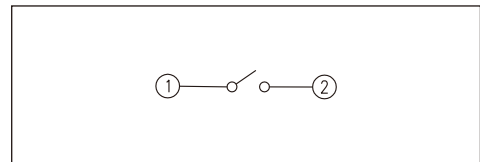
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf (Vertical Push) 220±65gf (Side Push)
Travel	0.13mm (Vertical Push) 0.20mm (Side Push)
Operating Life	100,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

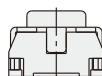
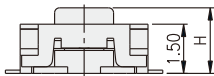
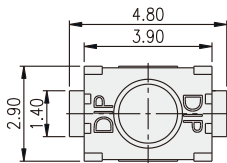


PACKAGE

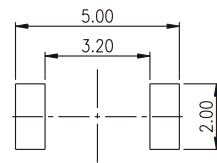
<Tape & Reel>
Side push: 3500 pcs
Vertical push: 2000 pcs

TACT SWITCH

MPTFP □

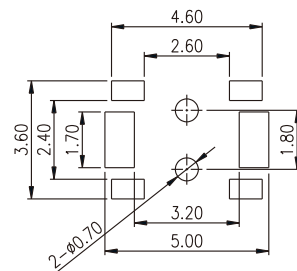
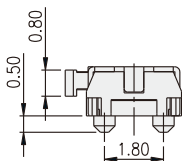
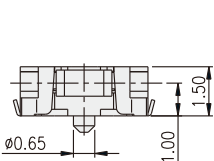
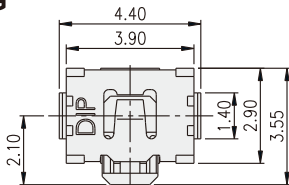


PART NO.	H
MPTFP1	1.50
MPTFP2	2.00
MPTFP6	2.50

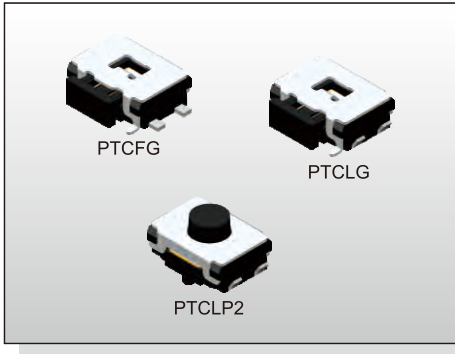


P.C.B. LAYOUT

MPTCLG



P.C.B. LAYOUT



FEATURES

- ✧ For high density mounting
- ✧ Vertical or side actuation
- ✧ Reflow solderable

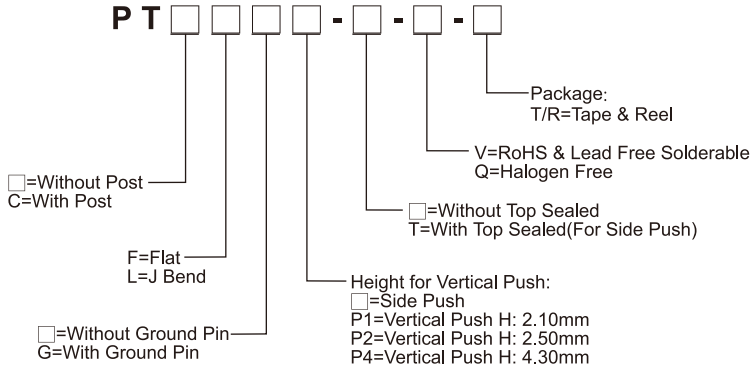
APPLICATION

- ✧ Automotive
- ✧ Portable electronic device
- ✧ Control panel

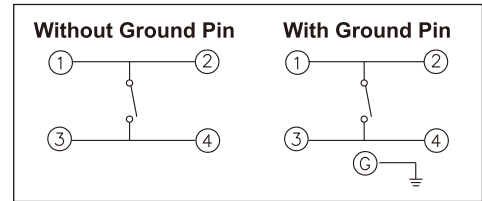
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf (Vertical Push) 220+80/-70gf (Side Push)
Travel	0.20mm (Vertical Push) 0.30mm (Side Push)
Operating Life	100,000 cycles
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

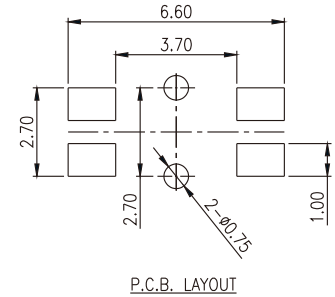
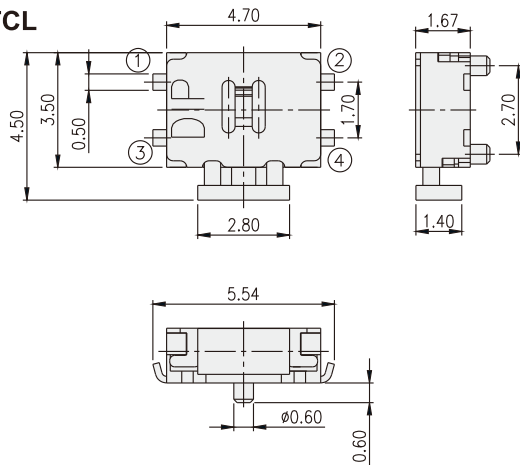


PACKAGE

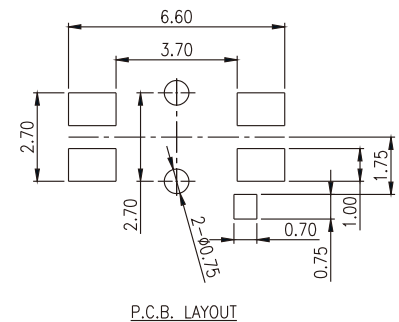
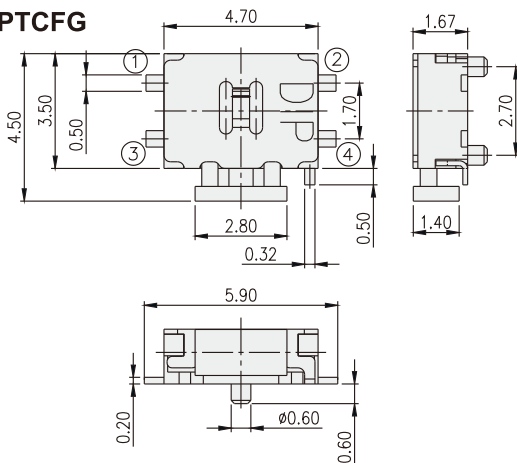
<Tape & Reel>
 Side push: 3000 pcs
 Vertical push: 2400 pcs

TACT SWITCH

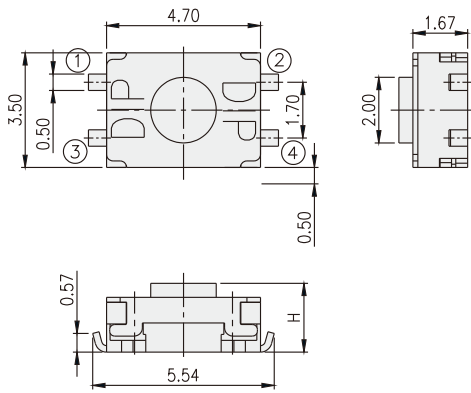
PTCL



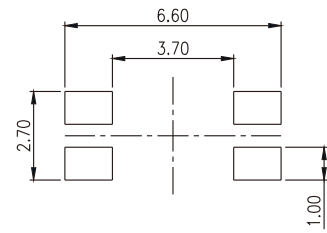
PTCFG



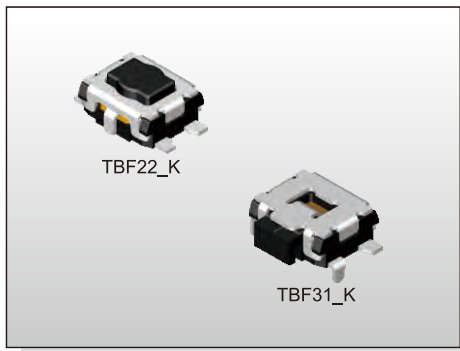
PTLGP □



PART NO.	H
PTLP1	2.10
PTLP2	2.50
PTLP4	4.30



P.C.B. LAYOUT



FEATURES

- ※Miniature 2.9x3.5mm
- ※Vertical or side actuation
- ※Long operating life

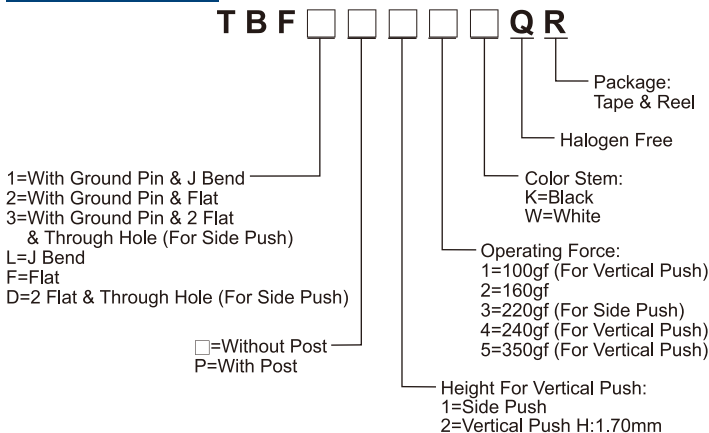
APPLICATION

- ※Mobile phone
- ※Consumer electronics
- ※Automotive

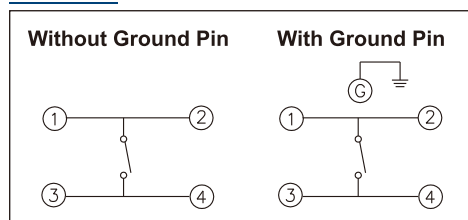
SPECIFICATION

Contact Rating	10μA, 2V DC to 20mA, 15V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	100±50/160±50/240±80/350±100gf (Vertical Push) 160+70/-40, 220+80/-70gf (Side Push)
Travel	0.15mm (Vertical Push) 0.20mm (Side Push)
Operating Life	100,000 cycles for Side Push 200,000 cycles for 160/240/350gf 1,000,000 cycles for 100gf (Vertical Push)
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



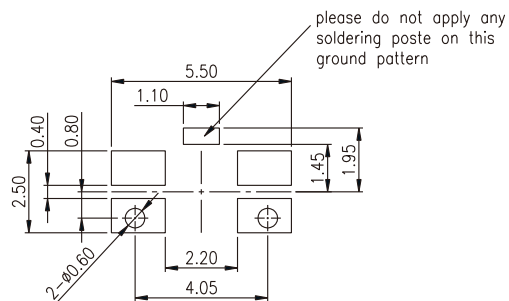
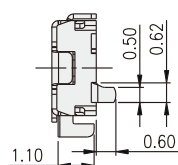
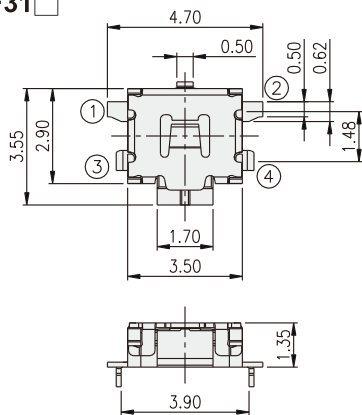
CIRCUIT



PACKAGE

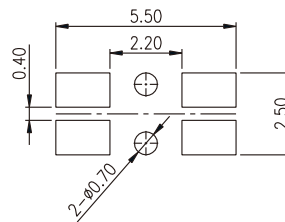
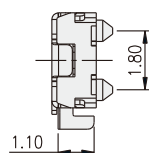
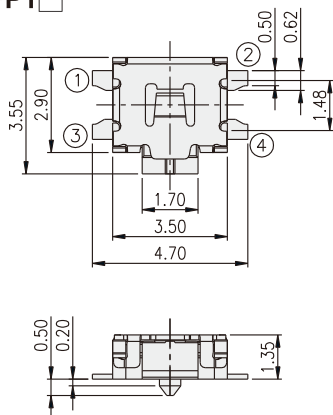
<Tape & Reel>
3000 pcs

TBF31 []



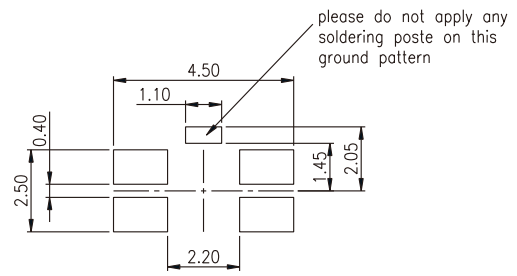
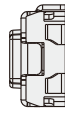
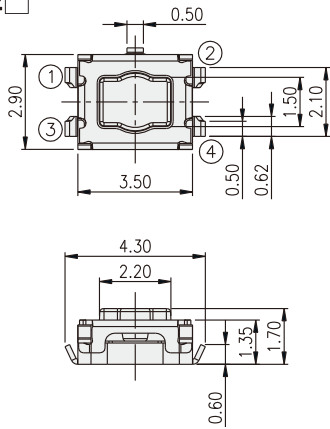
P.C.B. LAYOUT

TBFFP1 []



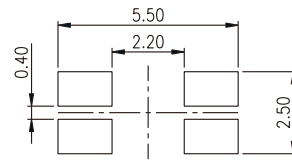
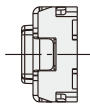
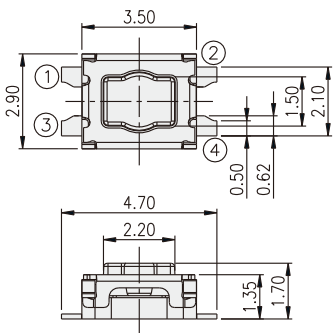
P.C.B. LAYOUT

TBF12 □

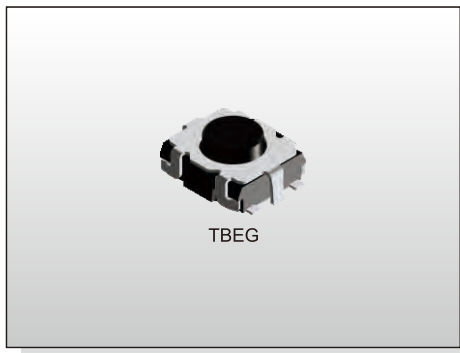


P.C.B. LAYOUT

TBFF2 □



P.C.B. LAYOUT



FEATURES

- ※Electrical life: 200,000 cycles
- ※Sharp click feeling
- ※2.7x3.0mm miniature tact switch

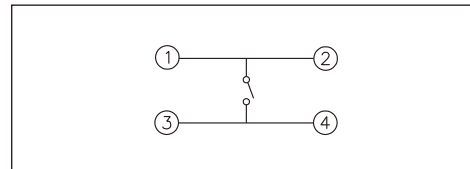
APPLICATION

- ※Automotive
- ※Video game device

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf/200±50gf/400±80gf
Travel	0.12mm
Operating Life	200,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +90°C

CIRCUIT



PACKAGE

<Tape & Reel>
8000 pcs

HOW TO ORDER

T B E □ - □ - Q - □

G=With Ground Pin
□=Without Ground Pin

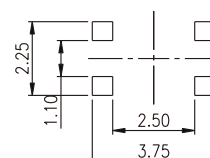
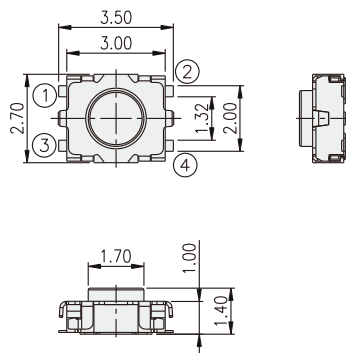
Package:
T/R=Tape & Reel

Halogen Free

Operating Force:
N=Brown, 160gf
W=White, 200gf
□=Black, 400gf

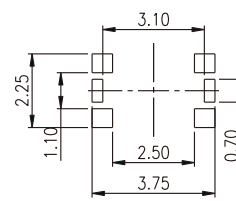
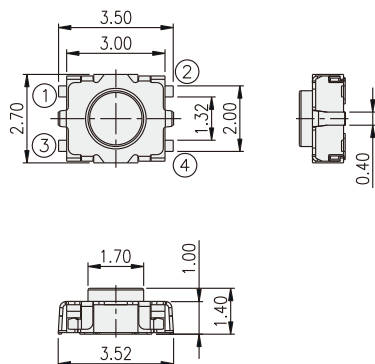
TACT SWITCH

TBE

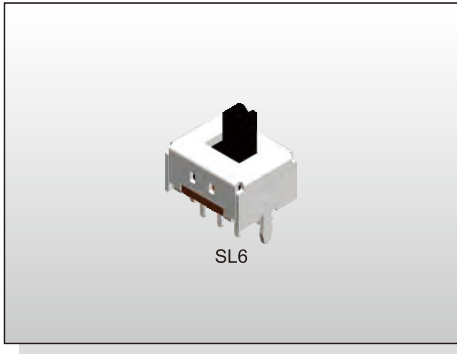


P.C.B. LAYOUT

TBEG



P.C.B. LAYOUT



FEATURES

- ※4.7mm height
- ※10,000 operation life cycles

APPLICATION

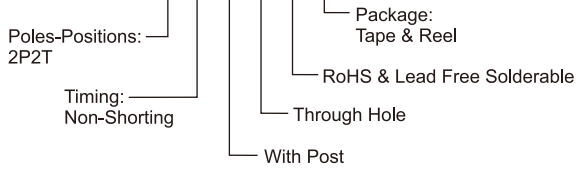
- ※Portable audio
- ※Instrumentation
- ※Radio cassette

SPECIFICATION

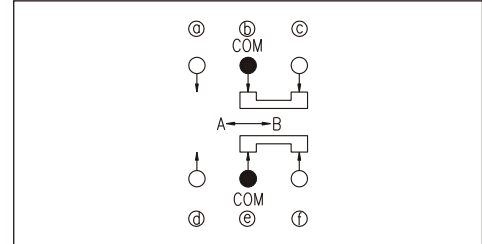
Contact Rating	0.1A, 12V DC
Contact Resistance	20mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	200±150gf
Travel	2mm
Operating Life	10,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-20°C ~ +60°C

HOW TO ORDER

S L 6 N C H V R



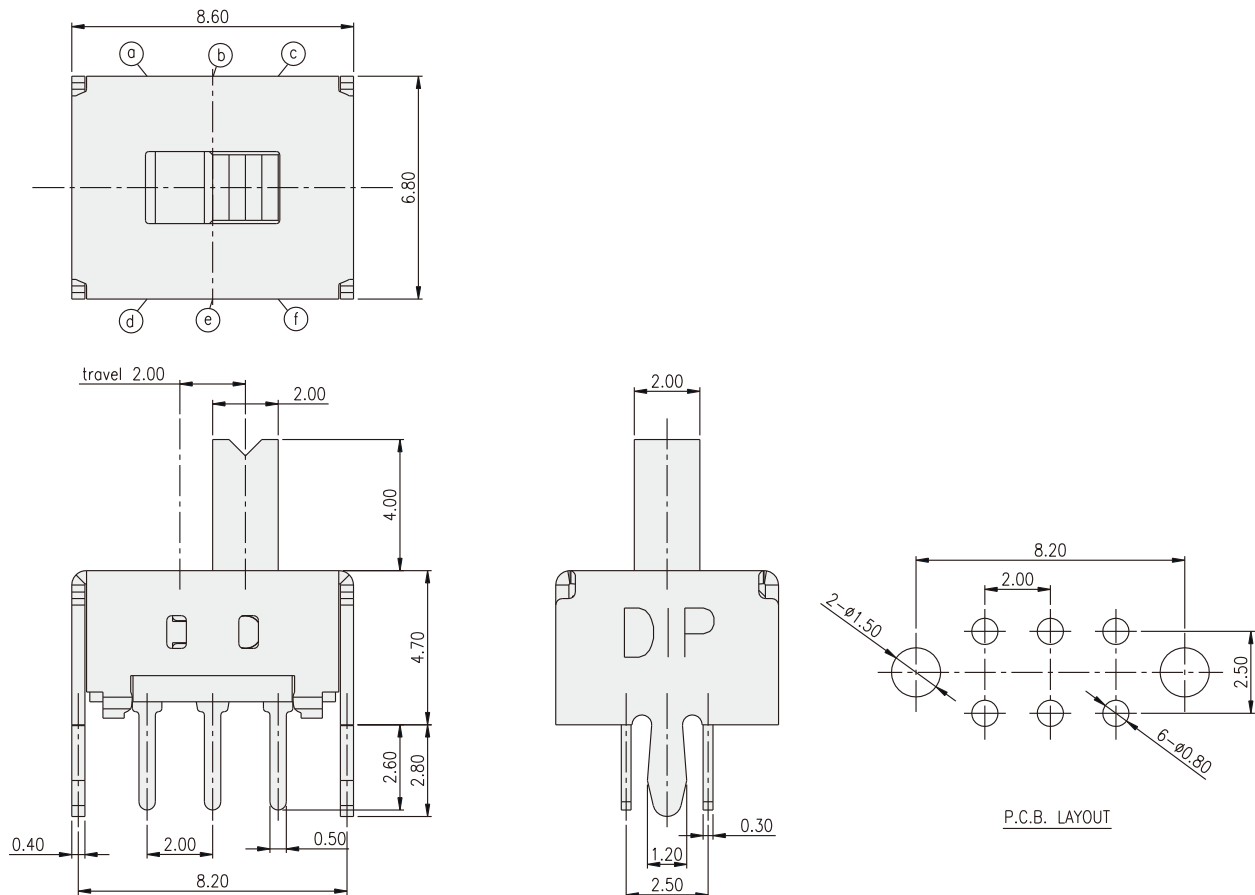
CIRCUIT



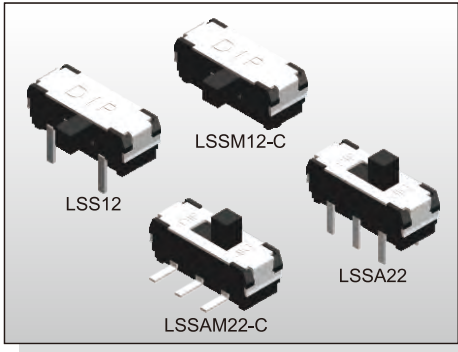
PACKAGE

<Tape & Reel>
300 pcs

SL6



SLIDE SWITCH



FEATURES

- ※2.0mm stroke
- ※Through hole or SMT
- ※1P2T, 2P2T models

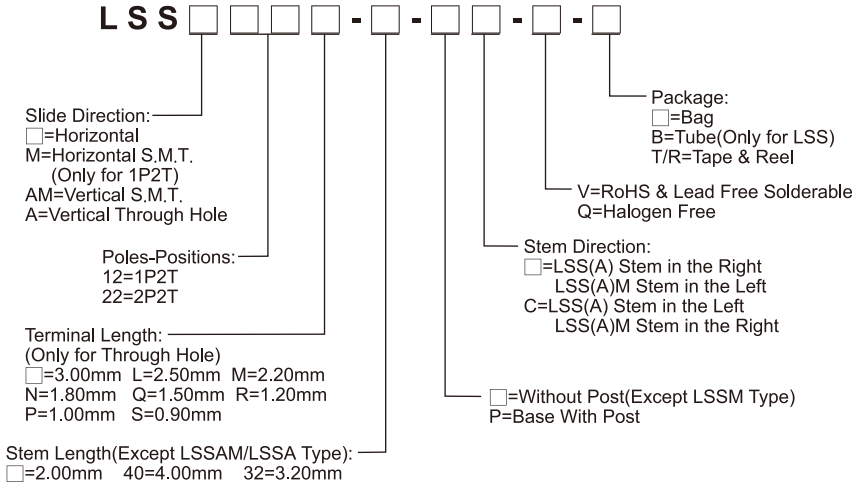
APPLICATION

- ※Remote control
- ※Consumer electronics
- ※Instrumentations

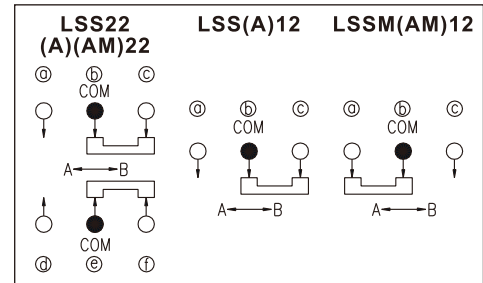
SPECIFICATION

Contact Rating	0.1A, 12V DC
Contact Resistance	60mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	200±150gf
Travel	2mm
Operating Life	10,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER



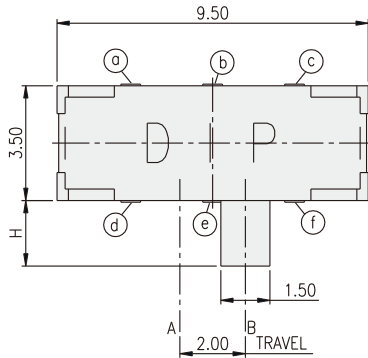
CIRCUIT



PACKAGE

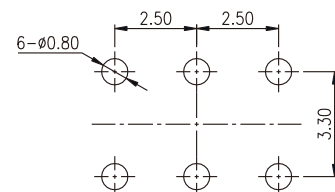
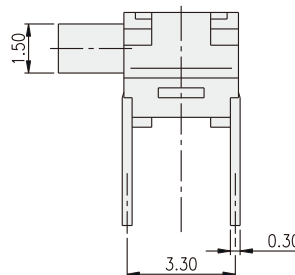
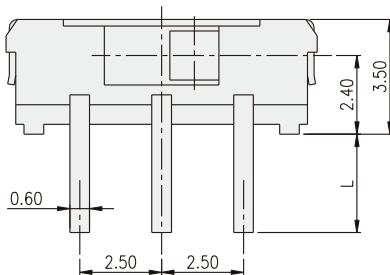
- <Bag>
LSS(A)12, 22: 1000 pcs
- <Tube>
LSS[]2, LSS[]2M, LSS[]2L: 50 pcs
- <Tape & Reel>
LSS12, 22-N,P,S,Q,R: 900 pcs
LSS12, 22-[],M,L: 800 pcs
LSS12, 12-40-P, 22[]-40: 800 pcs
LSSM12-P, LSSM12-40-P: 800 pcs
LSSM12: 1000 pcs
LSSA(M)12, 22: 600 pcs
LSSA12, 22M,L-P: 600 pcs
LSSA12, 22R-P: 500 pcs

LSS22



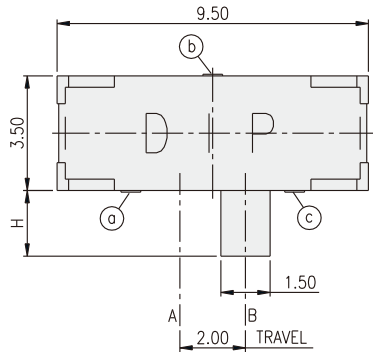
PART NO.	H
LSS22	2.0
LSS22-32	3.20
LSS22-40	4.0

PART NO.	L
LSS22	3.0
LSS22S	0.90
LSS22P	1.0
LSS22R	1.20
LSS22Q	1.50
LSS22N	1.80
LSS22M	2.20
LSS22L	2.50



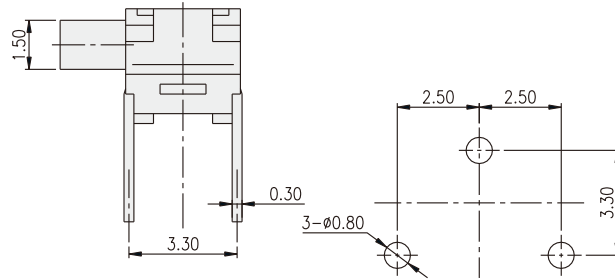
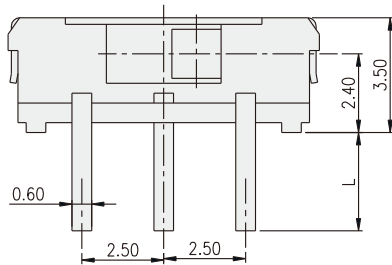
P.C.B. LAYOUT

LSS12



PART NO.	H
LSS12	2.00
LSS12-32	3.20
LSS12-40	4.00

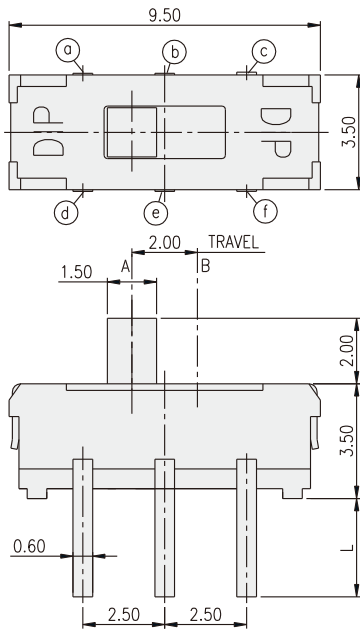
PART NO.	L
LSS12	3.0
LSS12S	0.90
LSS12P	1.0
LSS12R	1.20
LSS12Q	1.50
LSS12N	1.80
LSS12M	2.20
LSS12L	2.50



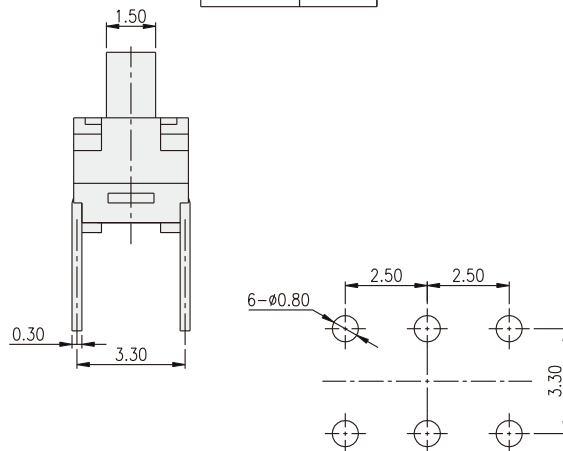
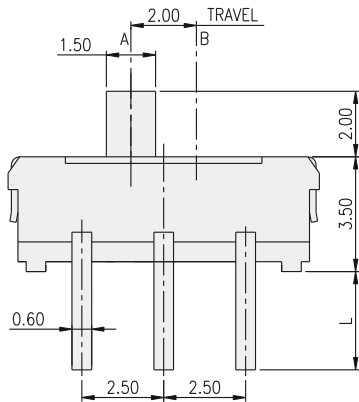
P.C.B. LAYOUT

SLIDE SWITCH

LSSA22

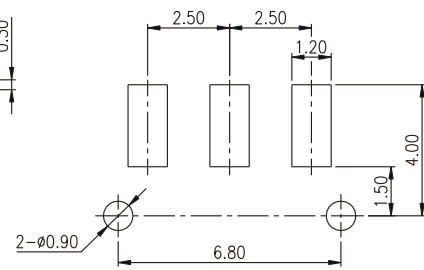
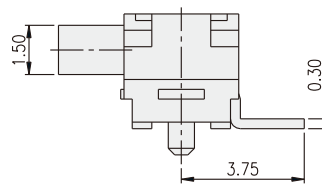
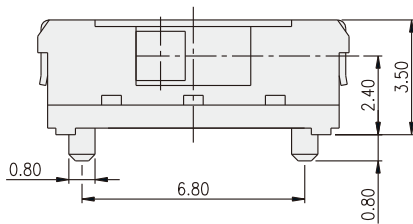
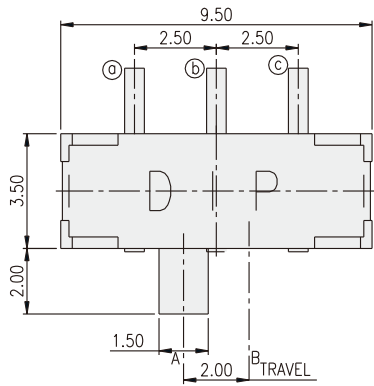


PART NO.	L
LSSA22	3.0
LSSA22S	0.90
LSSA22P	1.0
LSSA22R	1.20
LSSA22Q	1.50
LSSA22N	1.80
LSSA22M	2.20
LSSA22L	2.50



P.C.B. LAYOUT

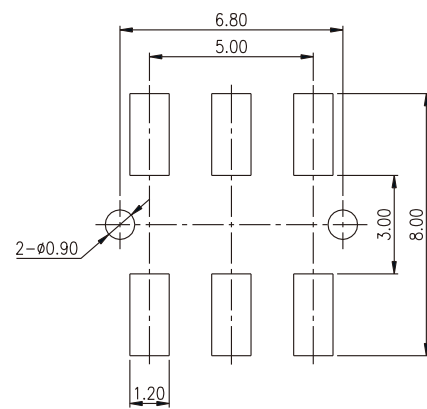
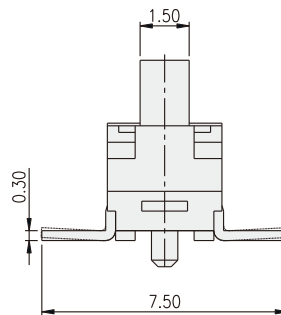
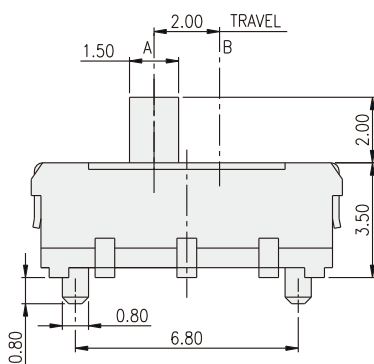
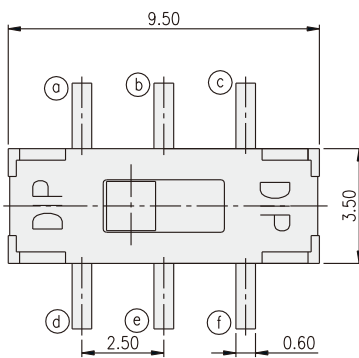
LSSM12-P



P.C.B. LAYOUT

SLIDE SWITCH

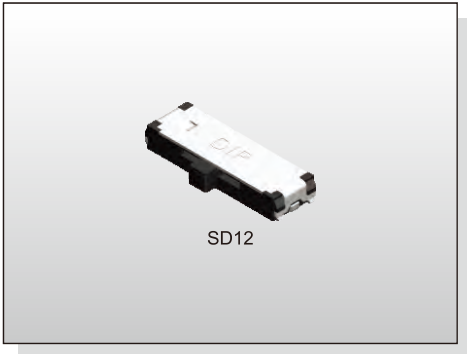
LSSAM22-P



P.C.B. LAYOUT

SLIDE SWITCH SD12 SERIES

Slide Type (1P3T)



FEATURES

- ※ 1.45mm height
- ※ 1P3T model
- ※ Single side recoil

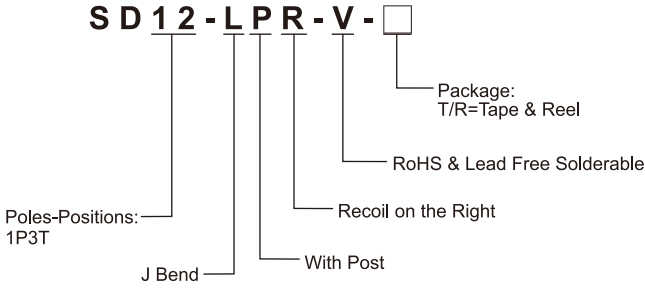
APPLICATION

- ※ Remote control
- ※ Consumer electronics
- ※ Instrumentations

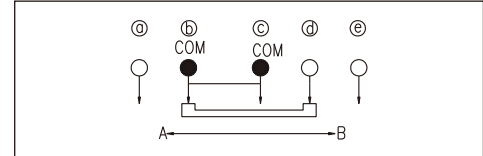
SPECIFICATION

Contact Rating	0.3A, 15V DC
Contact Resistance	1Ω max.
Insulation Resistance	10MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	150±100gf
Travel	1.5mm
Operating Life	5,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-25°C ~ +85°C

HOW TO ORDER



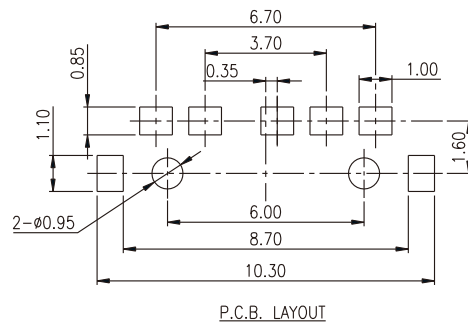
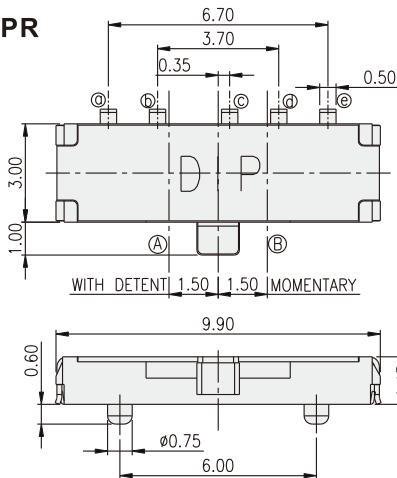
CIRCUIT



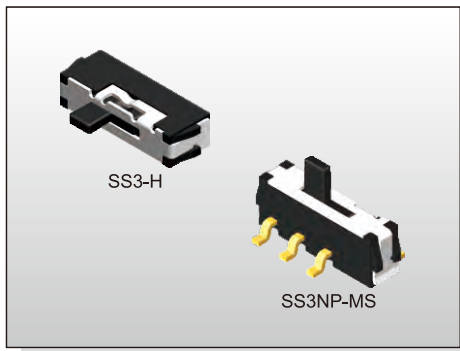
PACKAGE

<Tape & Reel>
3000 pcs

SD12-LPR



SLIDE SWITCH



FEATURES

- ※2.0mm height
- ※1P2T model
- ※Reflow solderable

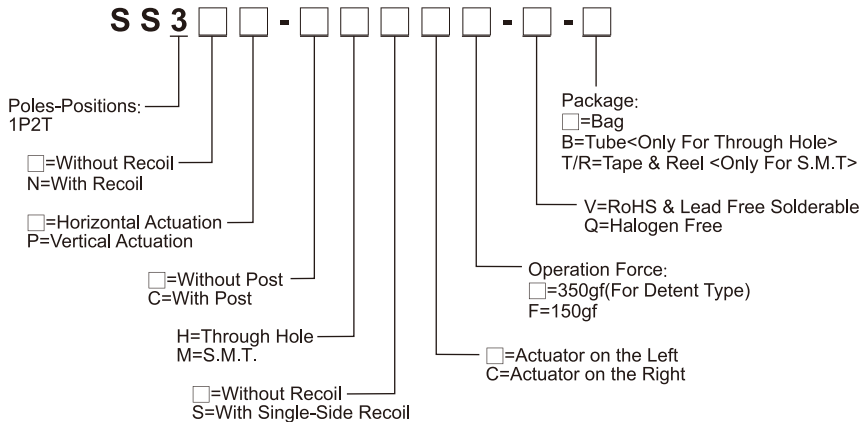
APPLICATION

- ※Remote control
- ※Consumer electronics
- ※Instrumentations

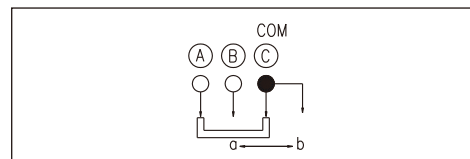
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	100gf min./350gf max.(Detent Type) 150±100gf(Recoil Type)
Travel	2mm
Operating Life	10,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

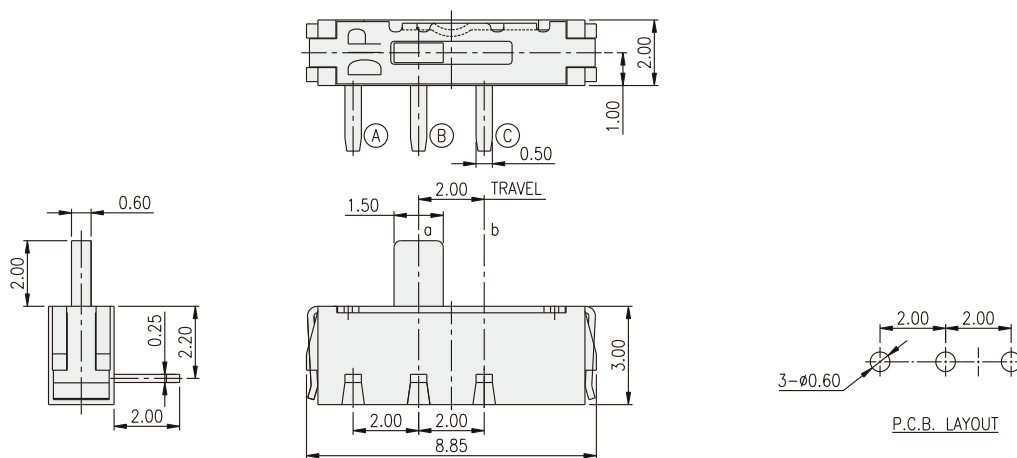


PACKAGE

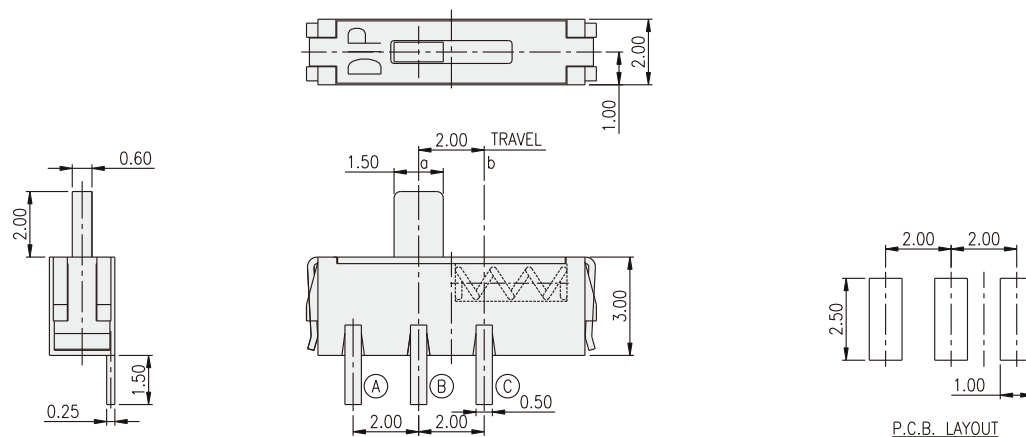
- <Bag>
2000 pcs
- <Tube>
53 pcs
- <Tape & Reel>
SS3-CM: 1900 pcs
SS3NP: 1000 pcs

SLIDE SWITCH

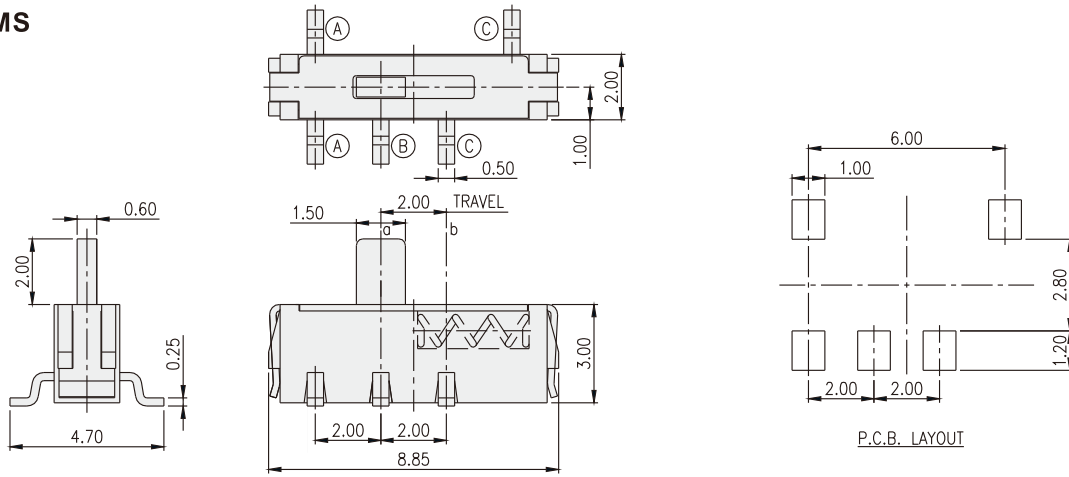
SS3-H



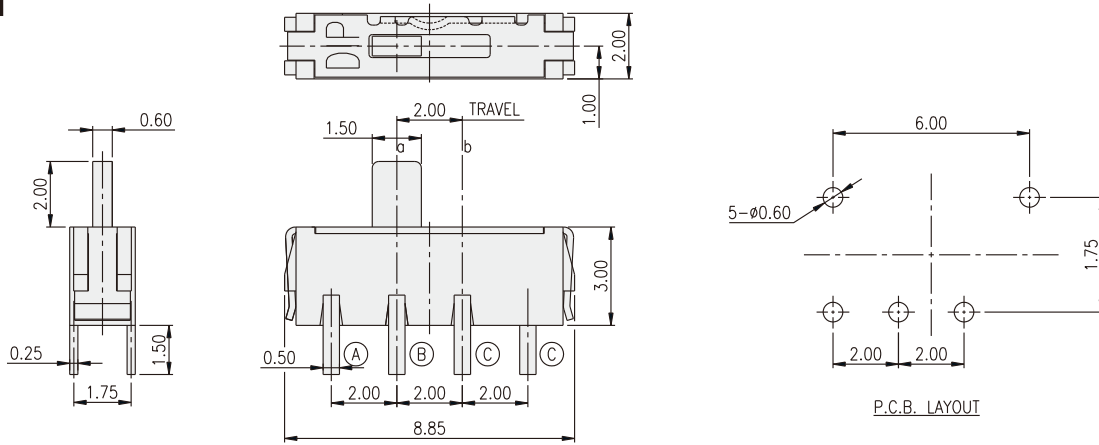
SS3N-MS



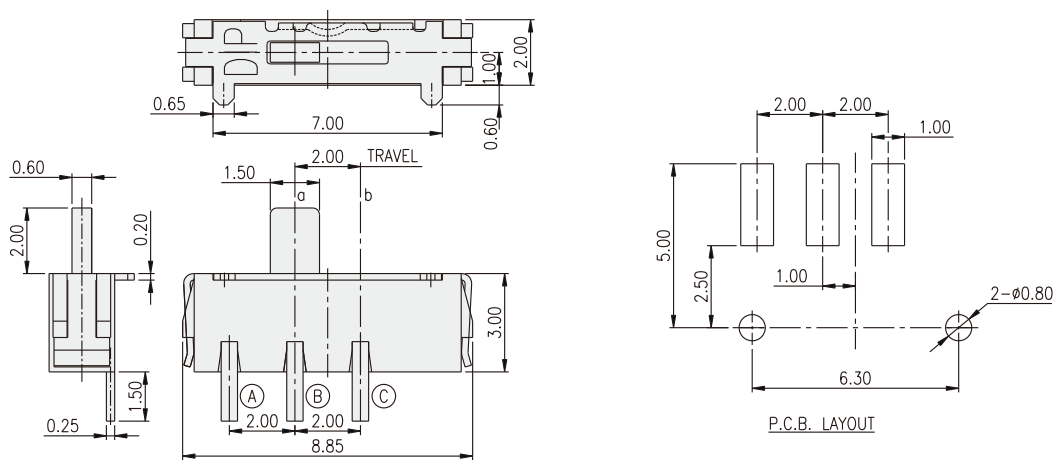
SS3NP-MS



SS3P-H



SS3-CM



SLIDE SWITCH SS4 SERIES

Recoil & SMT Type (1P3T)



FEATURES

- ※2.0mm height
- ※1P3T model
- ※Reflow solderable

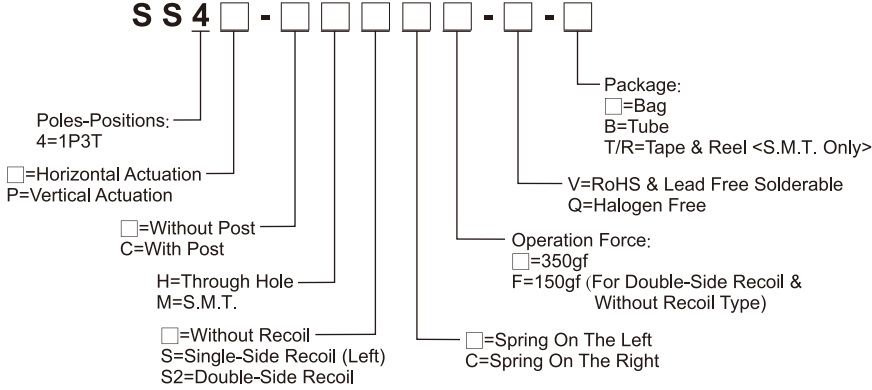
APPLICATION

- ※Remote control
- ※Consumer electronics
- ※Instrumentations

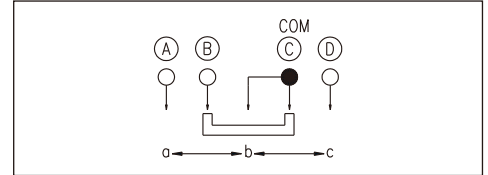
SPECIFICATION

Contact Rating	25mA, 24V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	100gf min./350gf max.(Detent Type) 150±100gf (Recoil Type)
Travel	2mm
Operating Life	10,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

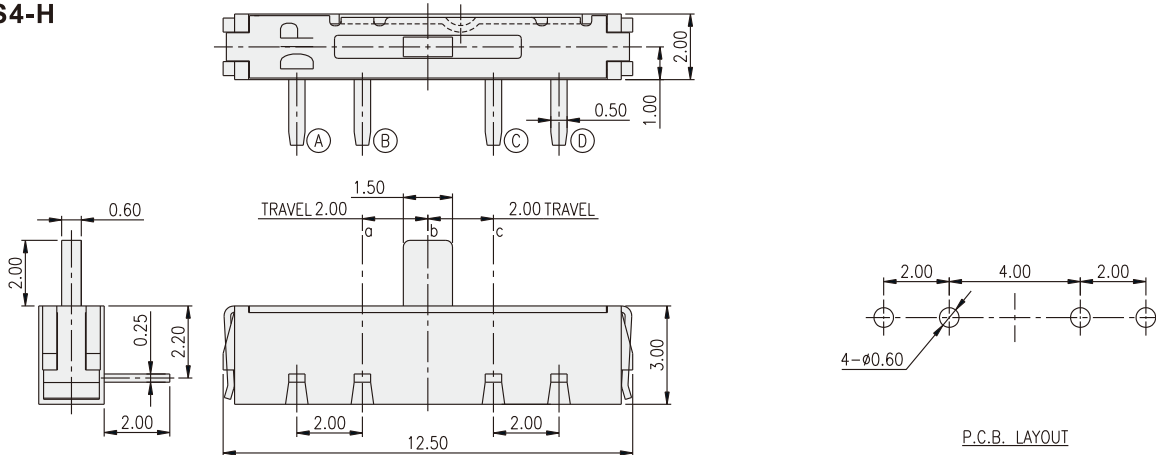


PACKAGE

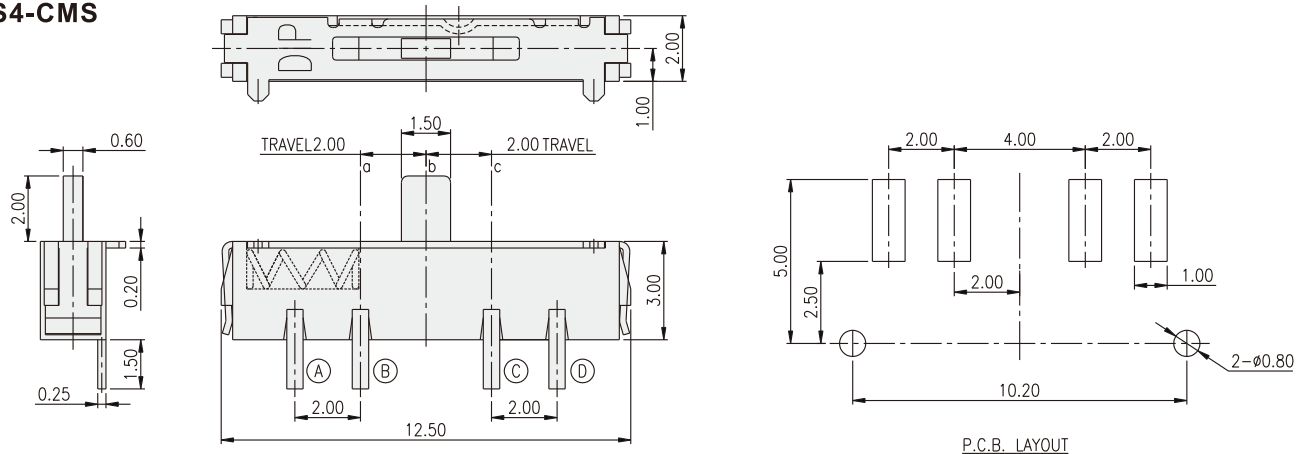
- <Bag>
1500 pcs
- <Tube>
38 pcs
- <Tape & Reel>
1900 pcs

SLIDE SWITCH

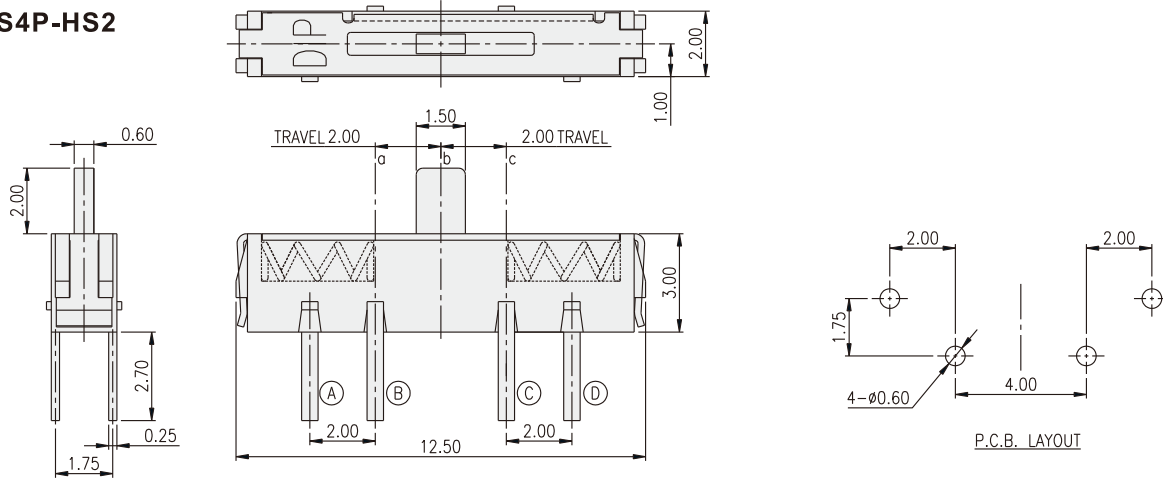
SS4-H



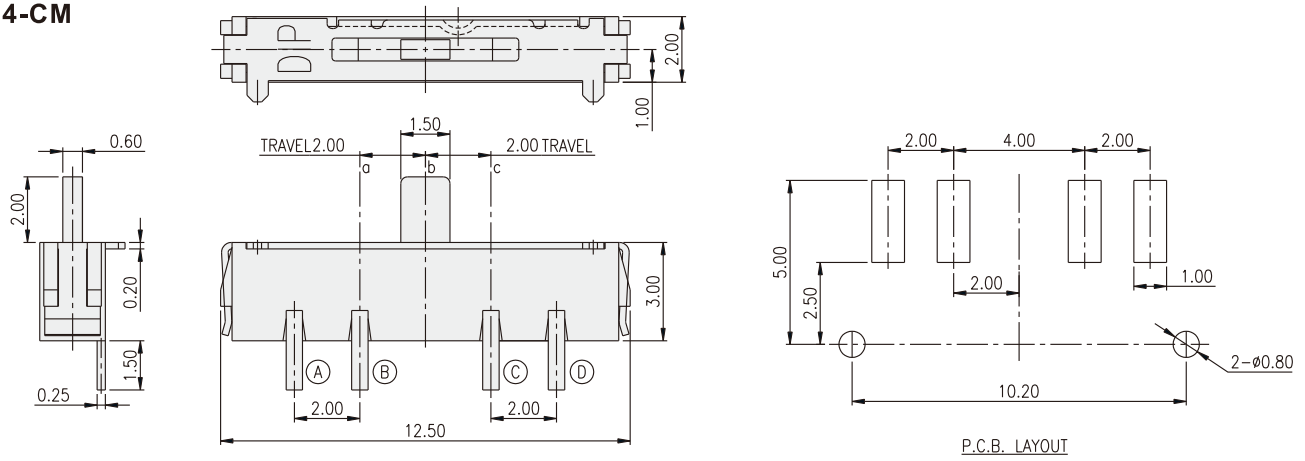
SS4-CMS



SS4P-HS2



SS4-CM

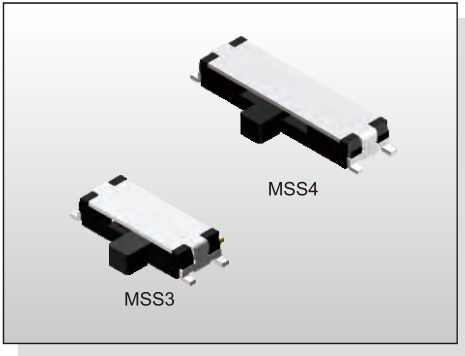


SLIDE SWITCH

SLIDE SWITCH

SLIDE SWITCH MSS(3)(4) SERIES

Miniature & SMT Type
(1P2T, 1P3T)



FEATURES

- ✘ 1.4mm height
- ✘ 1P2T, 1P3T models
- ✘ Stroke 1.5mm

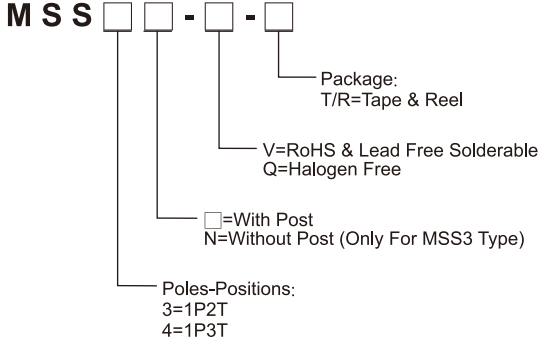
APPLICATION

- ✘ Remote control
- ✘ Consumer electronics
- ✘ Instrumentations

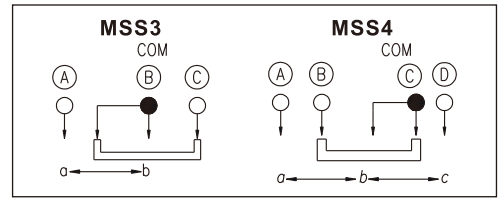
SPECIFICATION

Contact Rating	25mA , 24V DC	
Contact Resistance	70mΩ max	
Insulation Resistance	100MΩ min. 100V DC	
Dielectric Strength	100V AC/1 minute	
Operating Force	150±100gf (1.47N±0.98N)	MSS3
	A→B 150±100gf (1.47N±0.98N)	MSS4
	C→B 150±100gf (1.47N±0.98N)	
	B→C 200±150gf (1.96N±1.47N)	
B→A 200±150gf (1.96N±1.47N)		
Travel	1.5mm	
Operating Life	10, 000 cycles	
Operating Temp.	-20°C ~ +70°C	
Storage Temp.	-40°C ~ +85°C	

HOW TO ORDER



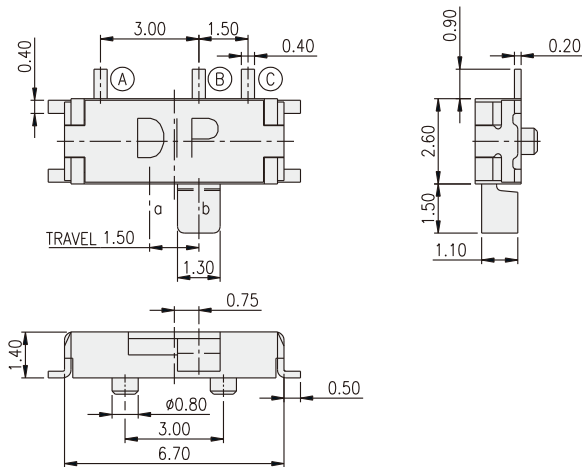
CIRCUIT



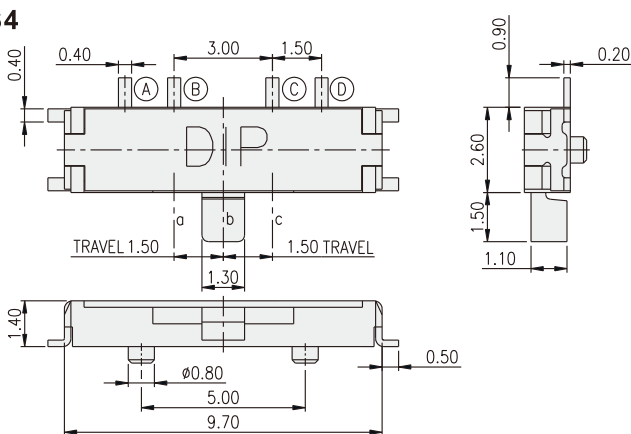
PACKAGE

<Tape & Reel>
2500 pcs

MSS3



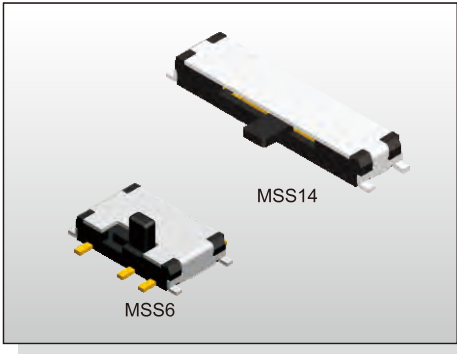
MSS4



SLIDE SWITCH

SLIDE SWITCH MSS(6)(14) SERIES

Miniature Travel & SMT Type (2P2T, 1P4T)



FEATURES

- ✧ 1.4mm height
- ✧ 2P2T, 1P4T models
- ✧ Stroke 1.5mm

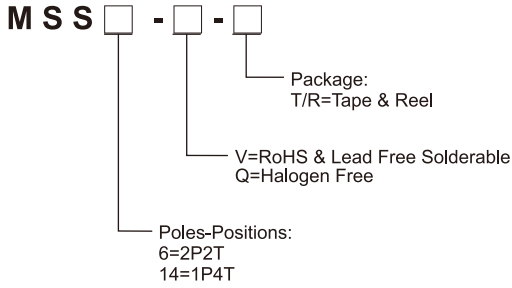
APPLICATION

- ✧ Remote control
- ✧ Consumer electronics
- ✧ Instrumentations

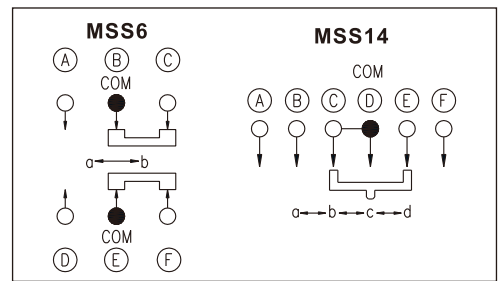
SPECIFICATION

Contact Rating	25mA , 24V DC	
Contact Resistance	70mΩ max	
Insulation Resistance	100MΩ min. 100V DC	
Dielectric Strength	100V AC/1 minute	
Operating Force	200±150gf (1.96N±1.47N)	MSS6
	A→B 150±100gf (1.47N±0.98N)	MSS14
	D→C 150±100gf (1.47N±0.98N)	
	B→C 200±150gf (1.96N±1.47N)	
	C→D 200±150gf (1.96N±1.47N)	
C→B 200±150gf (1.96N±1.47N)		
B→A 200±150gf (1.96N±1.47N)		
Travel	1.5mm	
Operating Life	10, 000 cycles	
Operating Temp.	-20°C ~ +70°C	
Storage Temp.	-40°C ~ +85°C	

HOW TO ORDER



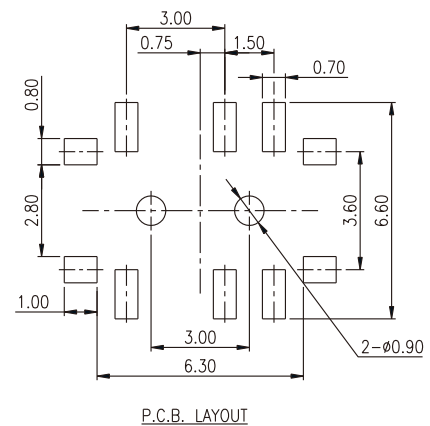
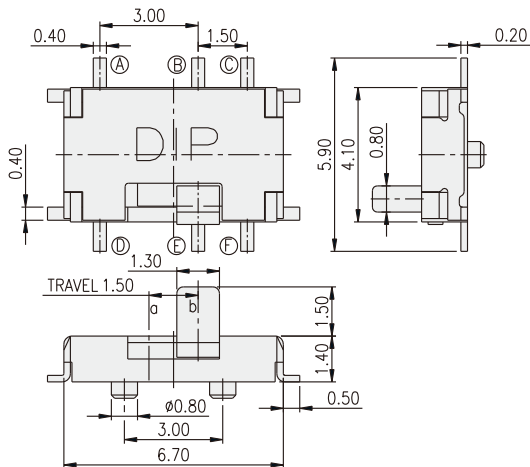
CIRCUIT



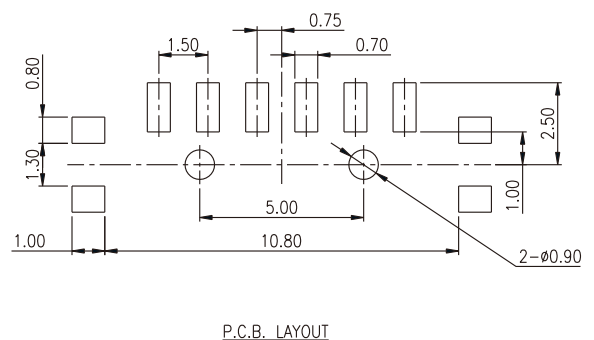
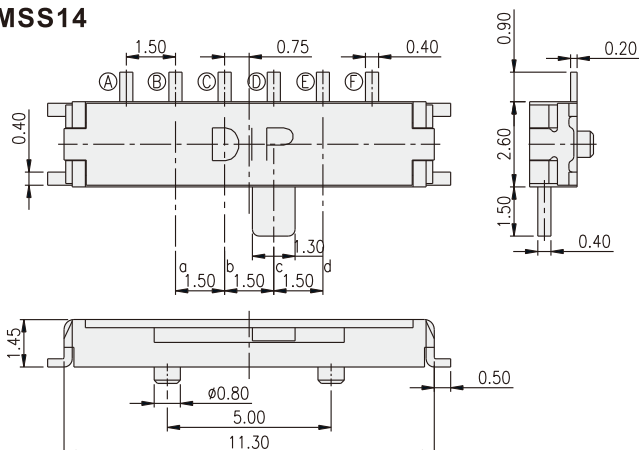
PACKAGE

<Tape & Reel>
MSS6: 1400 pcs
MSS14: 2500 pcs

MSS6

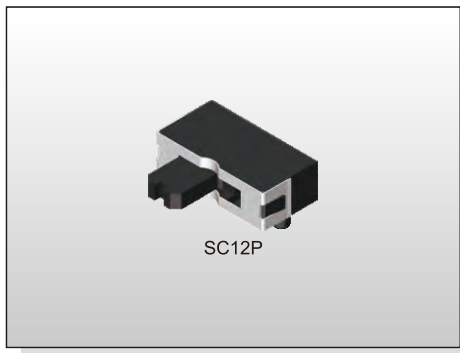


MSS14



SLIDE SWITCH SC12P SERIES

Slide Type (1P2T)



FEATURES

- ✘ 3.0mm height
- ✘ Through hole type
- ✘ 1P2T model

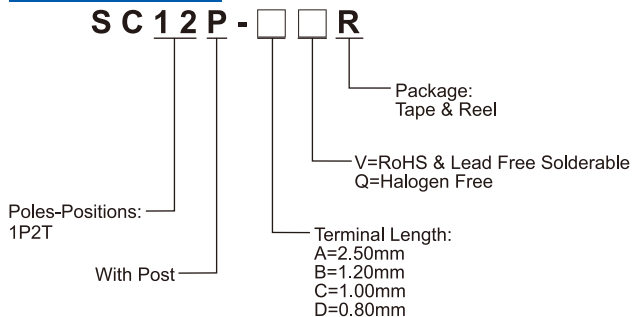
APPLICATION

- ✘ Remote control
- ✘ Consumer electronics
- ✘ Instrumentations

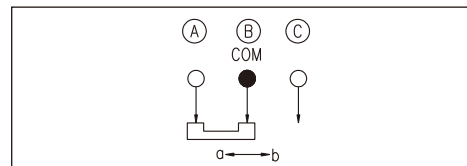
SPECIFICATION

Contact Rating	0.3A, 10V DC
Contact Resistance	50mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	100~300gf
Travel	2.5mm
Operating Life	10,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +75°C

HOW TO ORDER



CIRCUIT

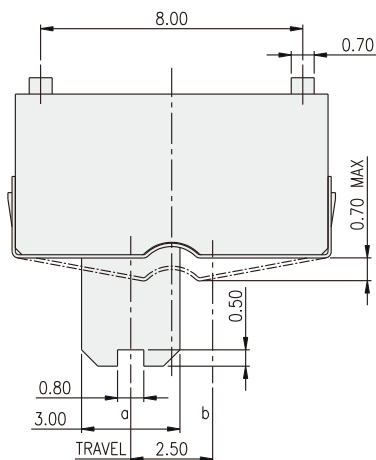


PACKAGE

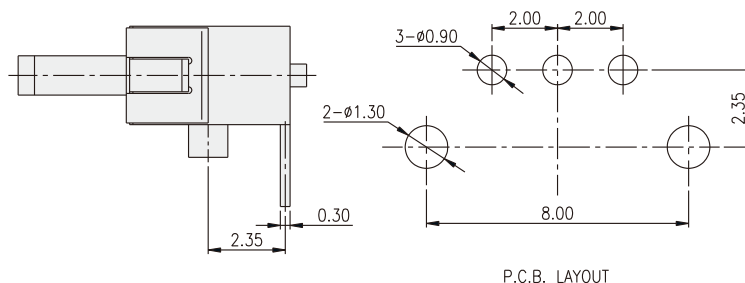
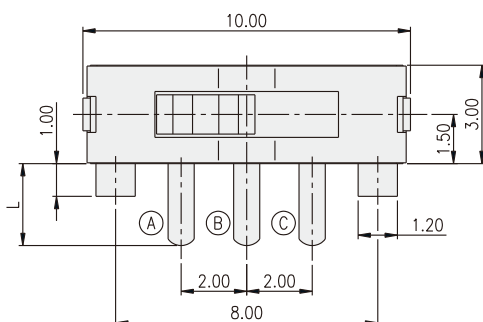
<Tape & Reel>
650 pcs

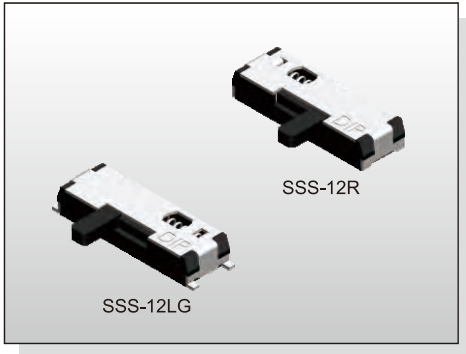
SLIDE SWITCH

SC12P



PART NO.	L
SC12P-A	2.50
SC12P-B	1.20
SC12P-C	1.00
SC12P-D	0.80





FEATURES

- ※2.0mm height
- ※1P2T model
- ※Stroke 2.7mm

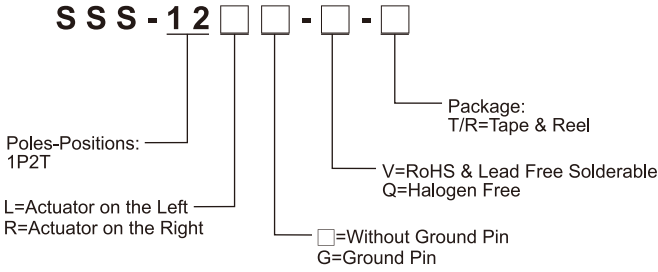
APPLICATION

- ※Remote control
- ※Consumer electronics
- ※Instrumentations

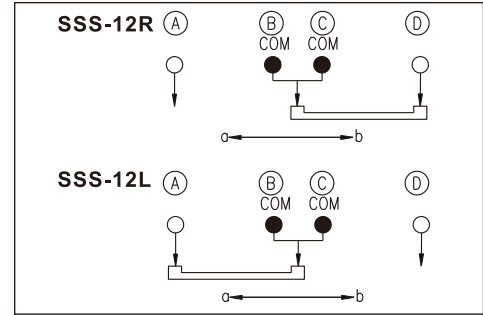
SPECIFICATION

Contact Rating	0.3A, 4V DC
Contact Resistance	70mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	180±70gf
Travel	2.7mm
Operating Life	10,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +75°C

HOW TO ORDER



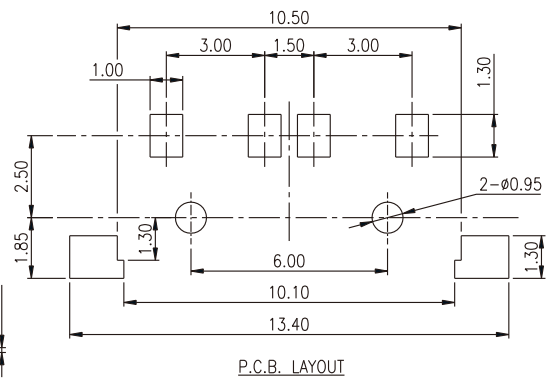
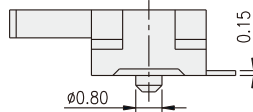
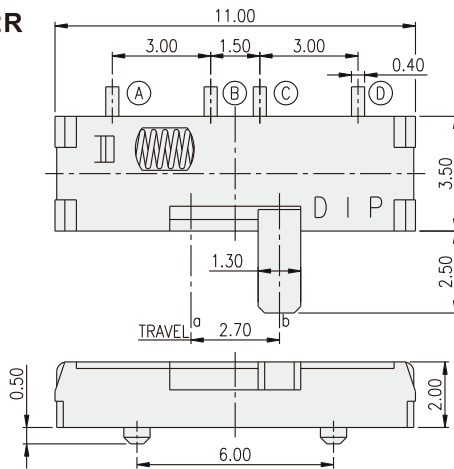
CIRCUIT



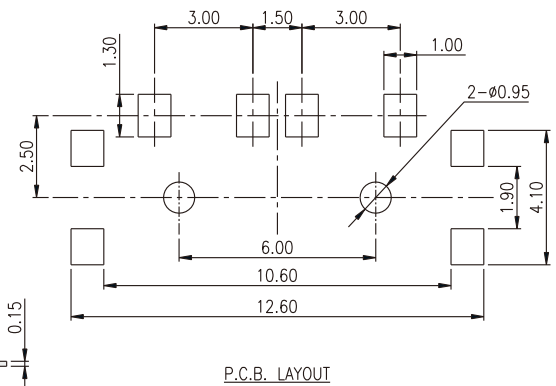
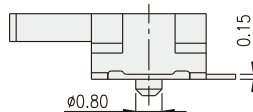
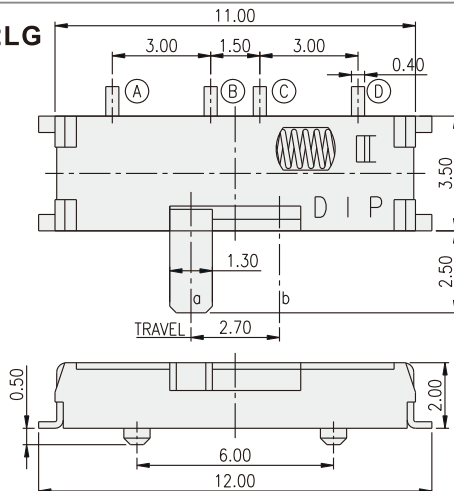
PACKAGE

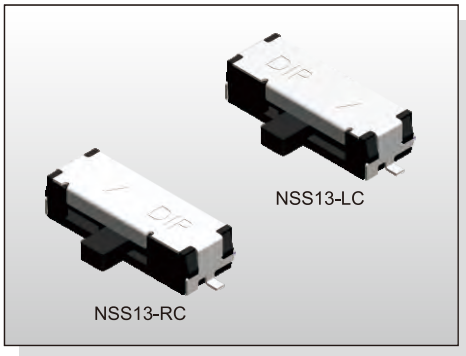
<Tape & Reel>
2000 pcs

SSS-12R



SSS-12LG





FEATURES

- ※ 1P3T model
- ※ Single-side recoil type
- ※ Reflow solderable

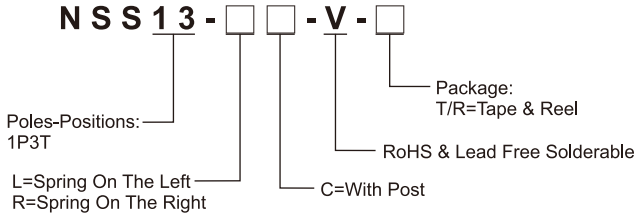
APPLICATION

- ※ Remote control
- ※ Consumer electronics
- ※ Instrumentations

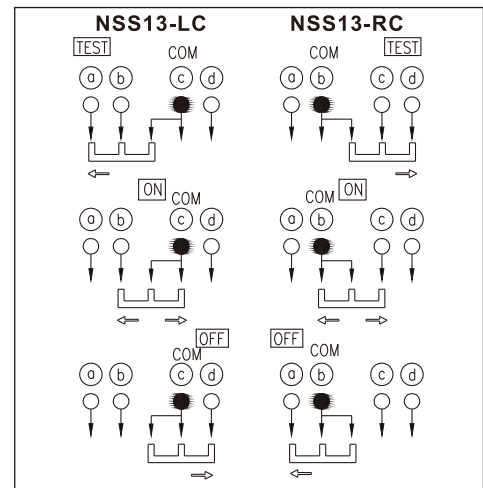
SPECIFICATION

Contact Rating	0.3A, 4V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	500V AC/1 minute
Operating Force	320±150gf (ON-TEST) 320±150gf (OFF-ON) 500+100/-200gf (ON-OFF)
Travel	2mm (ON-TEST) 4mm (OFF-ON) 4mm (ON-OFF)
Operating Life	10, 000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



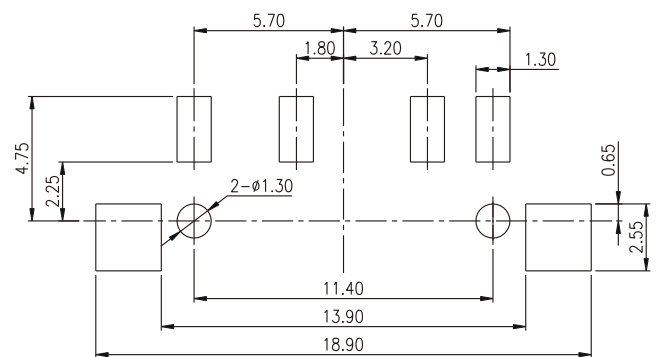
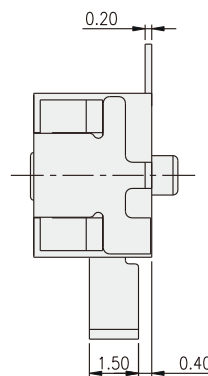
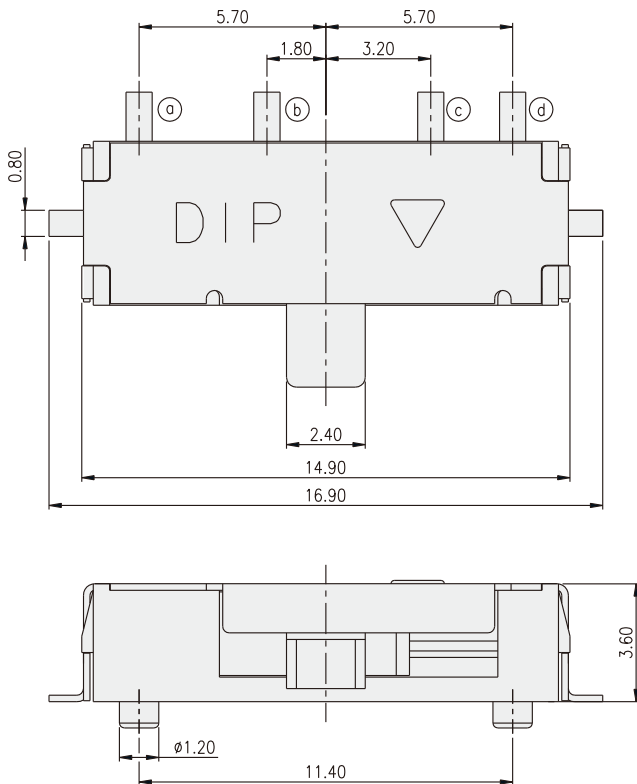
CIRCUIT



PACKAGE

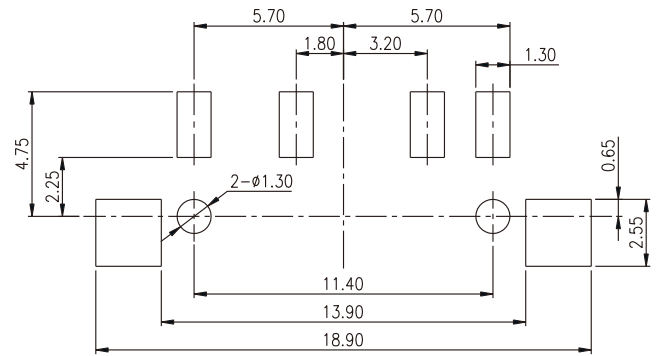
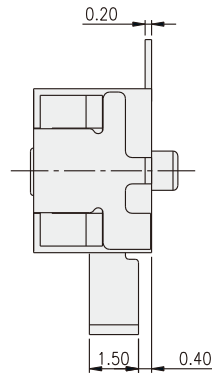
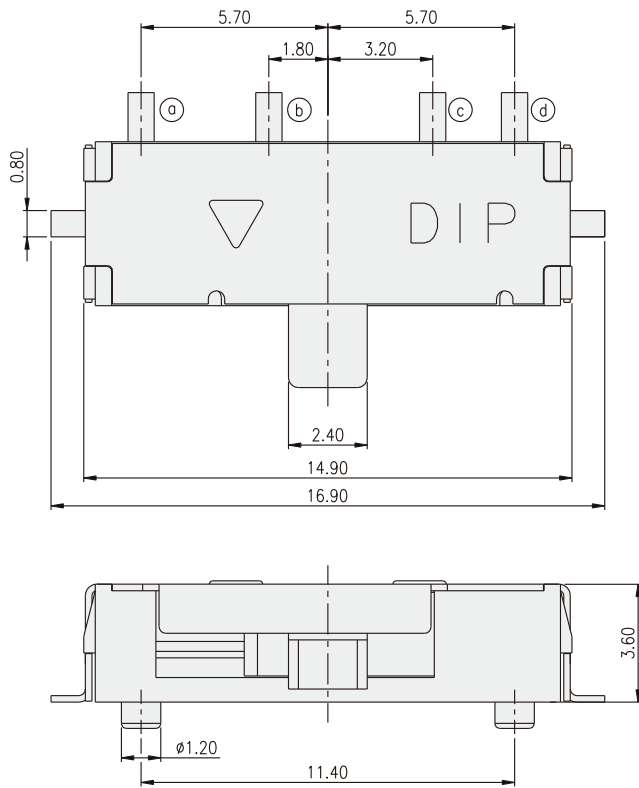
<Tape & Reel>
800 pcs

NSS13-LC

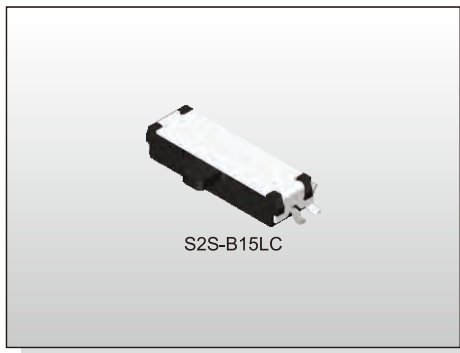


P.C.B. LAYOUT

NSS13-RC



P.C.B. LAYOUT



FEATURES

- ※2.0mm height
- ※Double-side recoil
- ※Stroke 1.5mm

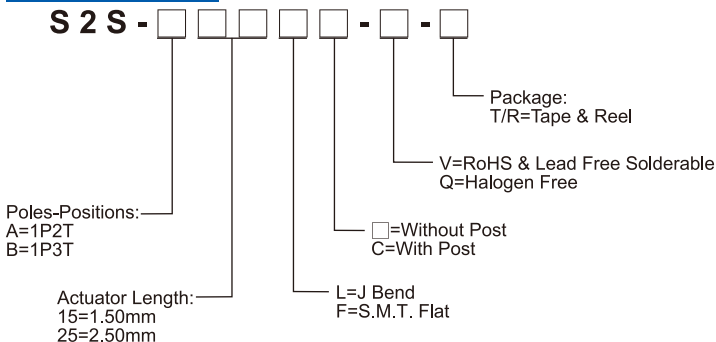
APPLICATION

- ※Remote control
- ※Consumer electronics
- ※Instrumentations

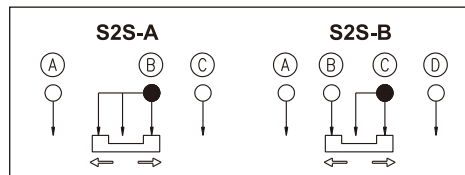
SPECIFICATION

Contact Rating	300mA, 4V DC
Contact Resistance	70mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	100±50gf
Travel	1.5mm
Operating Life	50,000 cycles
Operating Temp.	-30°C ~ +80°C
Storage Temp.	-40°C ~ +90°C

HOW TO ORDER



CIRCUIT

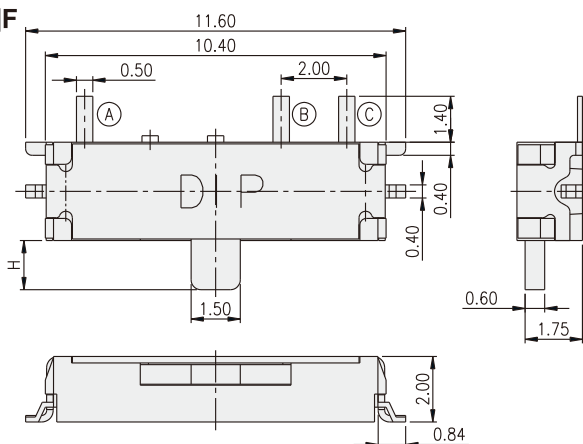


PACKAGE

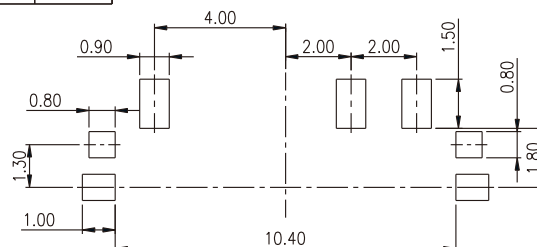
<Tape & Reel>
2000 pcs

SLIDE SWITCH

S2S-A [] [] F

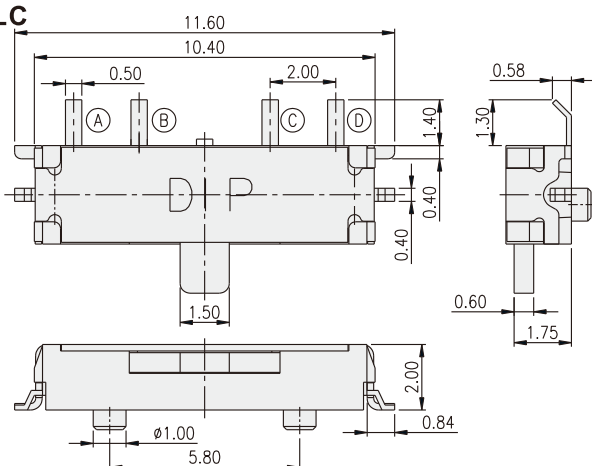


PART NO.	H
S2S-A15F	1.50
S2S-A25F	2.50

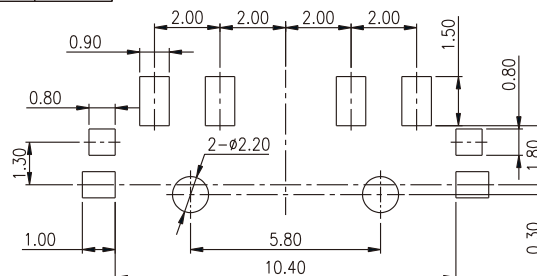


P.C.B. LAYOUT

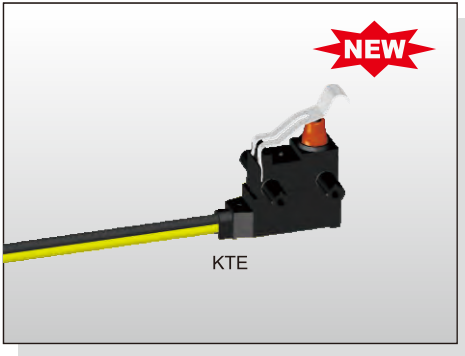
S2S-B [] [] LC



PART NO.	H
S2S-B15LC	1.50
S2S-B25LC	2.50



P.C.B. LAYOUT



FEATURES

- ※ Noiseless switching system
- ※ Long travel
- ※ Sealed type

APPLICATION

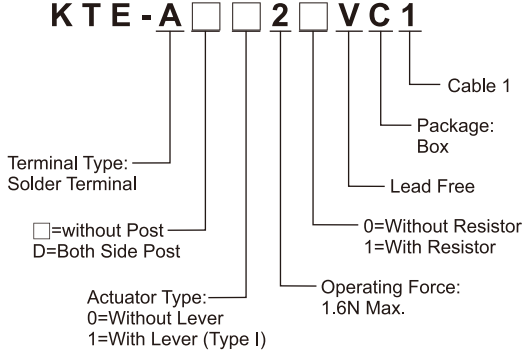
- ※ Automotive
- ※ Industrial equipment
- ※ White goods

SPECIFICATION

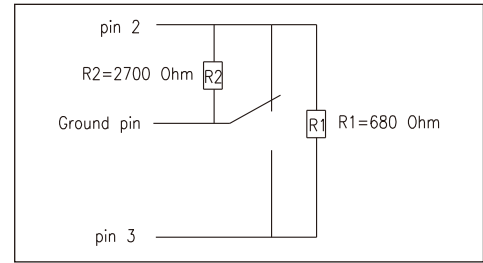
Contact Rating	1mA~100mA, ≤25V DC
Contact Resistance	free position(680Ω±1.5%) 8.3mm~9.15mm (3380Ω±1.5%) 6.85mm~8.0mm (<=500mΩ)
※ Insulation Resistance	100MΩ min. 500V DC
※ Dielectric Strength	250V AC/1 minute
Operating Force	Actuating Force <= 1.6N
Operating Life	200,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

※ Only for without resistors type.

HOW TO ORDER



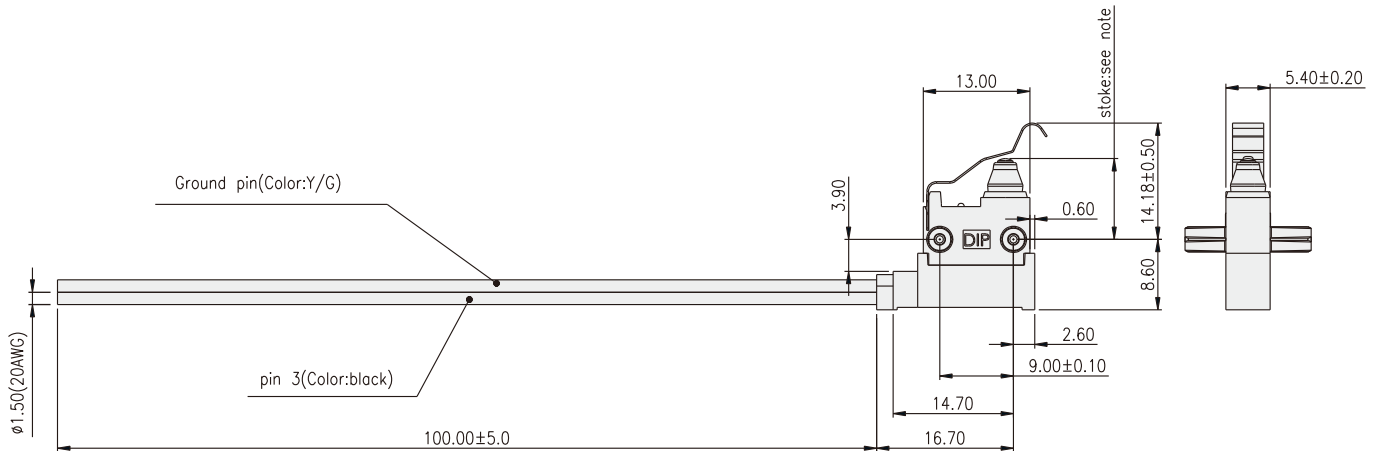
CIRCUIT



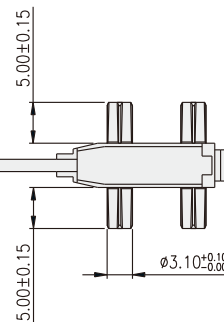
PACKAGE

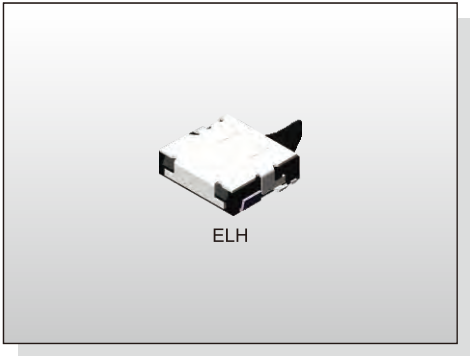
To be confirmed

KTE



Note:
Stoke: free position 9.85mm (680Ω±1.5%)
8.3mm~9.15mm (3380Ω±1.5%)
6.85mm~8.0mm (<=500mΩ)





FEATURES

- ※ Compact size
- ※ Two-way operation
- ※ Halogen Free

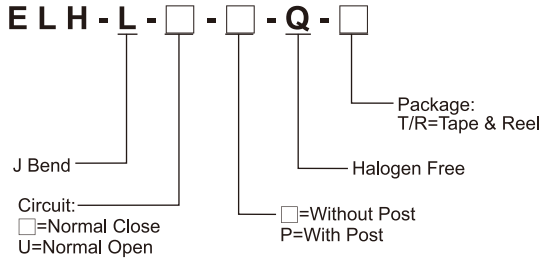
APPLICATION

- ※ Digital camera
- ※ Notebook
- ※ Automotive

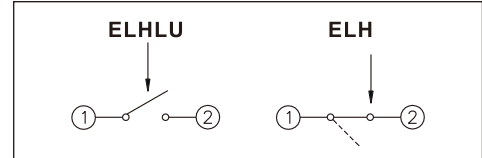
SPECIFICATION

Contact Rating	50μA, 3V DC min. 1mA, 5V DC max.
Contact Resistance	2Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	35gf max.
Travel	1.15mm
Operating Life	50,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



CIRCUIT

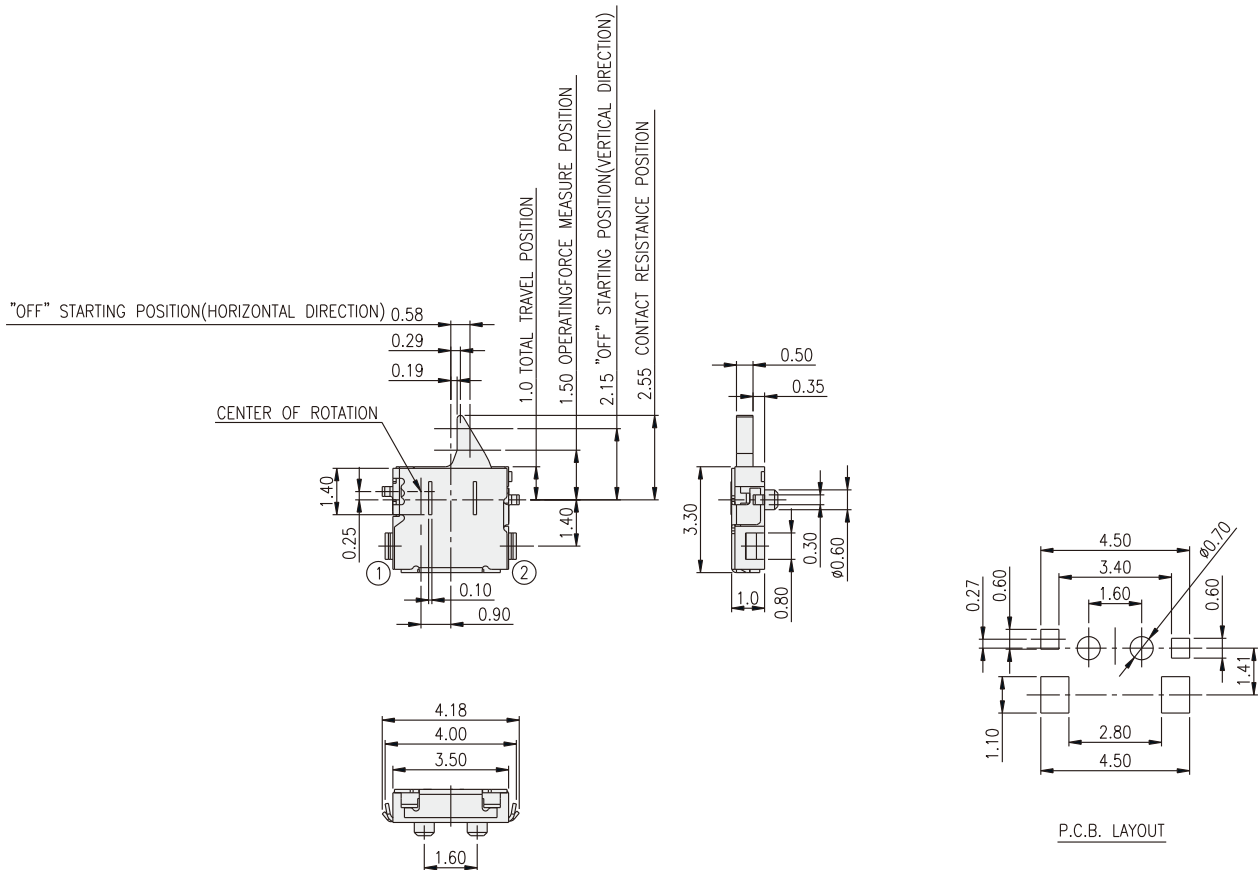


PACKAGE

<Tape & Reel>
3500 pcs

DETECTOR SWITCH

ELH





ELU

FEATURES

- ※ Compact sized
- ※ Sharp detection feeling

APPLICATION

- ※ Consumer electronics
- ※ Safety control device
- ※ Heat energy regulator

SPECIFICATION

Contact Rating	100 μ A, 3V DC min. 1mA, 5V DC max.
Contact Resistance	3 Ω max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	35gf max.
Travel	2.50mm
Operating Life	50,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER

ELU **-QR**

=Without Post
P=With Post

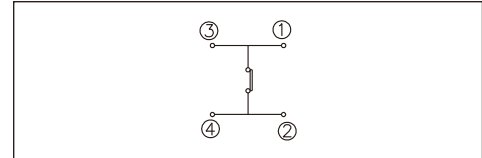
Terminal Type :
F=With Flat Terminal
L=With Bending Terminal

Package:
Tape & Reel

Halogen Free

Circuit:
C=Normal Close
=Normal Open

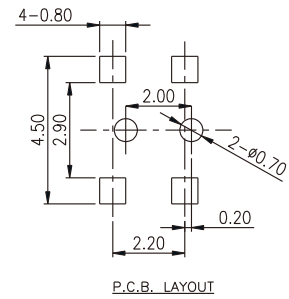
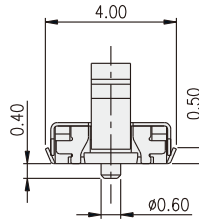
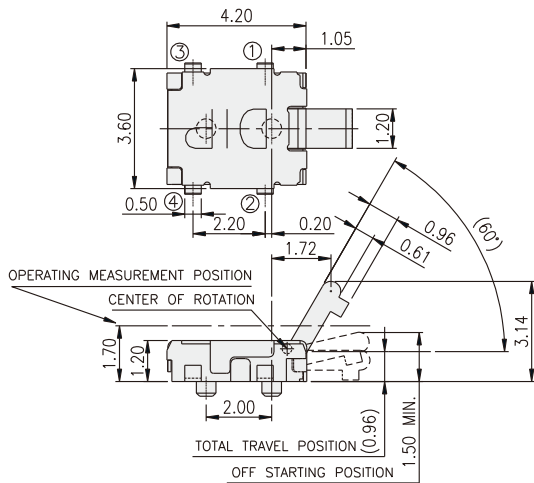
CIRCUIT

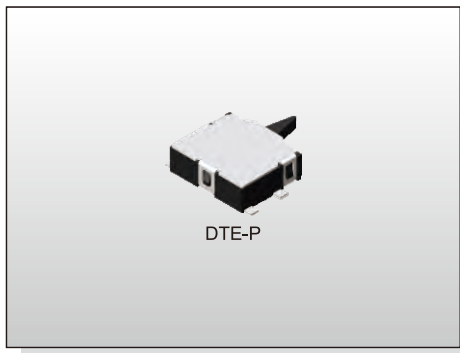


PACKAGE

<Tape & Reel>
2000 pcs

ELH





DTE-P

FEATURES

- ※ Compact size
- ※ Two-way operation, auto return
- ※ Circuit type: Normally open

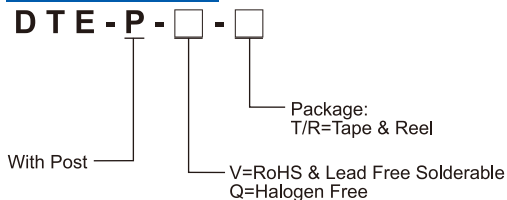
APPLICATION

- ※ Detecting opening/ closing of DSC cover
- ※ Computer peripheral
- ※ Instruments

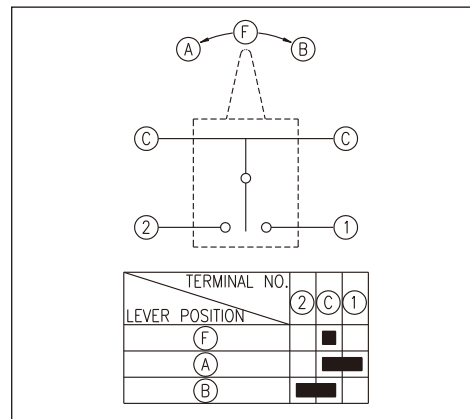
SPECIFICATION

Contact Rating	10mA, 5V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	30gf max.
Travel	1.5mm
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-40°C ~ +70°C

HOW TO ORDER



CIRCUIT

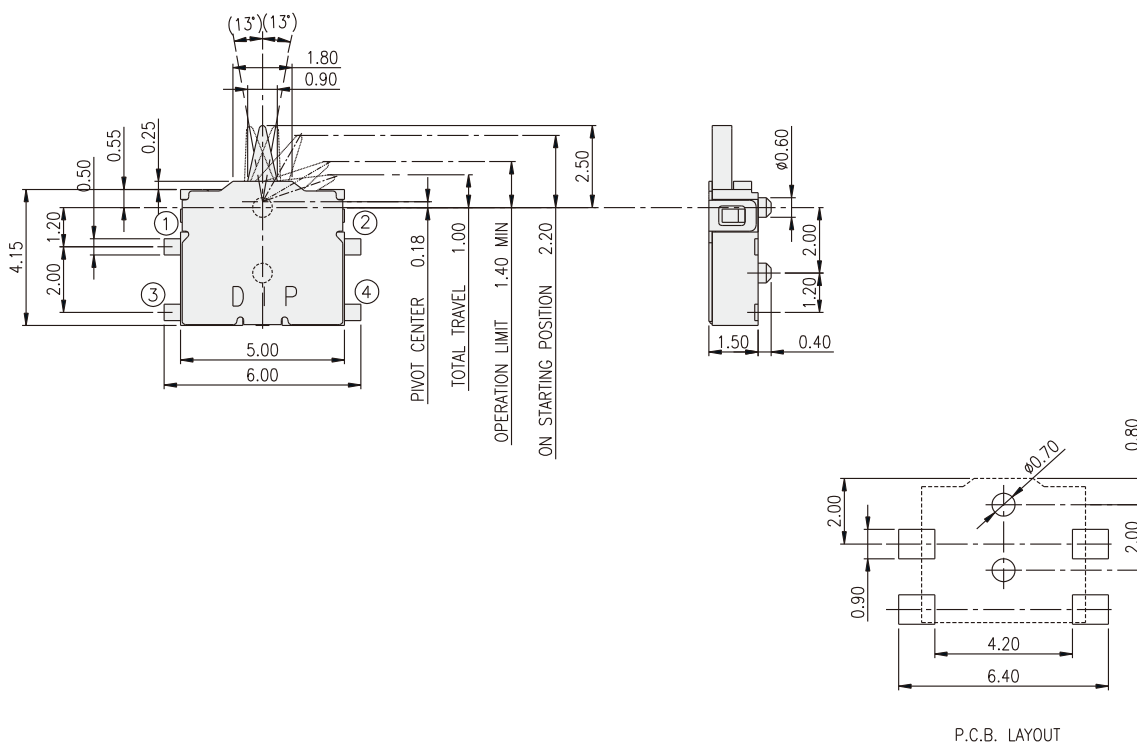


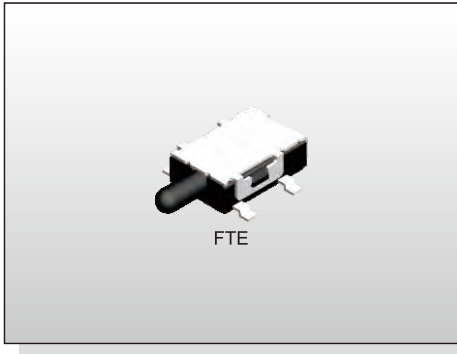
PACKAGE

<Tape & Reel>
3800 pcs

DETECTOR SWITCH

DTE-P





FEATURES

- ※Ultra-low profile with 2.0mm
- ※Sharp detection feeling

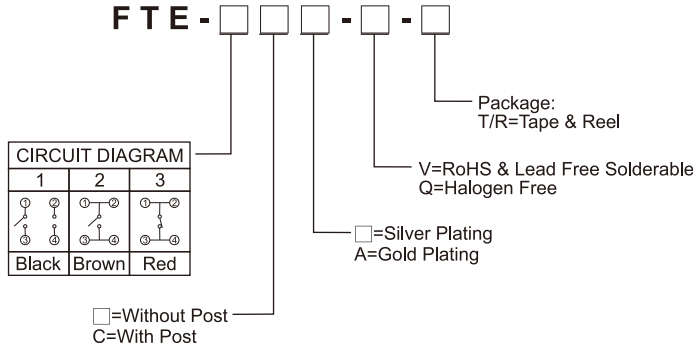
APPLICATION

- ※Detection of car audio mechanism
- ※Smoke detector
- ※Notebook

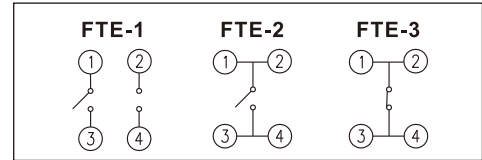
SPECIFICATION

Contact Rating	1mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	105gf max.
Travel	2.0mm
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



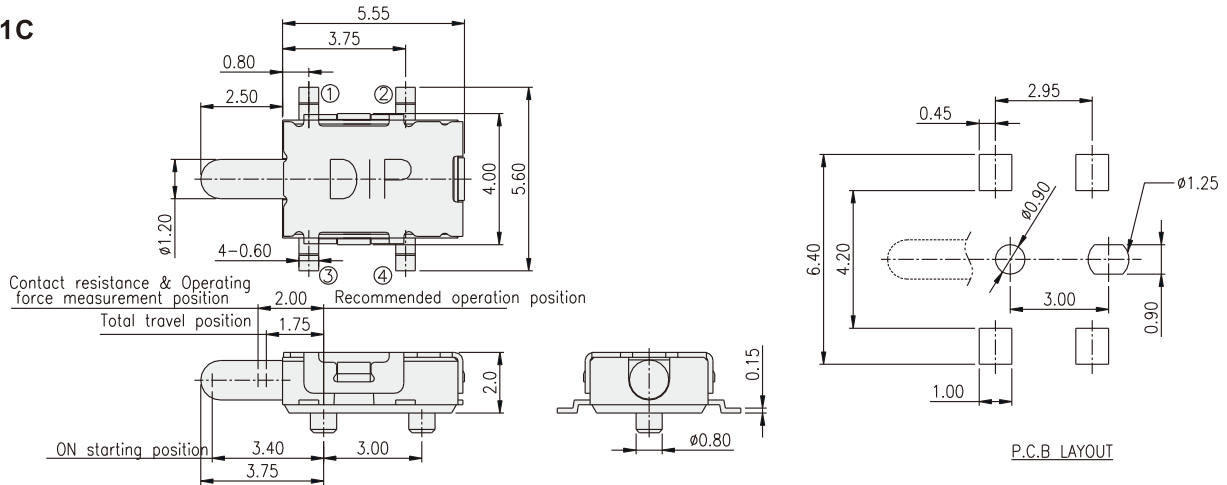
CIRCUIT



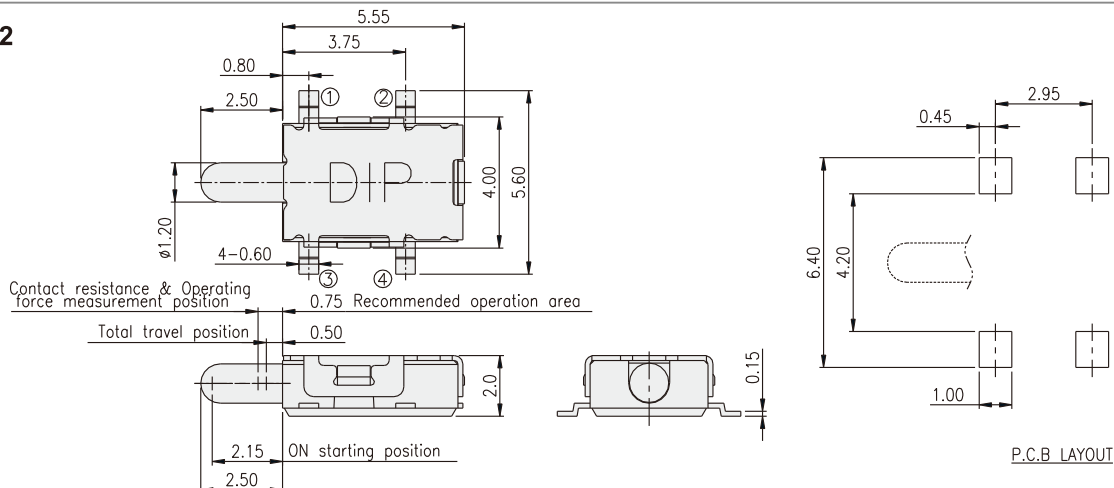
PACKAGE

<Tape & Reel>
3000 pcs

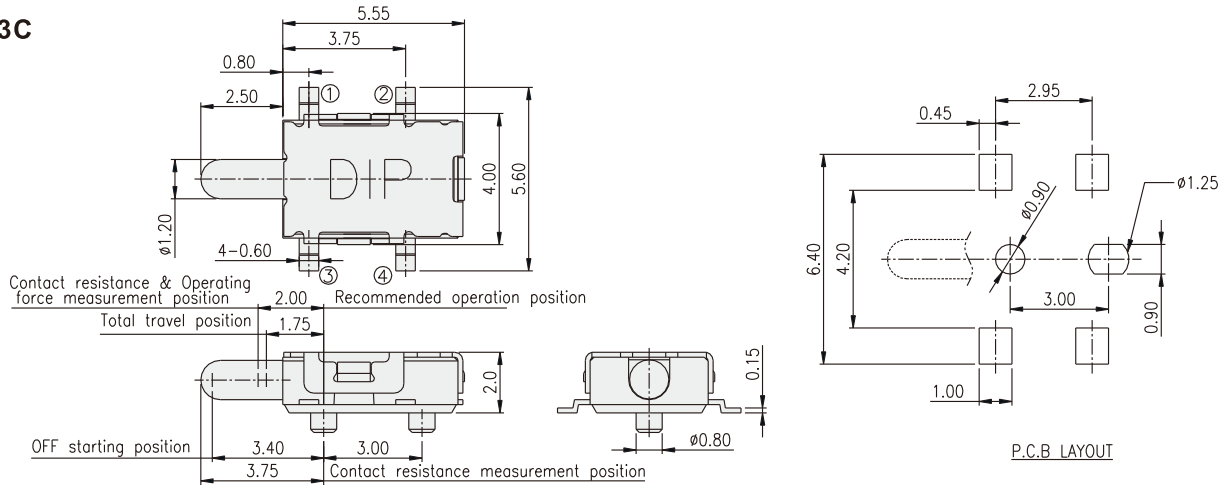
FTE-1C

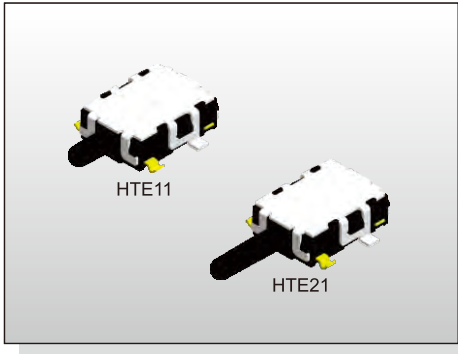


FTE-2



FTE-3C





FEATURES

- ※Ultra-low profile with 2.0mm
- ※Sharp detection feeling

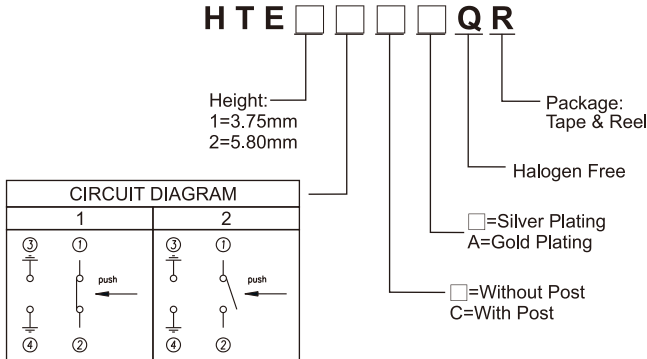
APPLICATION

- ※Detection of car audio mechanism
- ※Smoke detector
- ※Notebook
- ※Industrial application
- ※3C products

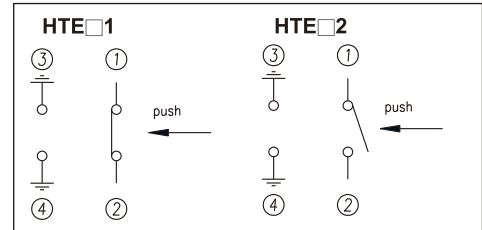
SPECIFICATION

Contact Rating	10mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	150gf max.
Travel	2.0mm
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER

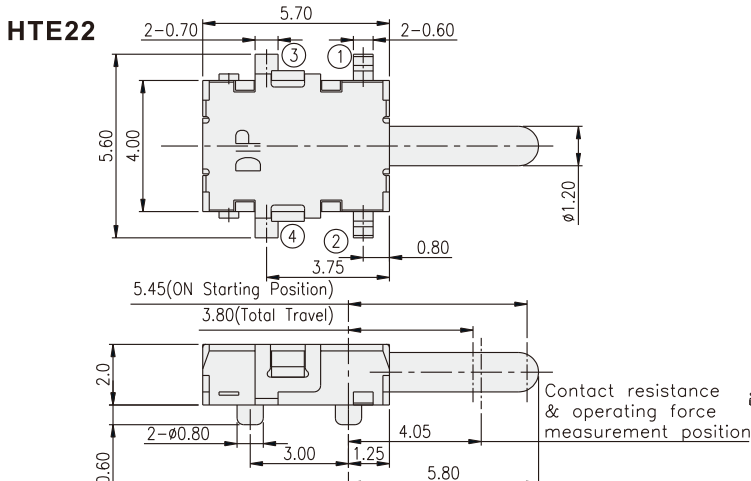
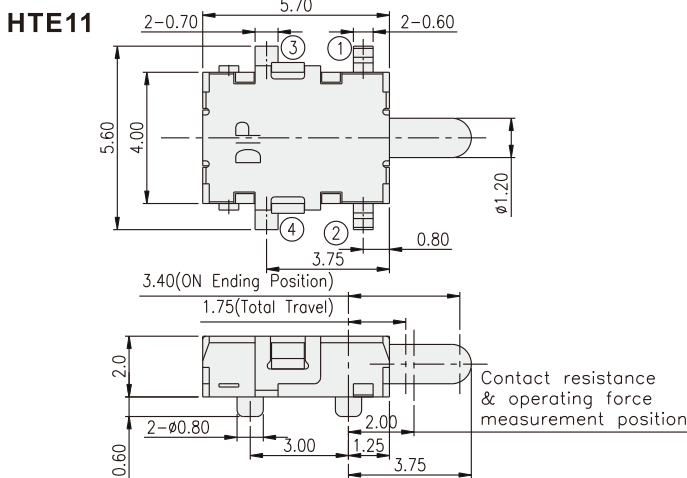


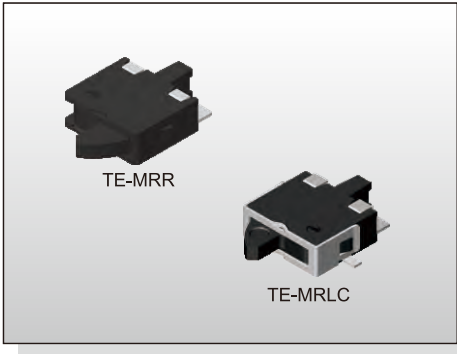
CIRCUIT



PACKAGE

<Tape & Reel>
3000 pcs





FEATURES

※Left or right operation direction

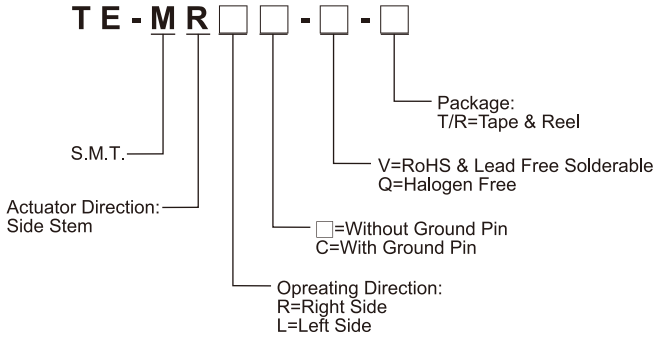
APPLICATION

- ※Close/open detection
- ※White goods
- ※Automotive

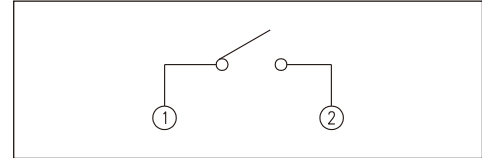
SPECIFICATION

Contact Rating	50mA, 20V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	50gf max.
Travel	2.15mm
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER



CIRCUIT

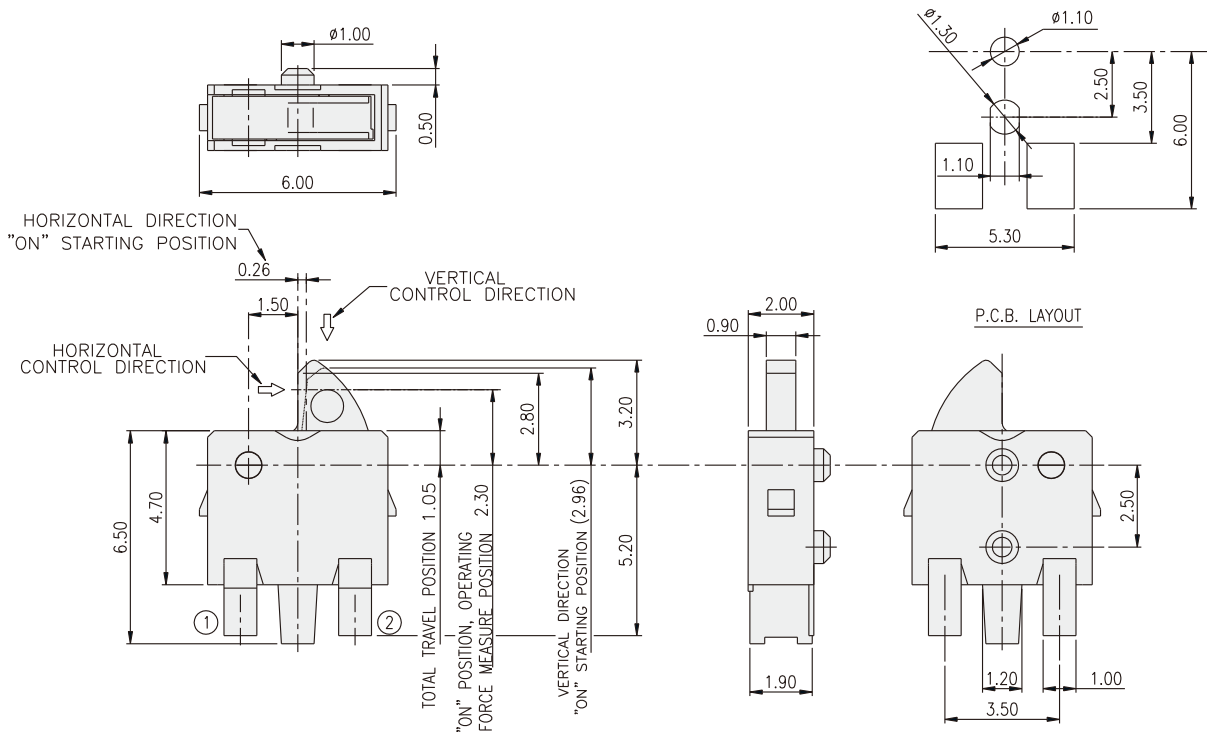


PACKAGE

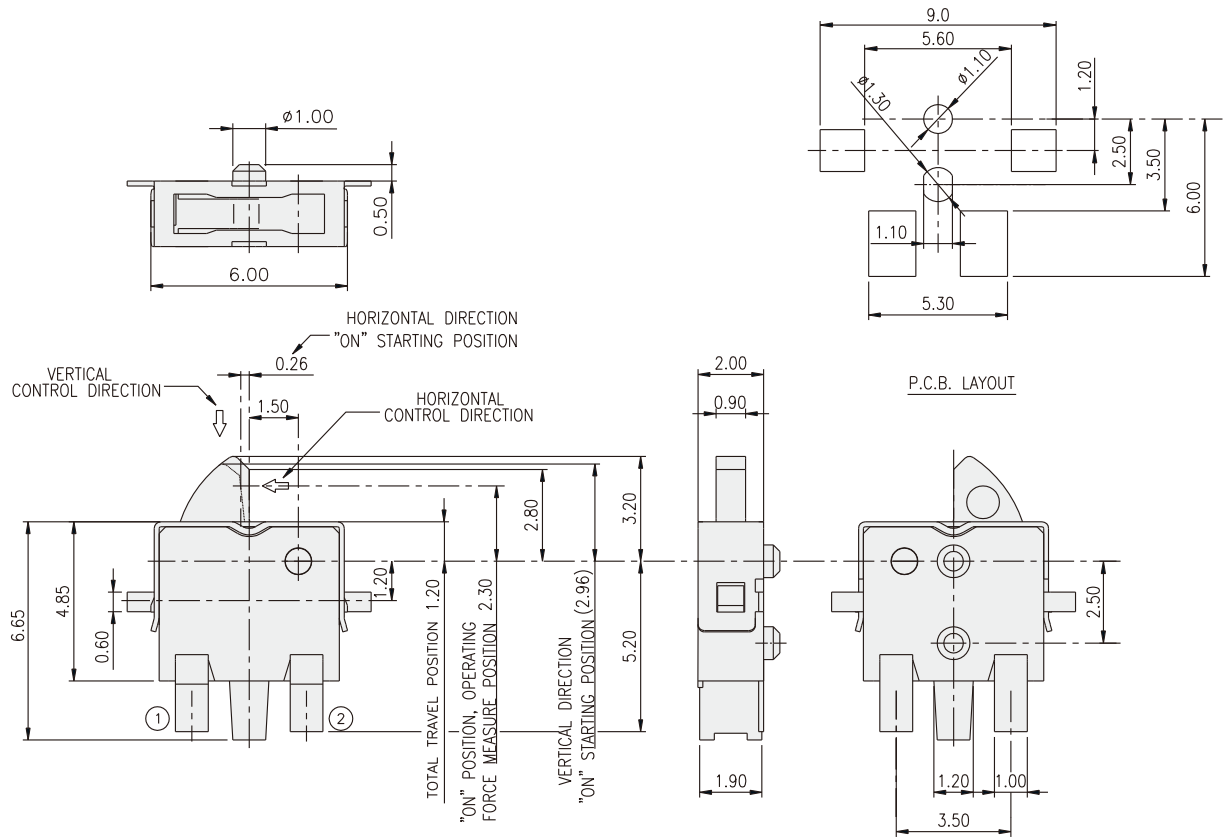
<Tape & Reel>
TE-MR□: 3000 pcs
TE-MR□C: 2000 pcs

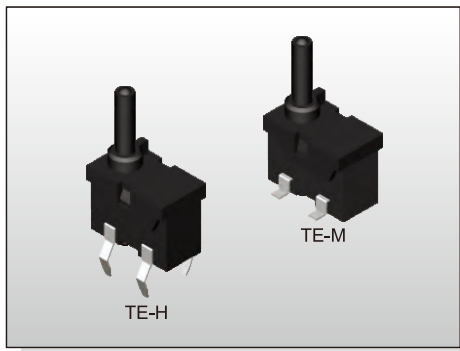
DETECTOR SWITCH

TE-MRR



TE-MRLC





FEATURES

- ※ Compact size
- ※ SMT & Through hole type available
- ※ Different stem height for option

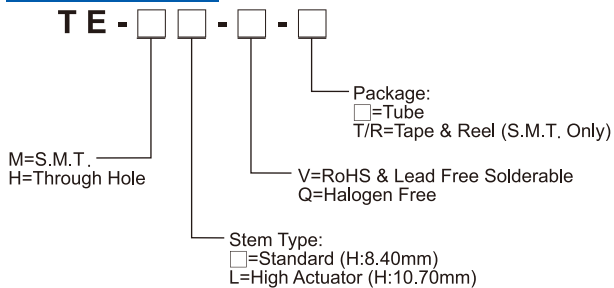
APPLICATION

- ※ DVD Players, CD-ROMs
- ※ Automotive
- ※ Telecommunication

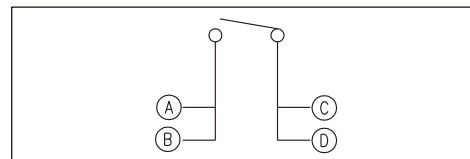
SPECIFICATION

Contact Rating	5mA, 5V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 250V DC
Dielectric Strength	250V AC/1 minute
Operating Force	35gf max.
Travel	2mm
Operating Life	50,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



CIRCUIT

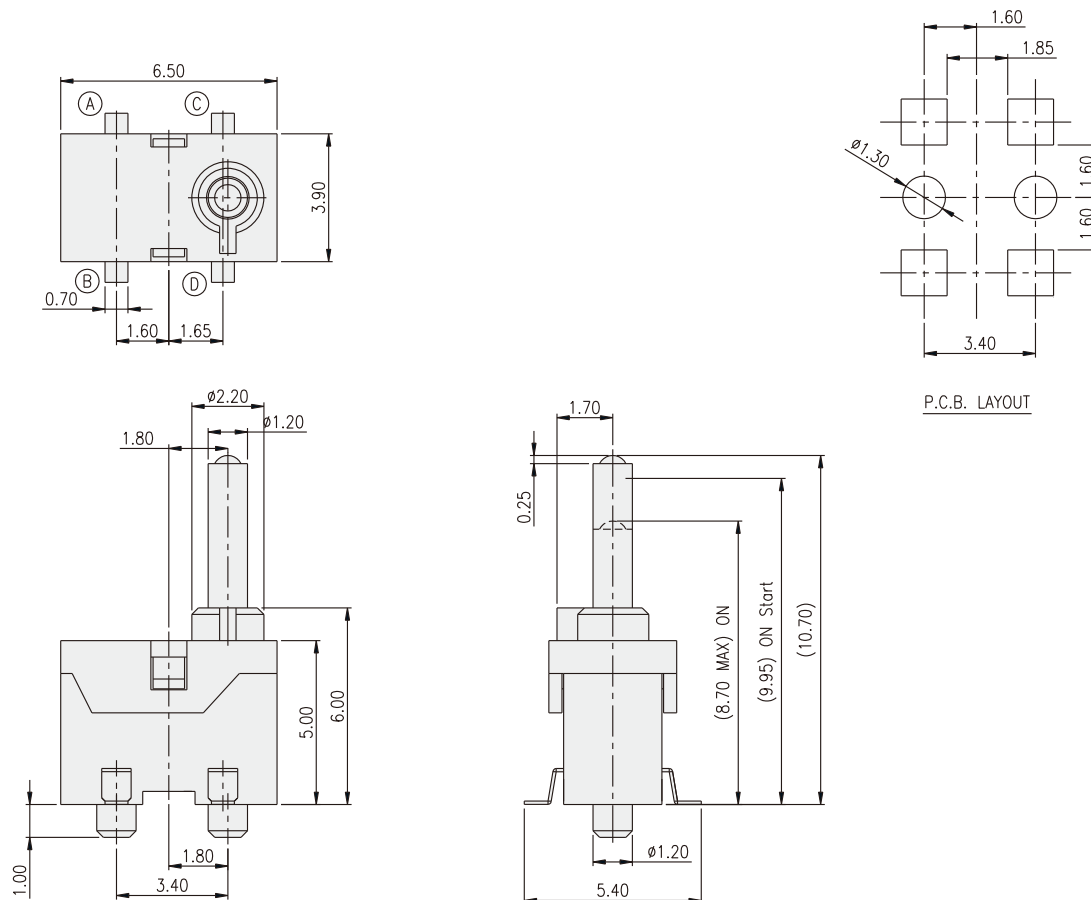


PACKAGE

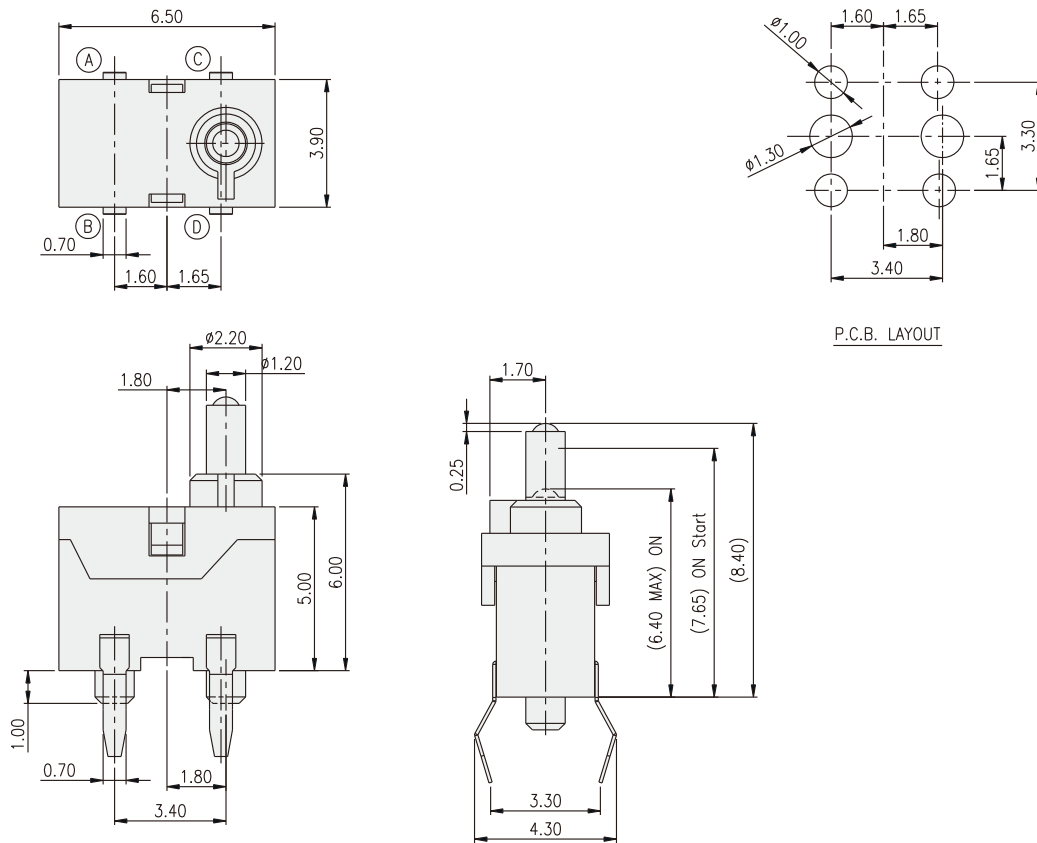
- <Tube>
72 pcs
- <Tape & Reel>
TE-M: 500 pcs
TE-ML: 400 pcs

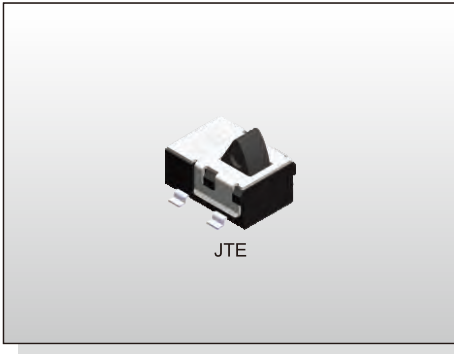
DETECTOR SWITCH

TE-ML



TE-H





JTE

FEATURES

- ※ Guiding post offers easy orientation
- ※ Long travel 2.5mm
- ※ 100,000 Operation life cycles

APPLICATION

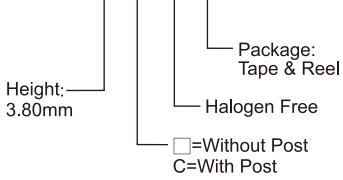
- ※ Consumer electronics
- ※ Medical devices
- ※ Open/close detection
- ※ NB power off function

SPECIFICATION

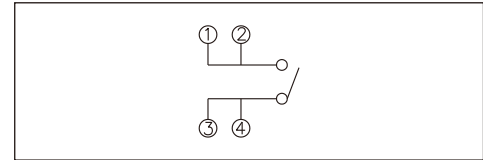
Contact Rating	10mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	36gf max.
Travel	2.5mm
Operating Life	100,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

JTE 1 □ QR



CIRCUIT

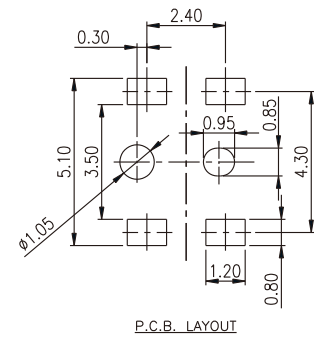
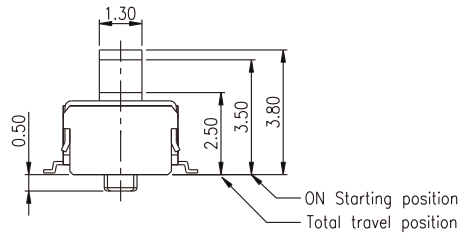
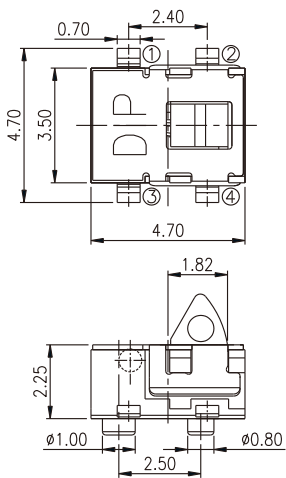


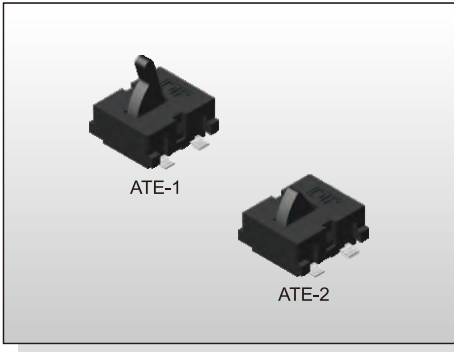
PACKAGE

<Tape & Reel>
1800 pcs

DETECTOR SWITCH

JTE





FEATURES

- ※ Guiding post offers easy orientation
- ※ 3.80 & 5.30mm stem height available

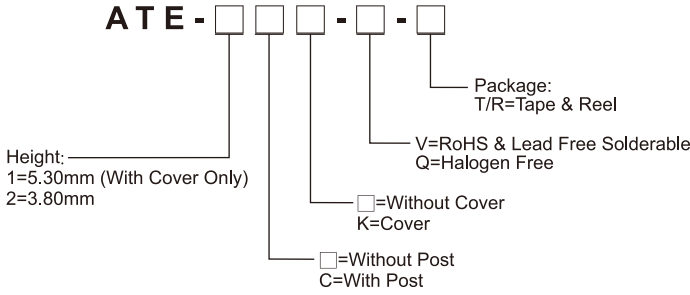
APPLICATION

- ※ DSC
- ※ Detection of disc loading

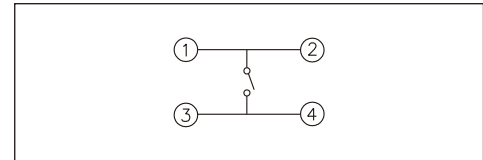
SPECIFICATION

Contact Rating	1mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	40gf max.
Travel	3.9mm max. Stem Height 5.3mm 2.6mm max. Stem Height 3.8mm
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER



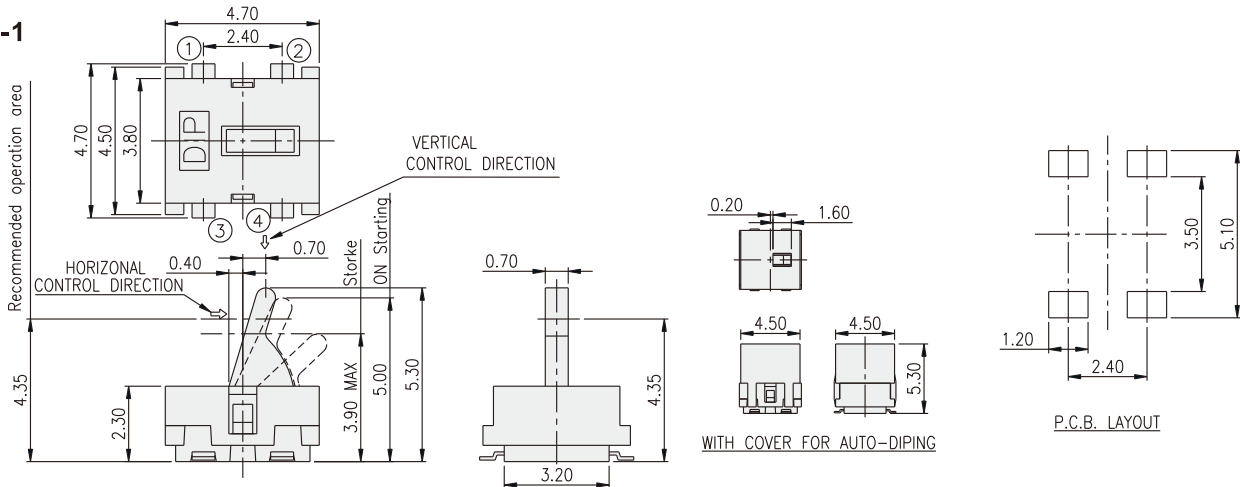
CIRCUIT



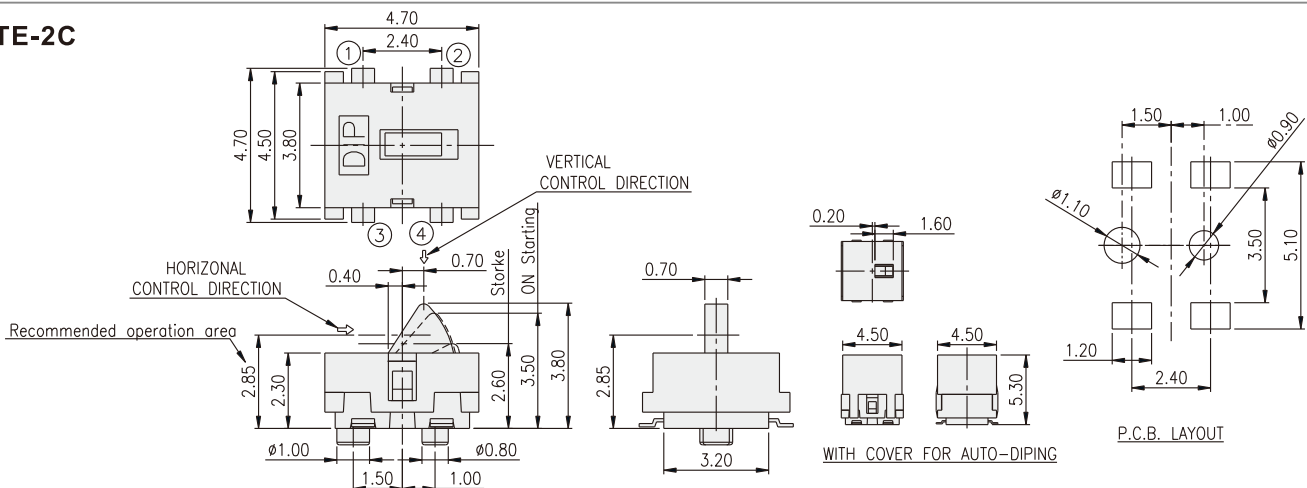
PACKAGE

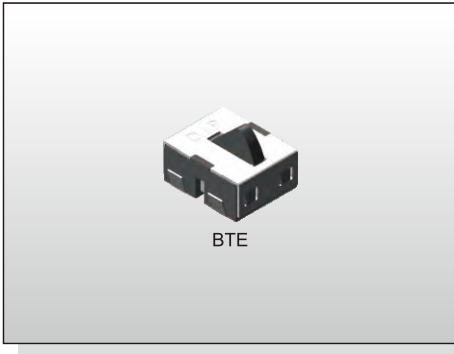
<Tape & Reel>
ATE-1 : 900 pcs
ATE-2 K: 900 pcs
ATE-2 : 1200 pcs

ATE-1



ATE-2C





BTE

FEATURES

- ※ Guiding post offers easy orientation
- ※ Ultra-low profile

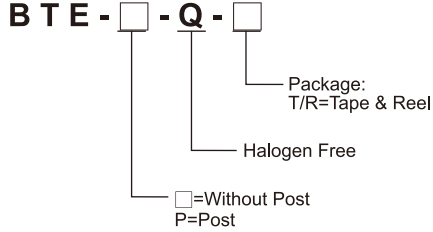
APPLICATION

- ※ Notebook
- ※ Smart phone

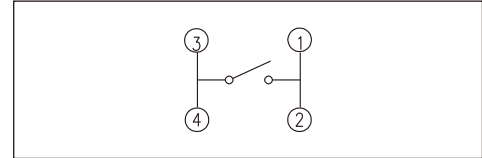
SPECIFICATION

Contact Rating	1mA, 5V DC
Contact Resistance	2Ω max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	50gf max.
Travel	1.03mm
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER



CIRCUIT

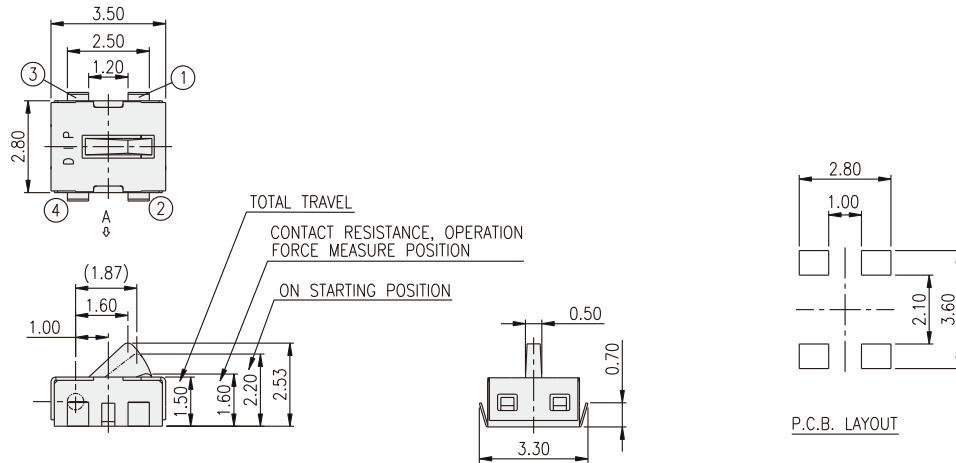


PACKAGE

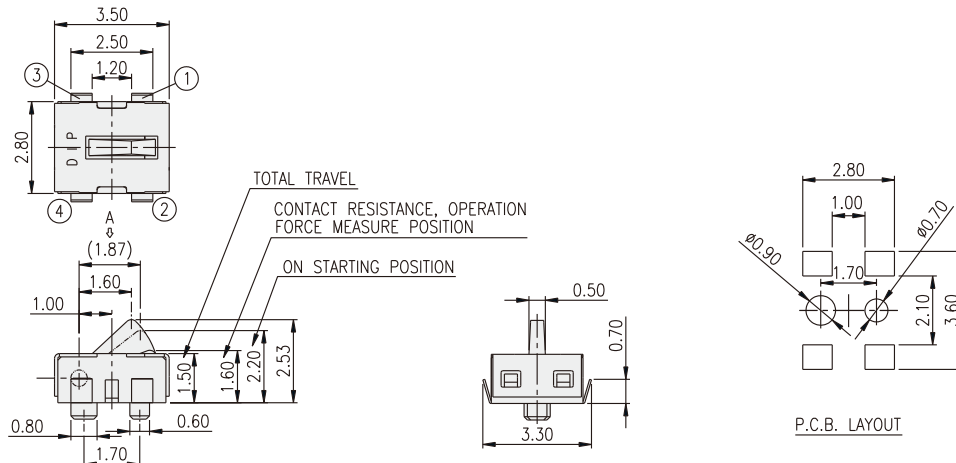
<Tape & Reel>
2600 pcs

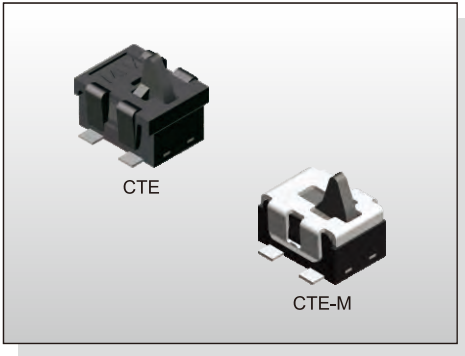
DETECTOR SWITCH

BTE



BTE-P





FEATURES

- ※ Guiding post offers easy orientation
- ※ Operation force: 35gf max.

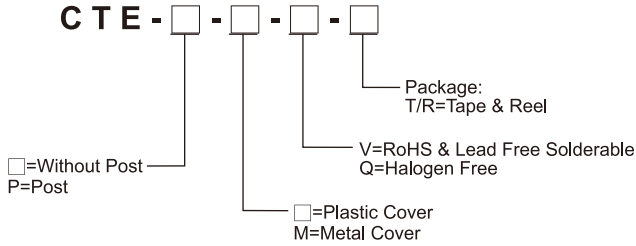
APPLICATION

- ※ Open/close detection
- ※ Notebook
- ※ DSC

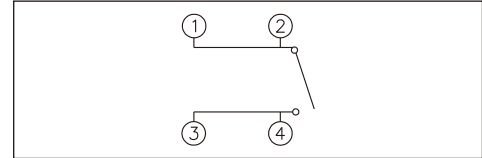
SPECIFICATION

Contact Rating	0.1mA~100mA, 20mV~5V DC
Contact Resistance	500mΩ max.
Insulation Resistance	100MΩ min. 250V DC
Dielectric Strength	250V AC/1 minute
Operating Force	35gf max.
Travel	1.05mm
Operating Life	80,000 cycles
Operating Temp.	-15°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



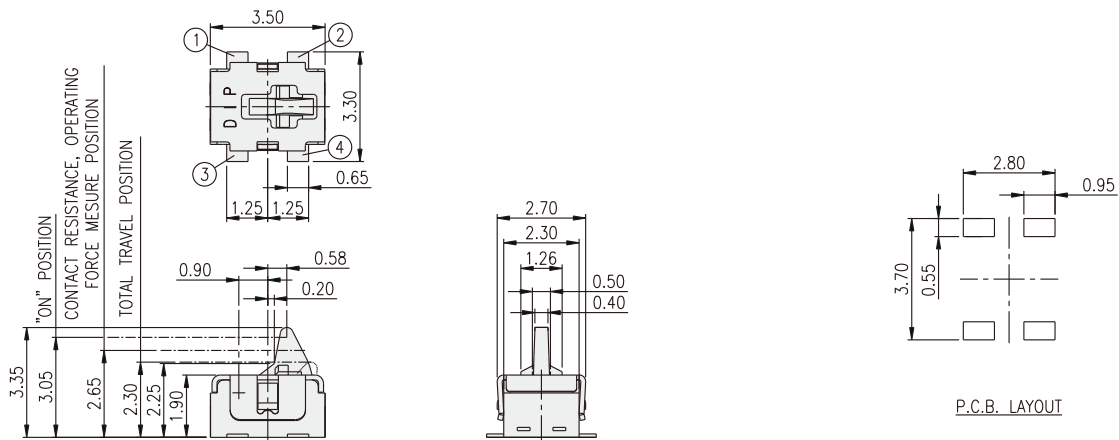
CIRCUIT



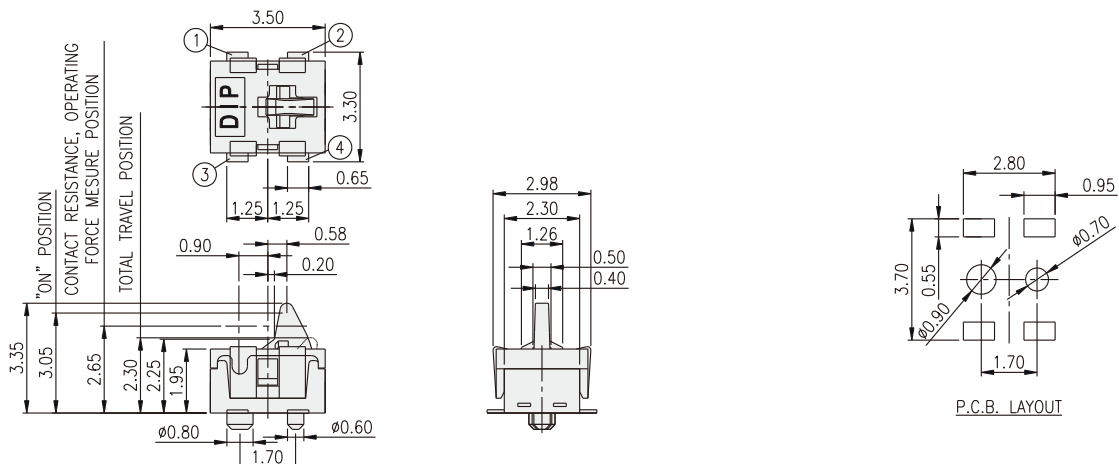
PACKAGE

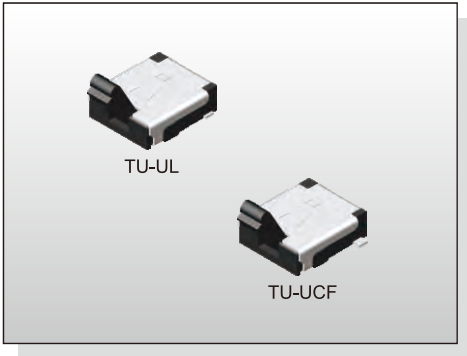
<Tape & Reel>
1800 pcs

CTE-M



CTE-P





FEATURES

- ※Ultra-thin with height 1.2 mm
- ※Flat & bending terminal available

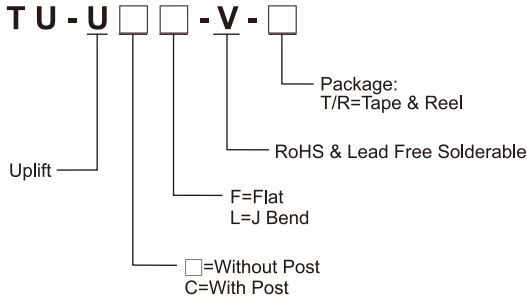
APPLICATION

- ※Detection of video cameras
- ※Mobile Phone

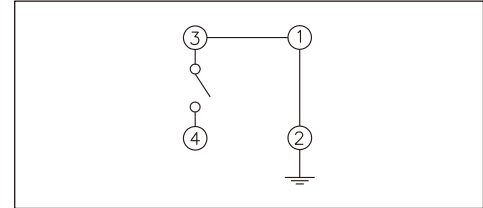
SPECIFICATION

Contact Rating	50uA, 3V DC to 10mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min.
Dielectric Strength	100V AC/1 minute
Operating Force	40gf max.
Travel	60°
Operating Life	50,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

HOW TO ORDER



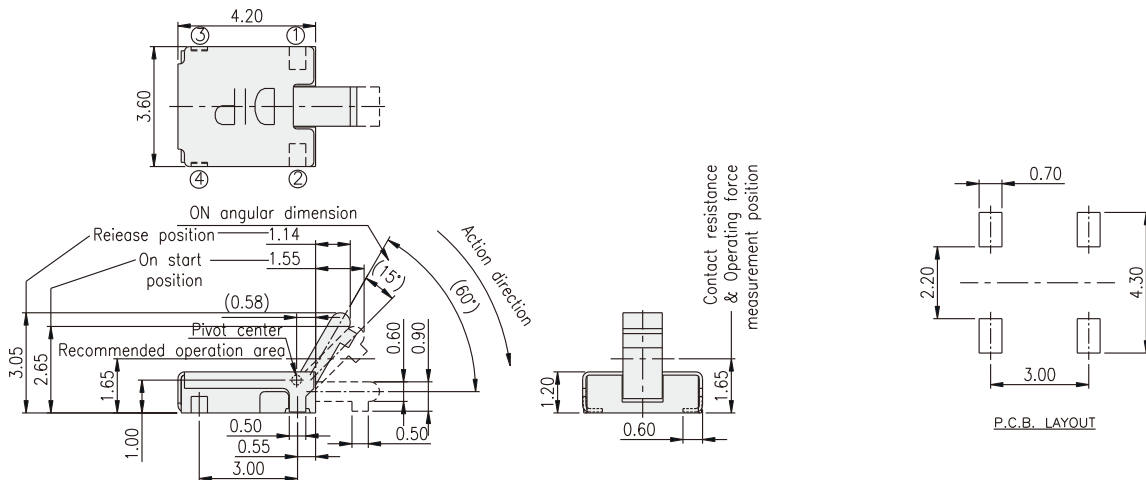
CIRCUIT



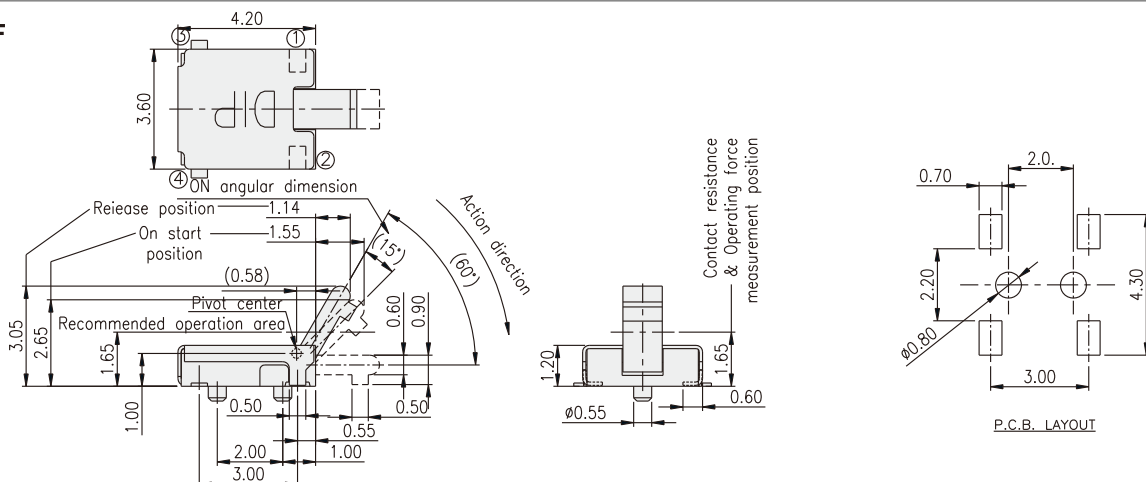
PACKAGE

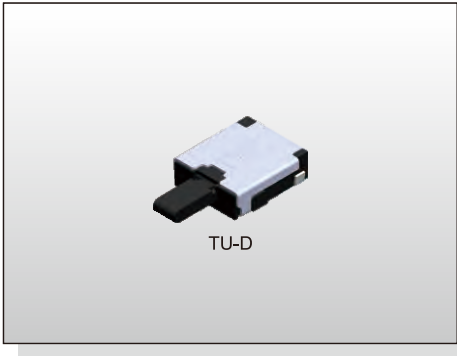
<Tape & Reel>
2300 pcs

TU-UL



TU-UCF





TU-D

FEATURES

- ※ Flat & bending terminals available
- ※ 50,000 operation life cycles

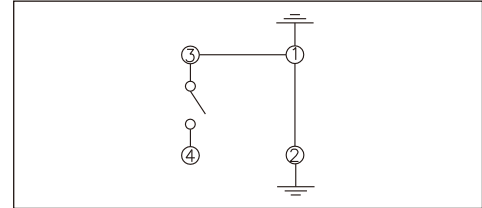
APPLICATION

- ※ Consumer electronics
- ※ Detection of video cameras
- ※ Open/close detection
- ※ Safety control device
- ※ Heat energy regulator

SPECIFICATION

Contact Rating	50uA, 3V DC to 10mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min.
Dielectric Strength	100V AC/1 minute
Operating Force	40gf max.
Travel	60°
Operating Life	50,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-20°C ~ +70°C

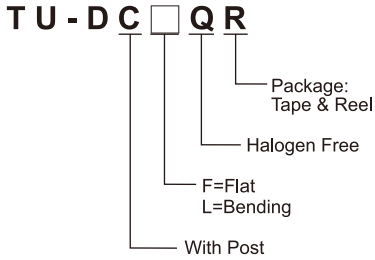
CIRCUIT



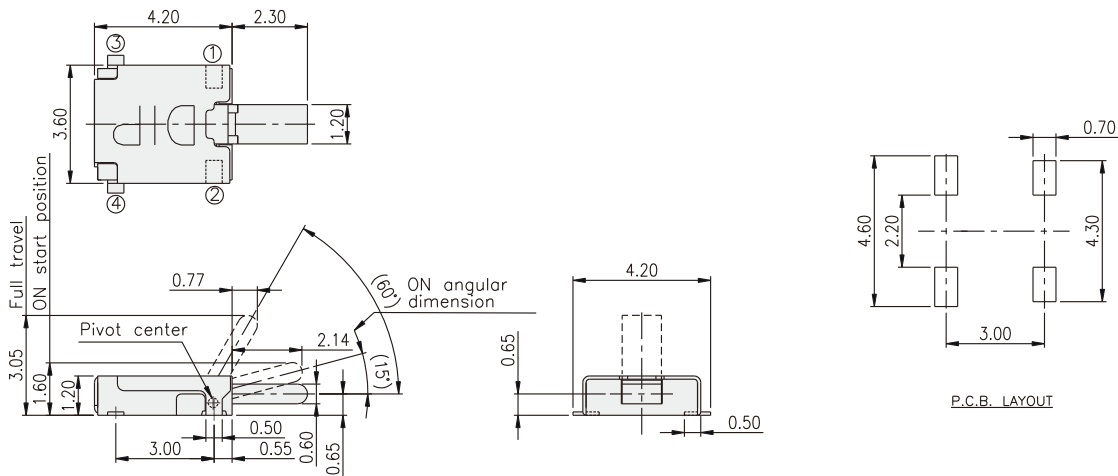
PACKAGE

<Tape & Reel>
3500 pcs

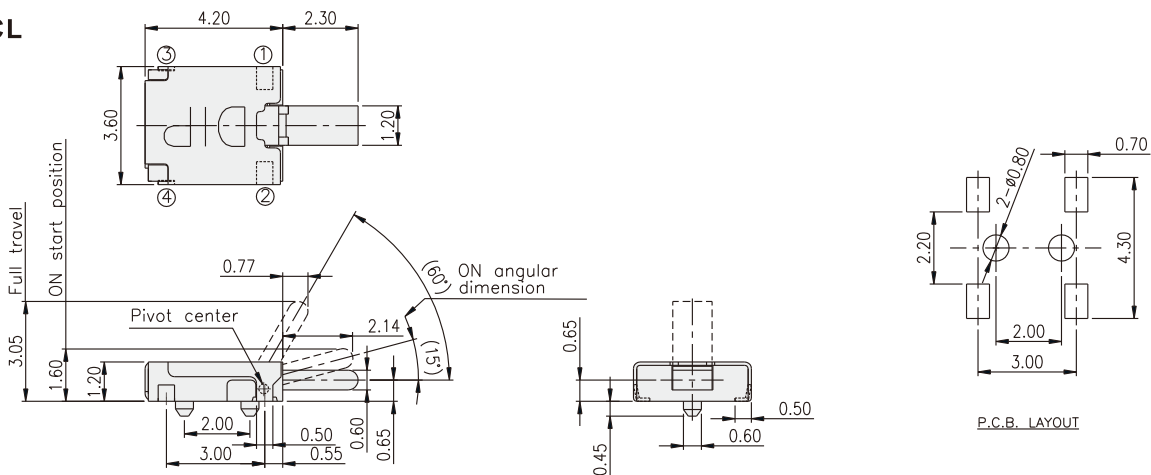
HOW TO ORDER



TU-DF

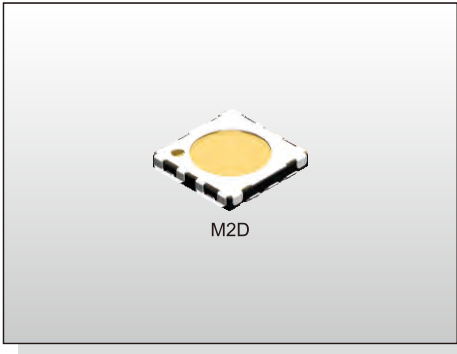


TU-DCL



MULTI FUNCTION SWITCH
M2D SERIES

Miniature
Double Action Type



M2D

FEATURES

- ※ Double action
- ※ Compact-sized 4.1x4.3mm
- ※ 0.6mm height

APPLICATION

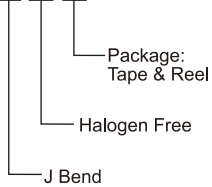
- ※ Camera
- ※ Mobile phone & peripherals

SPECIFICATION

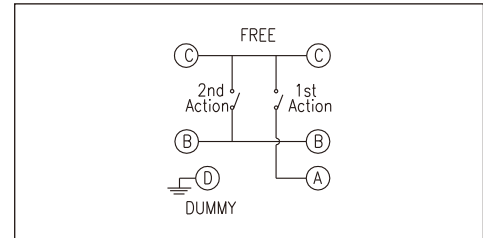
Contact Rating	10 μ A, 2V DC min. 20mA, 15V DC max.
Contact Resistance	500m Ω max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	90 \pm 40gf, 1st 190 \pm 60gf, 2nd
Travel	0.15mm, 1st 0.30mm, 2nd
Operating Life	100,000 cycles
Operating Temp.	-20 $^{\circ}$ C ~ +70 $^{\circ}$ C
Storage Temp.	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C

HOW TO ORDER

M 2 D L Q R



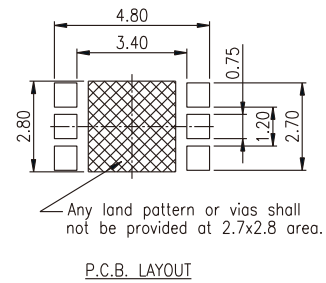
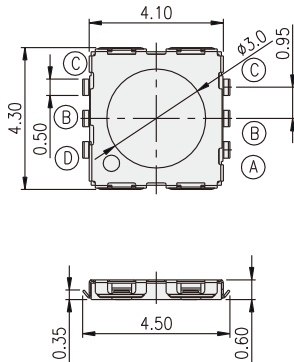
CIRCUIT



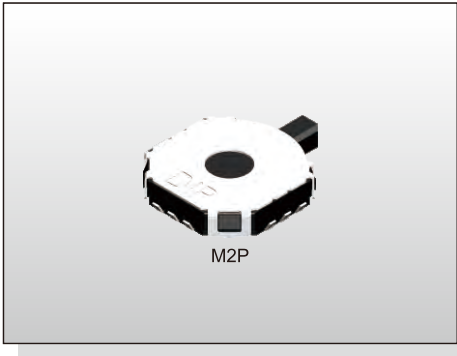
PACKAGE

<Tape & Reel>
4500 pcs

M2D



P.C.B. LAYOUT



M2P

FEATURES

- ※Double action with lever
- ※1.4mm height

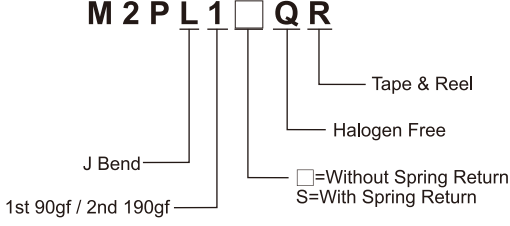
APPLICATION

- ※Camera
- ※Mobile phone & peripherals

SPECIFICATION

Contact Rating	01mA, 3V DC~10mA, 5V DC
Contact Resistance	1Ω max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	100V AC/1 minute
Operating Force	Lever:70gf.cm MAX Push:90±40gf, 1st 190±60gf, 2nd
Travel	Lever:8°, 1st 20°, 2nd Push:0.15mm, 1st 0.30mm, 2nd
Operating Life	50,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

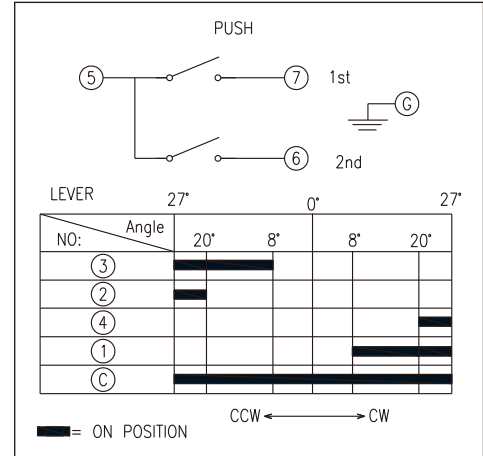
HOW TO ORDER



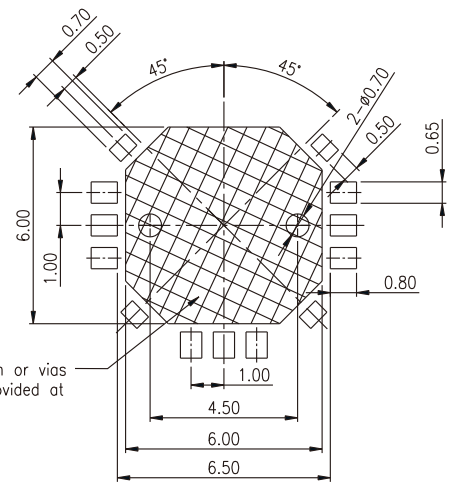
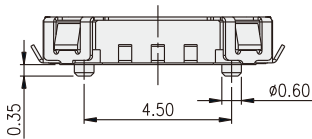
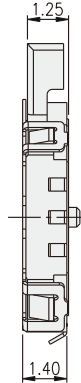
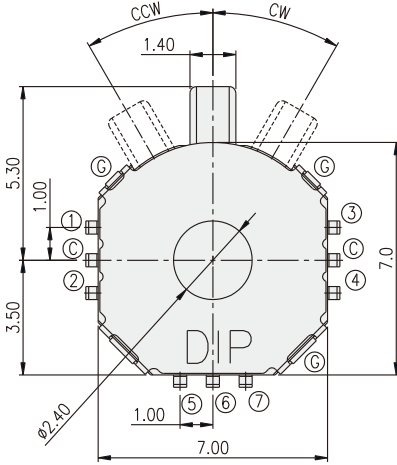
PACKAGE

<Tape & Reel>
2300 pcs

CIRCUIT

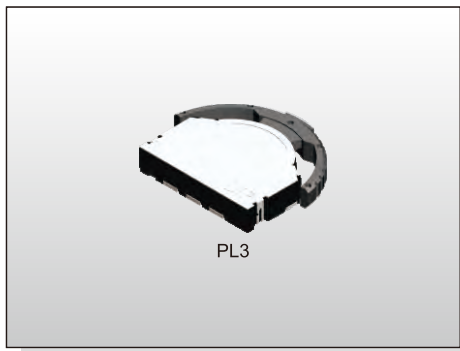


M2P



Any land pattern or vias shall not be provided at 6x6 area.

P.C.B. LAYOUT



PL3

FEATURES

※Multi function (Push & Lever)

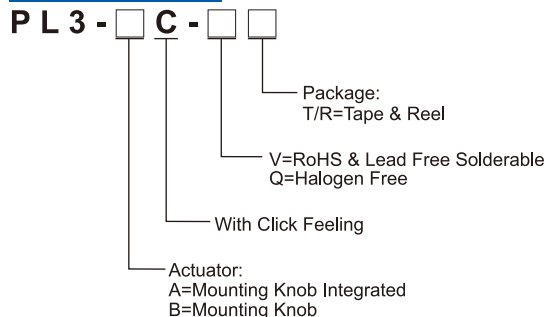
APPLICATION

※Remote controls
※Volume control for variety of applications

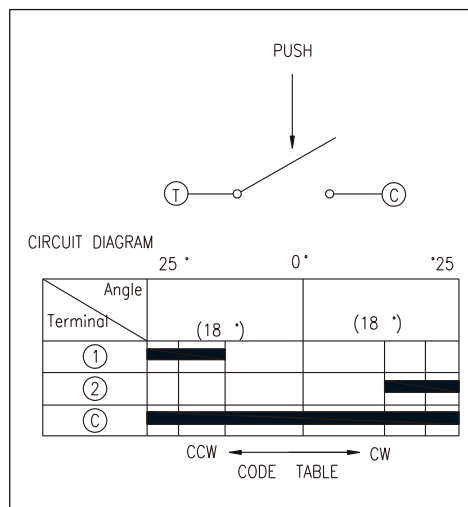
SPECIFICATION

Contact Rating	10mA, 5V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	70±50gf, Lever(CW, CCW) 200±100gf, Center push
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +60°C
Storage Temp.	-30°C ~ +80°C

HOW TO ORDER



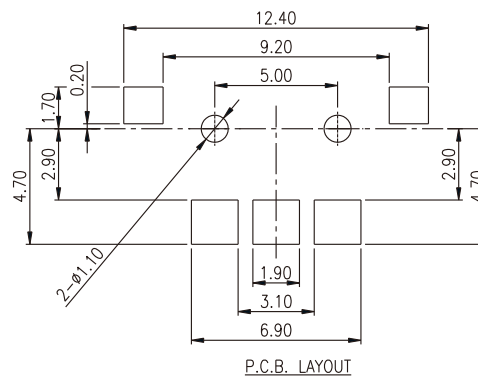
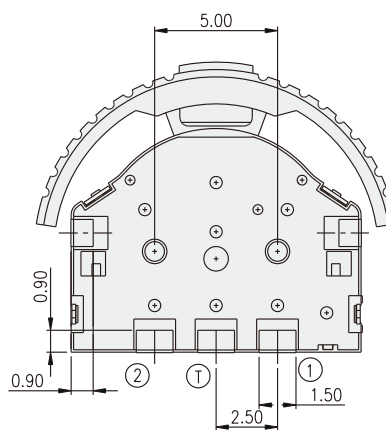
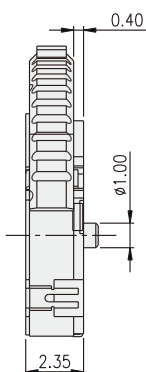
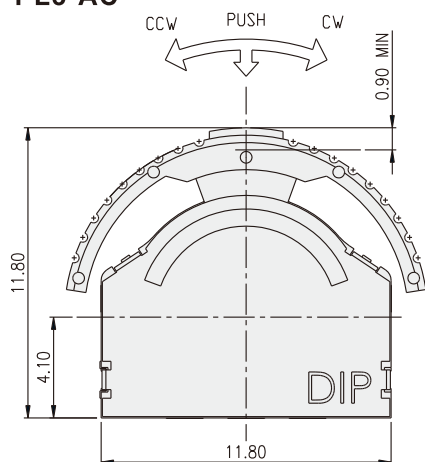
CIRCUIT



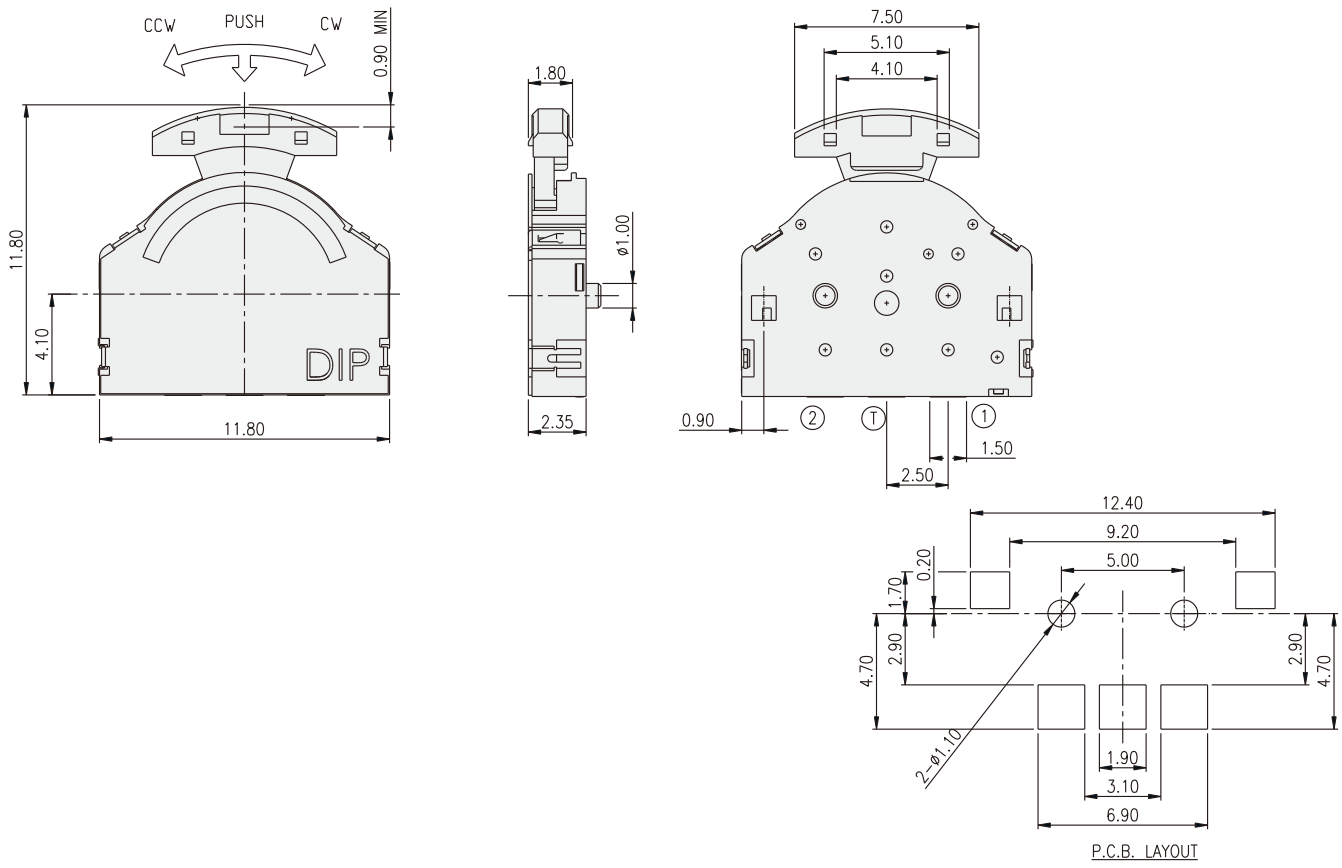
PACKAGE

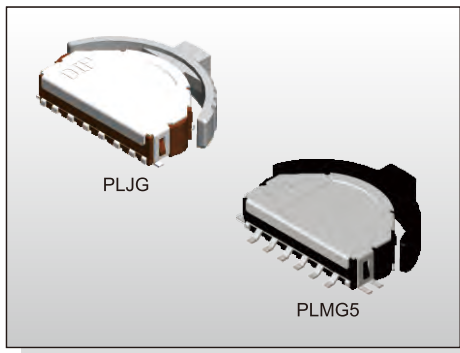
<Tape & Reel>
900 pcs

PL3-AC



PL3-BC





FEATURES

※Multi function (Push & Lever)

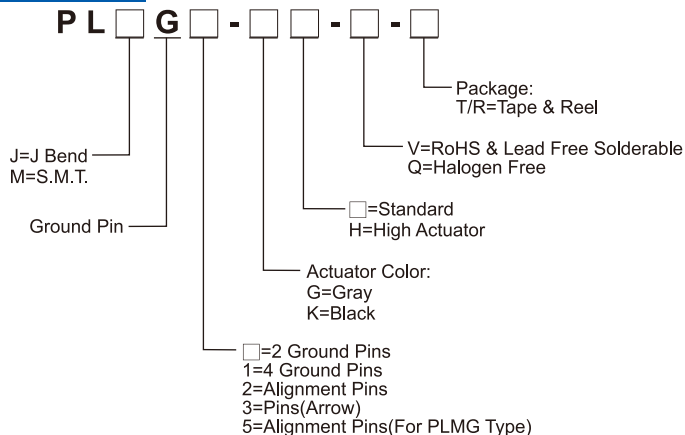
APPLICATION

※Remote controls
※Volume control for variety of applications

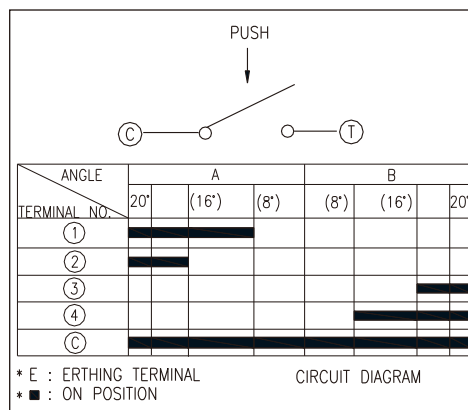
SPECIFICATION

Contact Rating	10mA, 5V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	40±20gf, Return actuator 150+100/-50gf, Center push direction
Operating Life	100,000 cycles
Operating Temp.	-10°C ~ +70°C
Storage Temp.	-25°C ~ +85°C

HOW TO ORDER



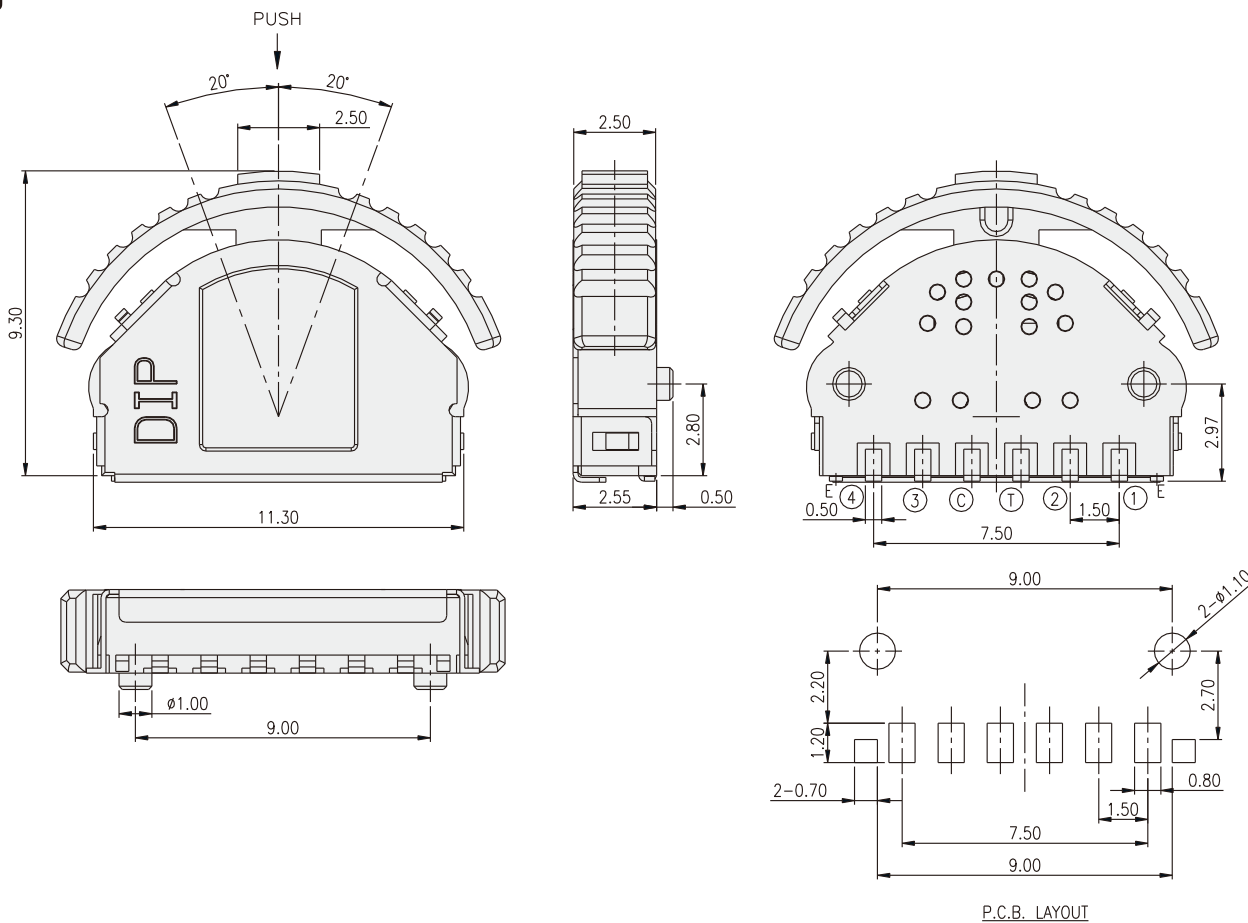
CIRCUIT



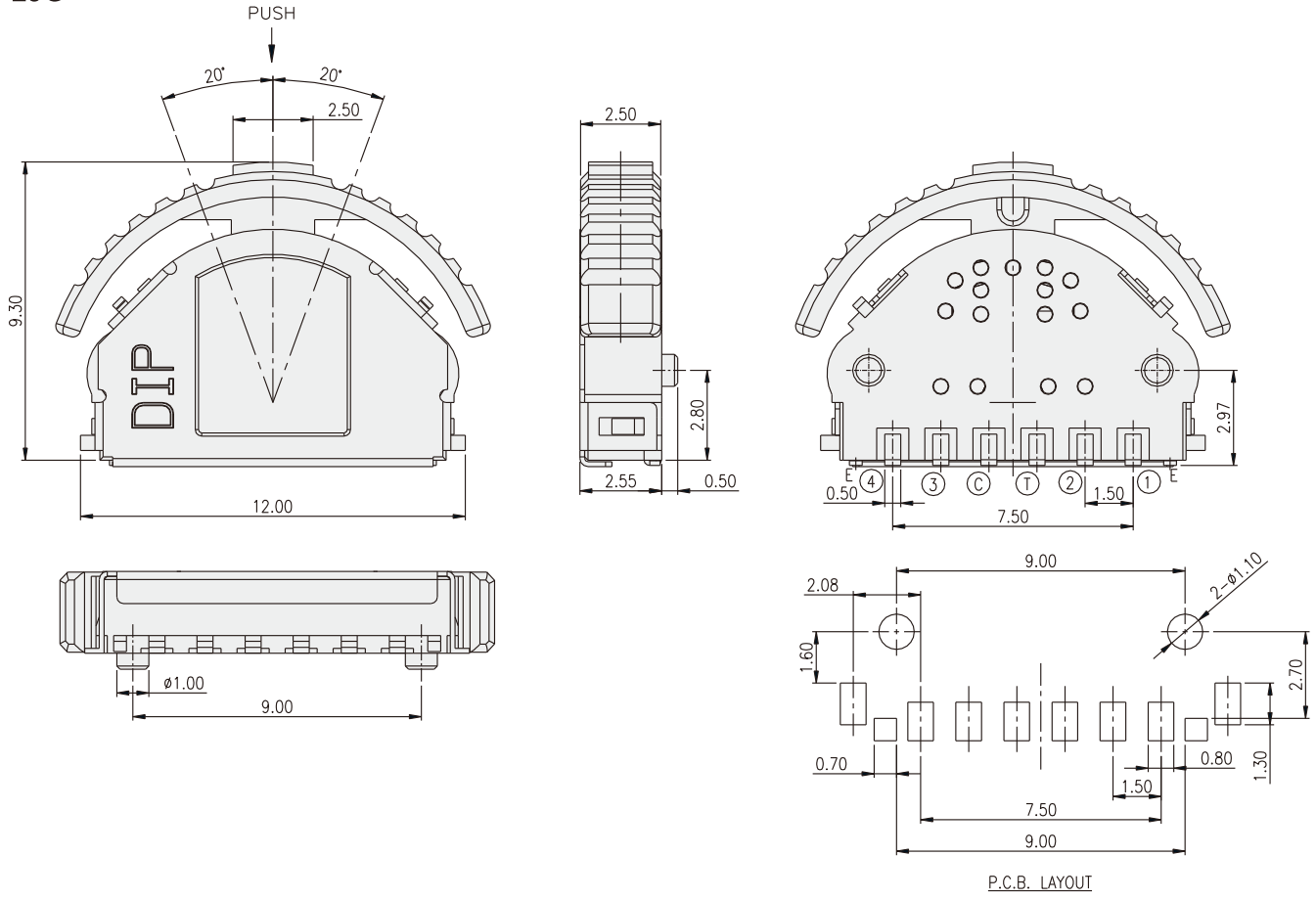
PACKAGE

<Tape & Reel>
 PLJ(G), PLJG1: 1000 pcs
 PLJG(2)(3): 800 pcs
 PLMG5: 750 pcs

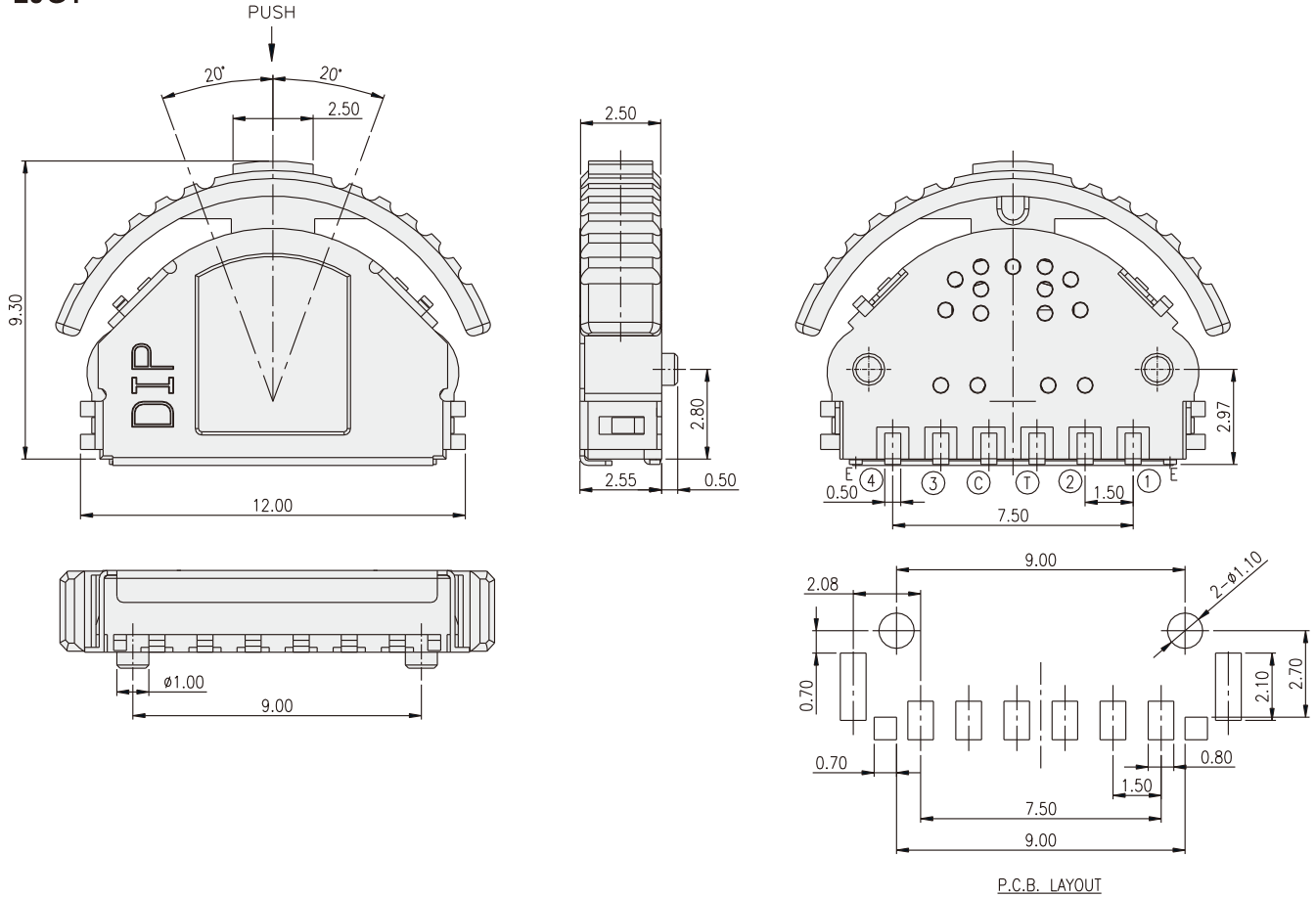
PLJ



PLJG



PLJG1

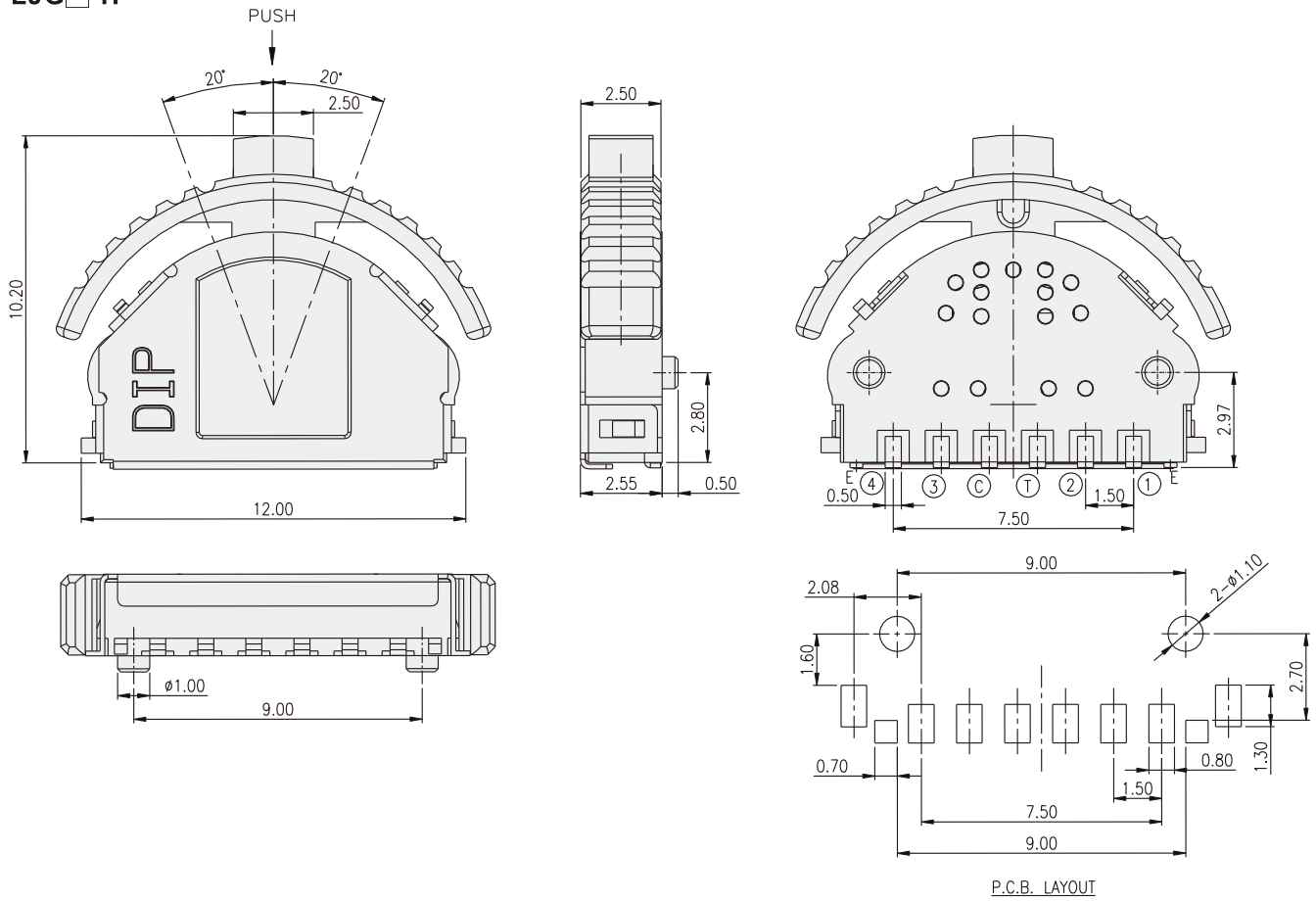


MULTI FUNCTION SWITCH
PL SERIES

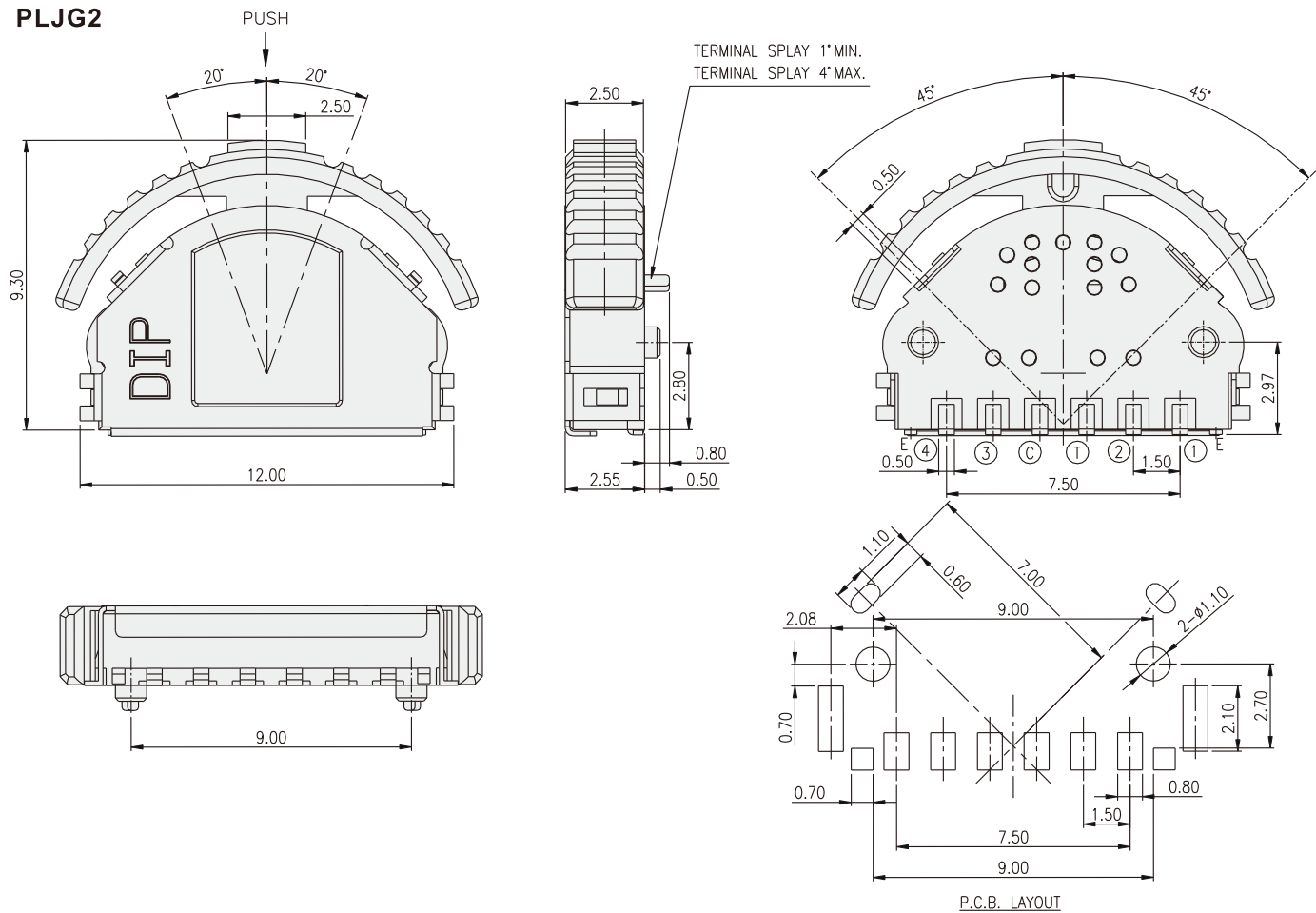
Push & Lever
Type



PLJG□-H

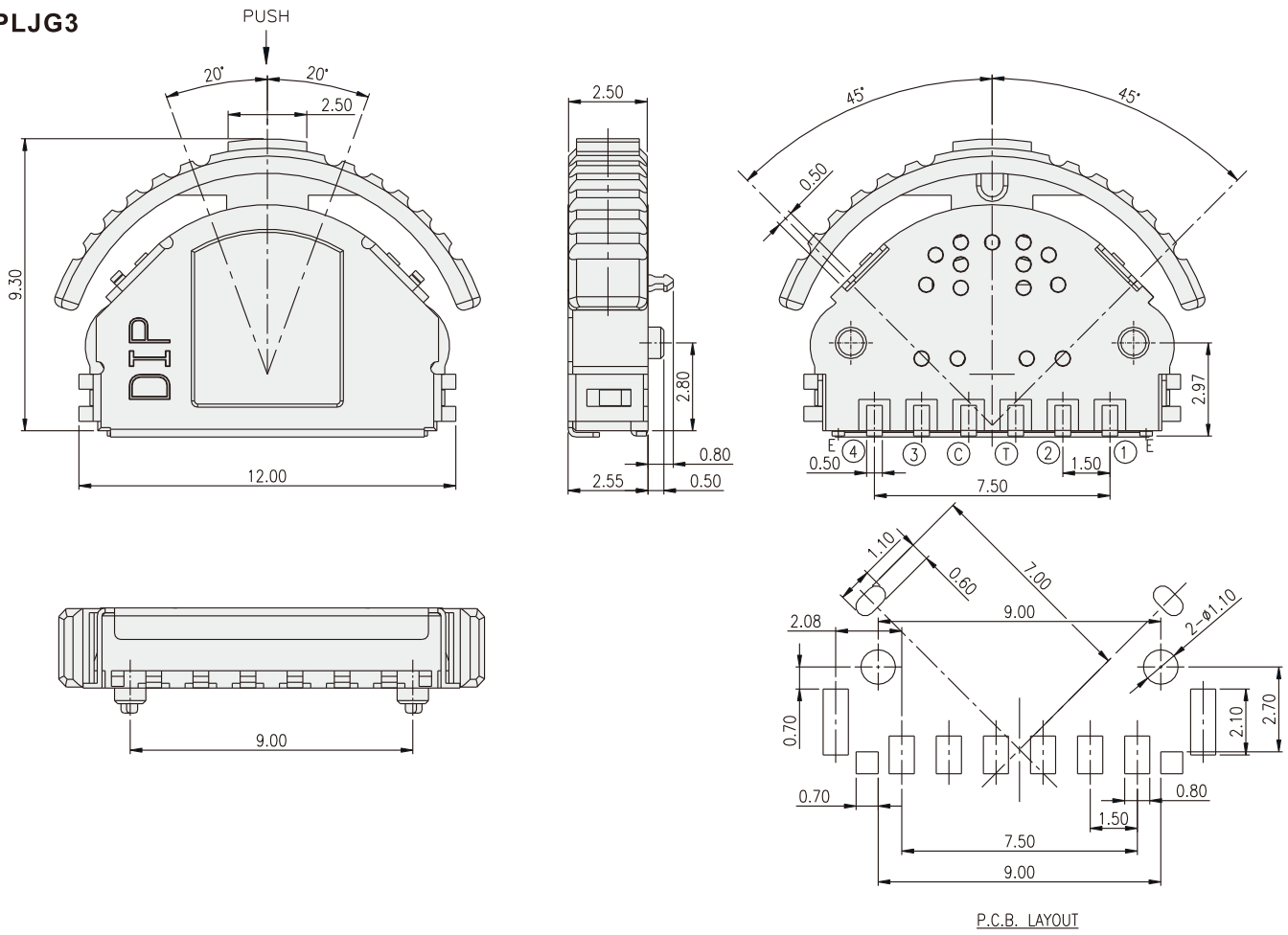


PLJG2

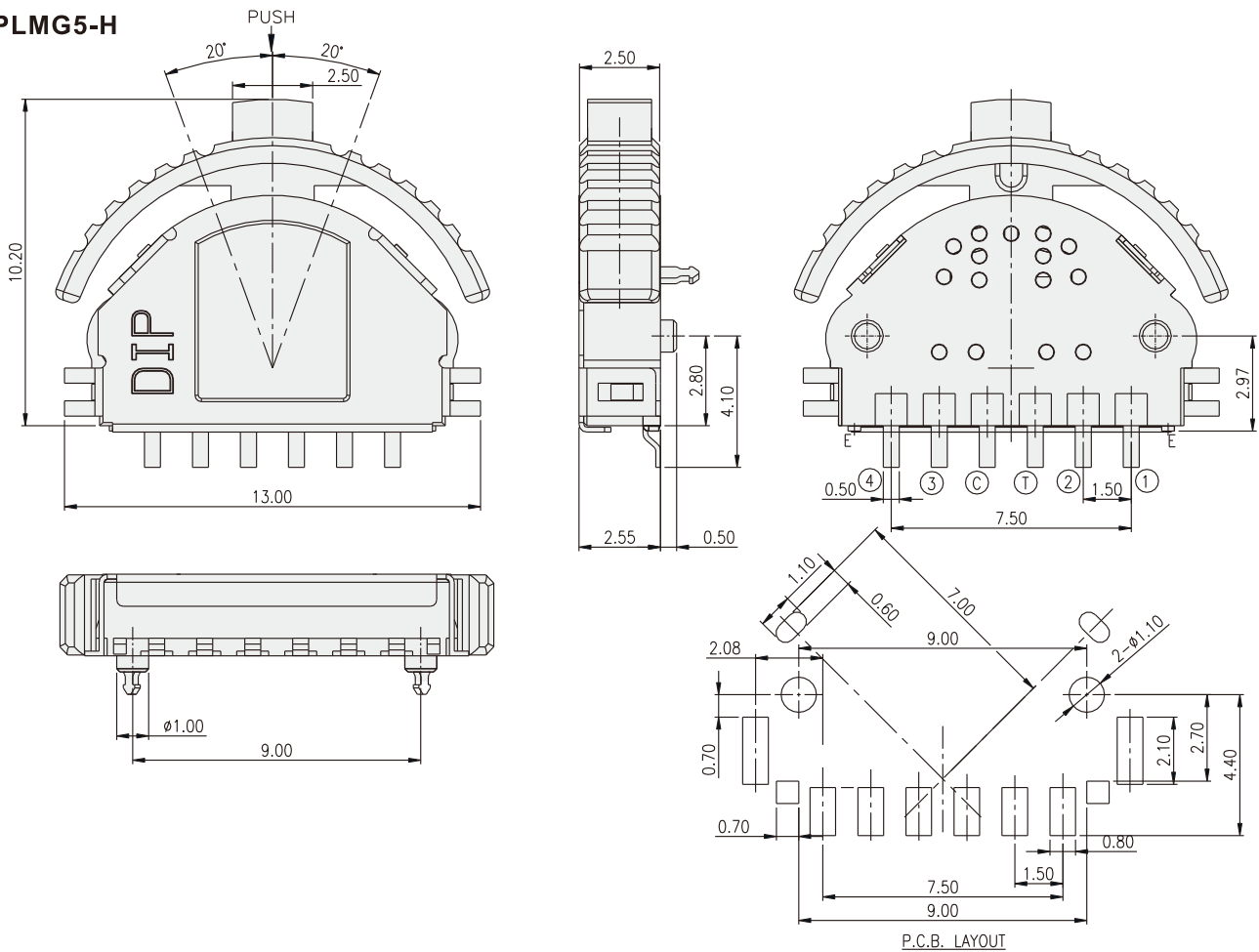


MULTI FUNCTION SWITCH

PLJG3

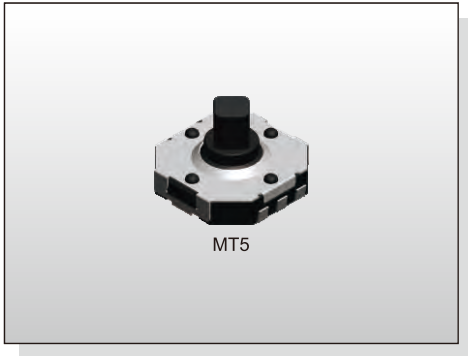


PLMG5-H



MULTI FUNCTION SWITCH MT(4)(5) SERIES

Multi-direction
Type



MT5

FEATURES

- ※7.4x7.7mm
- ※Variety of height options
- ※Reflow solderable

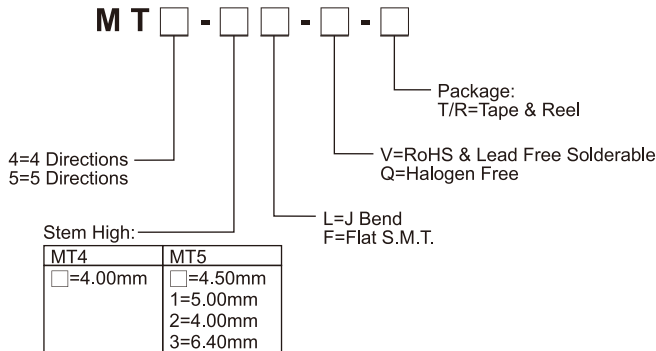
APPLICATION

- ※Medical device
- ※Consumer electronics
- ※Security device

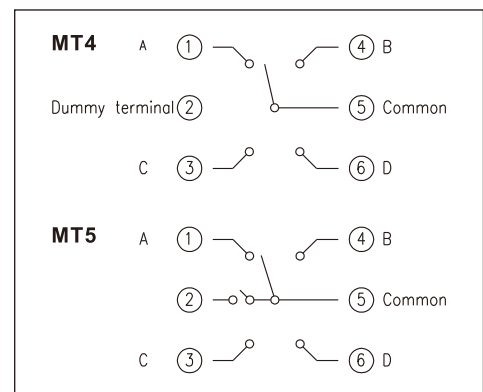
SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160gf, 4-direction 360gf, Center push
Travel	0.25mm, 4-direction 0.15mm, Center push
Operating Life	100,000 cycles
Operating Temp.	-25°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER



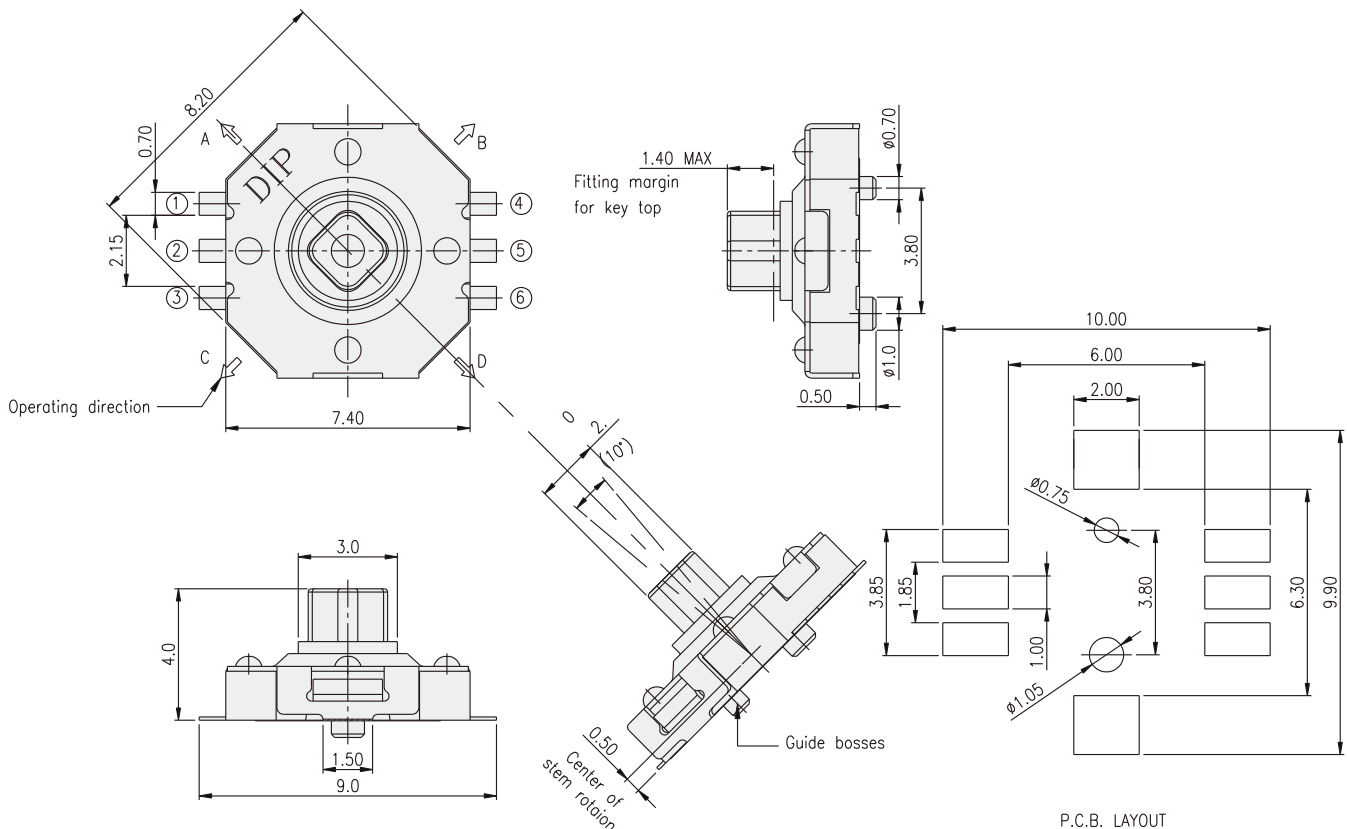
CIRCUIT



PACKAGE

<Tape & Reel>
850 pcs
MT5-3: 800 pcs

MT4-F



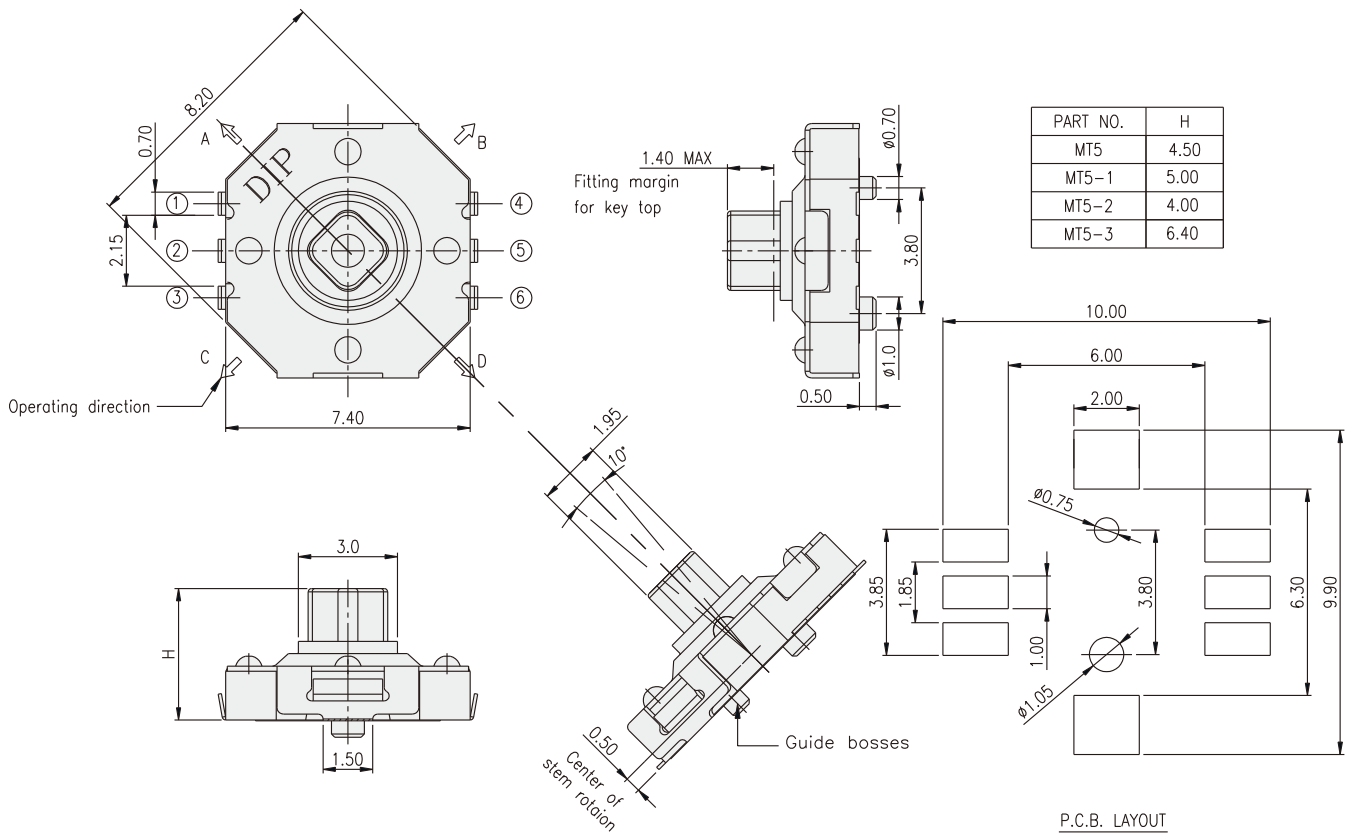
MULTI FUNCTION SWITCH

MULTI FUNCTION SWITCH
MT(4)(5) SERIES

**Multi-direction
 Type**



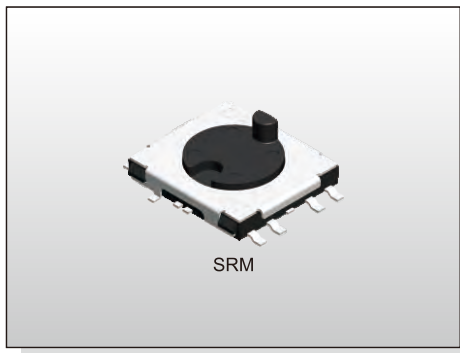
MT5-L



MULTI FUNCTION SWITCH

MULTI FUNCTION SWITCH SRM SERIES

Encoder 8-Direction Type



FEATURES

- ※Low profile
- ※Mode switching with maximum 8-direction
- ※Non-click structure applicable

APPLICATION

- ※Thermal controller
- ※Camera
- ※Audio

SPECIFICATION

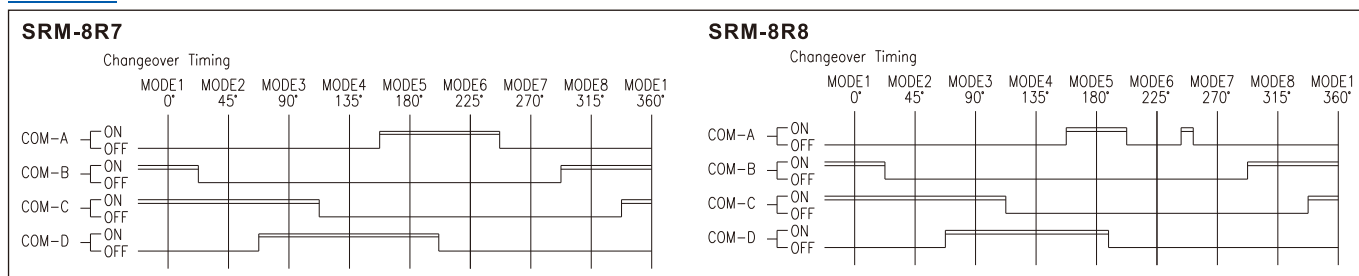
Contact Rating	25mA, 24V DC
Contact Resistance	200mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	40±30gf, B 130±50gf, N
Operating Life	10,000 cycles
Operating Temp.	-25°C ~ +80°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

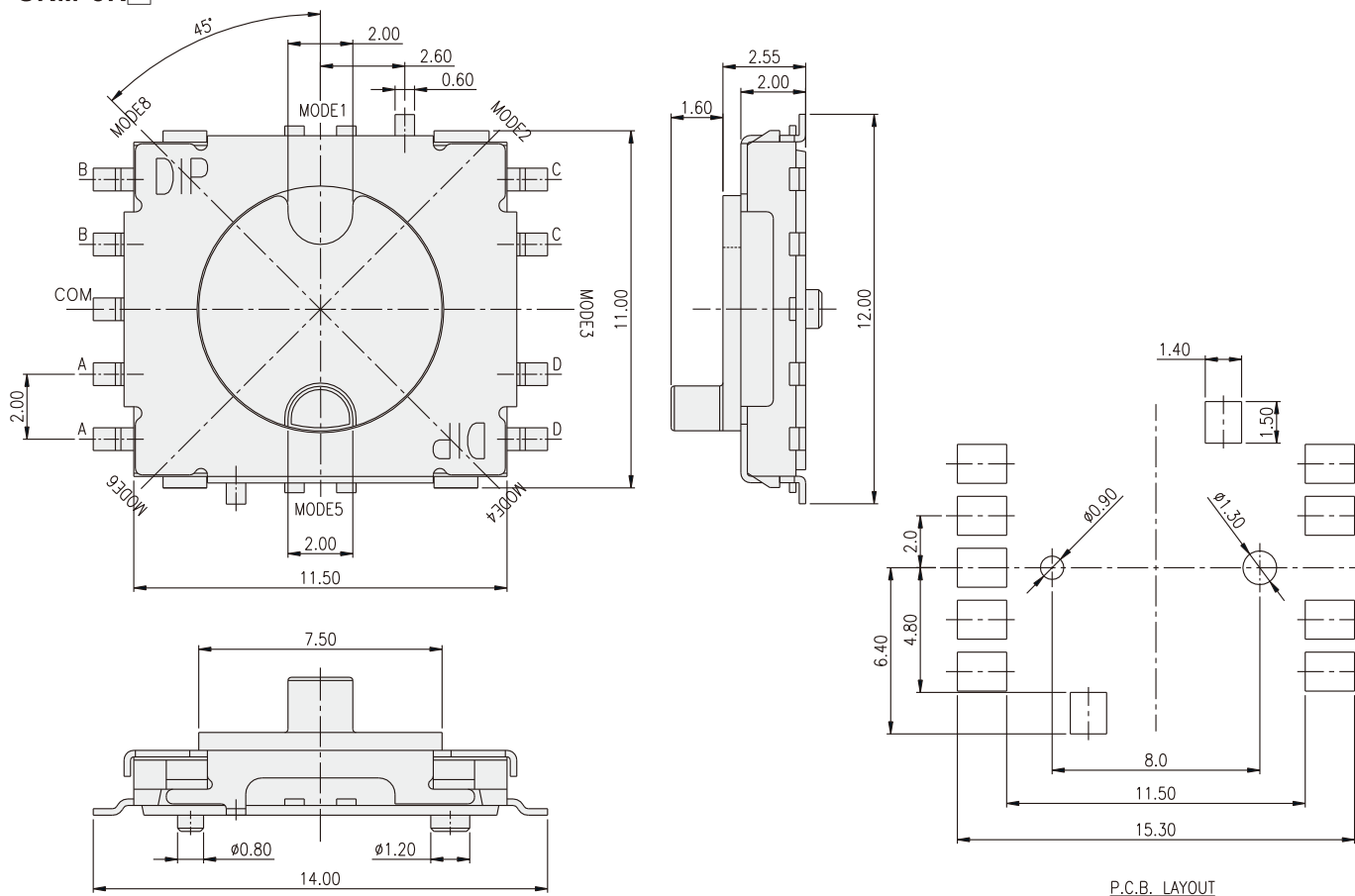
S R M - 8 R **- V -**

- 8 Direction
- Package: T/R=Tape & Reel
- RoHS & Lead Free Solderable
- =Non-click, Black
B=40gf, Blue
N=130gf, Brown
- =Without Ground Pin
G=With Ground Pin

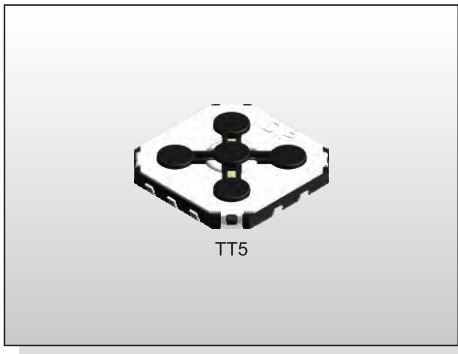
CIRCUIT



SRM-8R□



MULTI FUNCTION SWITCH



TT5

FEATURES

- ※Low-Profile of height 1.55mm
- ※Sharp operation feeling

APPLICATION

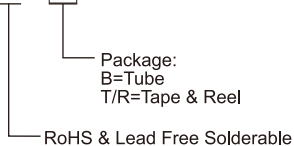
- ※Portable electronic devices
- ※Remote control
- ※Industrial applications

SPECIFICATION

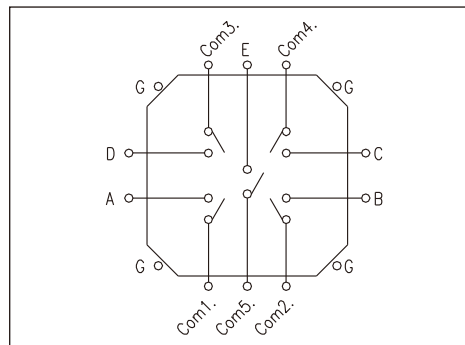
Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100MΩ min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	180±60gf, Side 320+80/-60gf, Center
Travel	0.25mm
Operating Life	200,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-40°C ~ +85°C

HOW TO ORDER

TT5-V-□



CIRCUIT



PACKAGE

- <Tube>
47 pcs
- <Tape & Reel>
2500 pcs

TT5

