

TACT SWITCH



Series	Contact Type	Features	Dimensions(mm)	Page
TL()-A1	Silver	Sealed IP67	10x10	78
TL()-A2	Silver	Sealed IP67	10x10	80
TL()-B1	Silver	Sealed IP67	10x10	82
TL()-B344	Silver	Sealed IP67	10x10	84
DTSA-2	Silver	Right Angle	13.1x14.7	86
DTSM-2	Silver	SMT	12.0x12.0	88
DTS(G)(P)-2	Silver	Through Hole & Ground Terminal	12.0x12.0	90
DTS(G)-6	Gold / Silver	Through Hole & Ground Terminal	6.2x6.2	93
DTS(M)(J)-6	Gold / Silver	SMT & J SMT	6.2x6.2	95
DTSA-6	Gold / Silver	Right Angle	7.3x13.16 / 7.4x7.1	98
T7A	Silver	Double Layers Right Angle	7.4x7.1	101





Series	Contact Type	Features	Dimensions(mm)	Page
TCF	Silver	Side Push Mid-mount	2.9x4.5	146
тсн	Silver	Right Angle	4.5x2.2	147
T6L NSW	Silver	Long Travel SMT	5.9x6.0	148
LTL-6	Silver	Long Travel	6.2x6.2	149
DTS-3	Silver	Through Hole & SMT	3.5x6.0	150
TAE	Gold / Silver	Thinner (H:2,5mm)	3.8x6.0	152
T(M)(J)G-325	Silver	Thinner (H:2,5mm)	3.7x6.0	153
IPT	Gold / Silver	Side / Vertical Push	2.8x3.8	154
MPT	Silver	Side / Vertical Push	2.9x3.9	155
PT	Silver	Side / Vertical Push	3.5x4.7	156
TBF	Silver	Side / Vertical Push	2.9x3.5	158
TBE	Silver	Vertical Push	2.7x3.0	160

$TL(\)-A1$ series

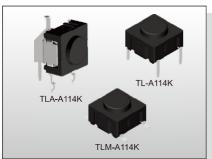
10x10 High Reliability











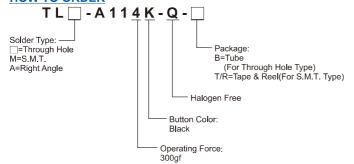
FEATURES

- ★Sealed
- *Long life of 10million
- *Variety of actuator lengths

APPLICATION

- *Music instrument
- ★Intercom system
- ★Industrial

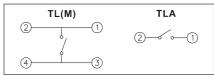
HOW TO ORDER



SPECIFICATION

	Contact Rating	0.5~50mA, 24V DC
	Contact Resistance	$30m\Omega$ 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

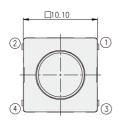
CIRCUIT



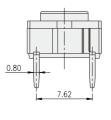
PACKAGE

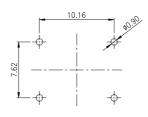
<Tube>
TL(A): 45 pcs
<Tape & Reel>
TLM: 650 pcs

TL-A114K









P.C.B. LAYOUT

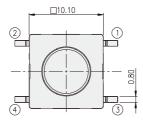


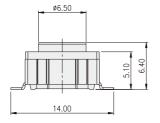


TLM-A114K

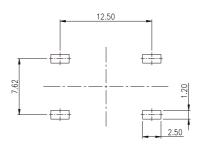
TACT SWITCH

TL()-A1 SERIES





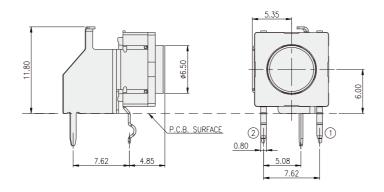


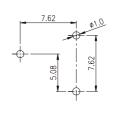


P.C.B. LAYOUT

TLA-A114K







P.C.B. LAYOUT

TACT SWITCH TL()-A2 SERIES

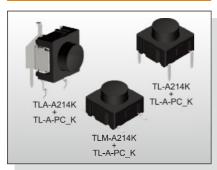
10x10 High Reliability











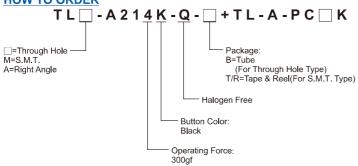
FEATURES

- *Long life of 10million
- *Variety of actuator lengths

APPLICATION

- *Music instrument
- ★Intercom system
- * Industrial

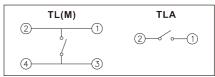
HOW TO ORDER



SPECIFICATION

	Contact Rating	0.5~50mA, 24V DC
	Contact Resistance	$30m\Omega$ 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

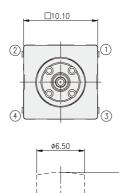
CIRCUIT



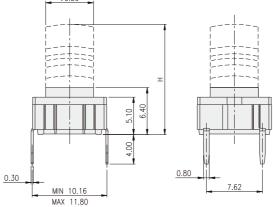
PACKAGE

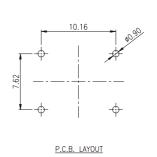
<Tube>
TL(A): 45 pcs
<Tape & Reel>
TLM: 650 pcs

TL-A214K+TL-A-PC K



PART NO.	Н
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







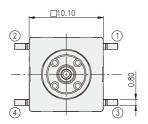




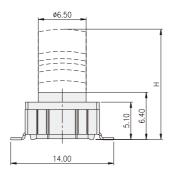
TLM-A214K+TL-A-PC K

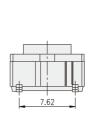
TL()-A2 SERIES

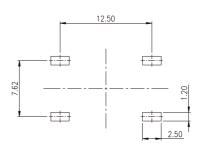
TACT SWITCH



PART NO.	Н
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

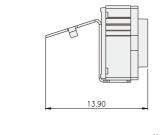




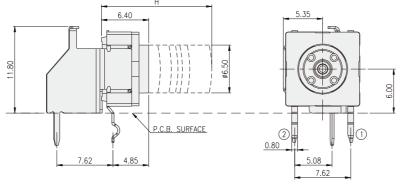


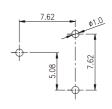
P.C.B. LAYOUT

TLA-A214K+TL-A-PC K



PART NO.	Н
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

$TL(\)\text{-}B1$ series

10x10 High Reliability











FEATURES

- ★Sealed
- X Long life of 10million
- ☆ Variety of actuator lengths

APPLICATION

- *Music instrument
- ★Intercom system
- ★ Industrial

HOW TO ORDER T L - B 1 1 4 K - Q - Package: B=Tube (For Through Hole Type) T/R=Tape & Reel(For S.M.T. Type) Halogen Free

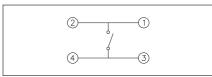
Button Color: Black

Operating Force: 300gf

SPECIFICATION

Contact Rating	0.5~50mA, 24V DC
Contact Resistance	$30m\Omega$ 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

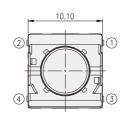
CIRCUIT

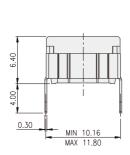


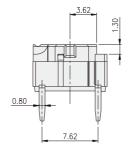
PACKAGE

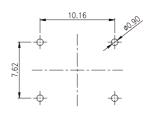
<Tube>
TL: 45 pcs
<Tape & Reel>
TLM: 650 pcs

TL-B114K







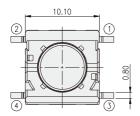


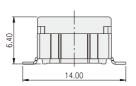
P.C.B. LAYOUT

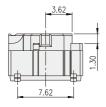


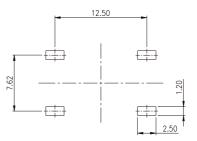


TLM-B114K









P.C.B. LAYOUT







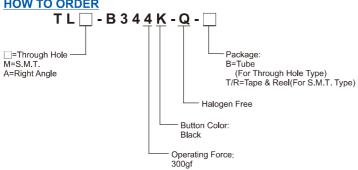


- X Long life of 10million

APPLICATION

- *Music instrument
- ★Intercom system
- ★ Industrial

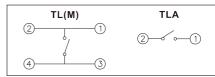
HOW TO ORDER



SPECIFICATION

	Contact Rating	0.5~50mA, 24V DC
	Contact Resistance	$30m\Omega$ 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

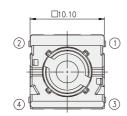
CIRCUIT

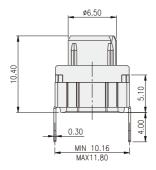


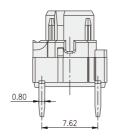
PACKAGE

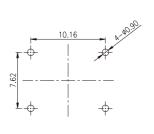
<Tube>
TL(A): 45 pcs
<Tape & Reel>
TLM: 300 pcs

TL-B344K









P.C.B. LAYOUT



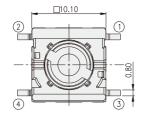


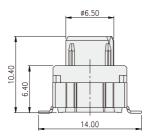


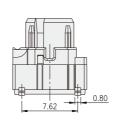
TLM-B344K

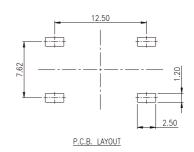
TACT SWITCH

TL()-B344 series

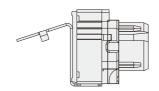


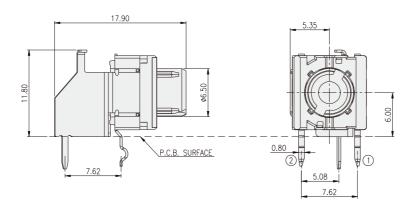


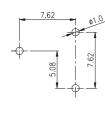




TLA-B344K

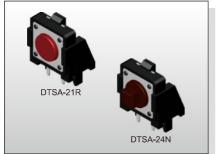






P.C.B. LAYOUT

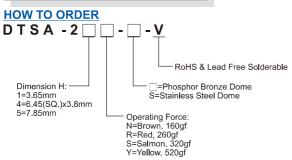




High reliable metal contactsVertical operation available**Cap options

APPLICATION

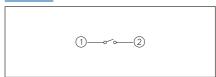
※Audio, OA equipment
※Instrumentation
※Industrial



SPECIFICATION

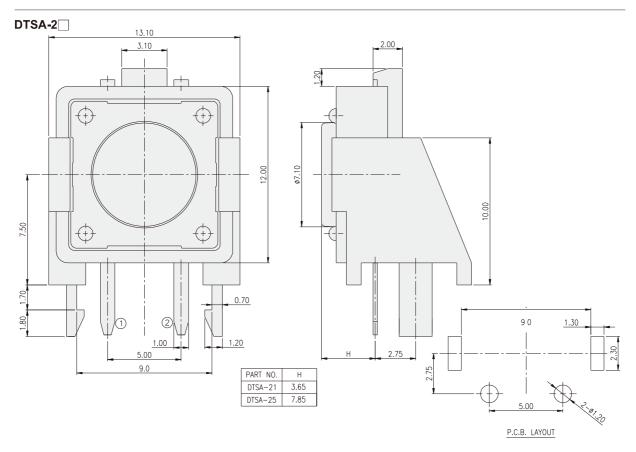
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)
Travel	0.35mm
	0.35mm Phosphor Bronze Dome 100,000 cycles for 520/320/260gf 200,000 cycles for 160gf
Travel Operating Life	Phosphor Bronze Dome 100,000 cycles for 520/320/260gf
	Phosphor Bronze Dome 100,000 cycles for 520/320/260gf 200,000 cycles for 160gf <u>Stainless Steel Dome</u> 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160gf

CIRCUIT



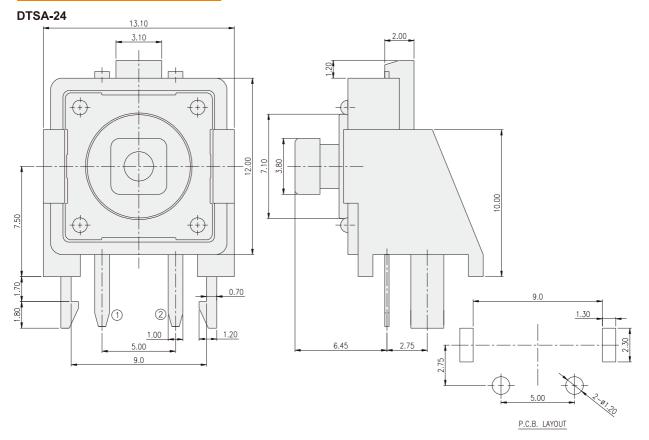
PACKAGE

<Bag> 250 pcs









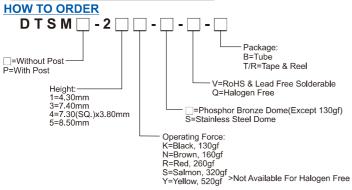




※Reflow solderable

APPLICATION

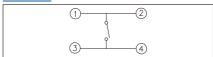
※Audio, OA equipment
※Instrumentation



SPECIFICATION

	Contact Rating	50mA, 12V DC
	Contact Resistance	100m $Ω$ max.
	Insulation Resistance	100M Ω 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
		Phosphor Bronze Dome
		100,000 cycles for 520/320/260gf 200,000 cycles for 160gf
	Operating Life	
	Operating Life Operating Temp.	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
	, ,	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

CIRCUIT

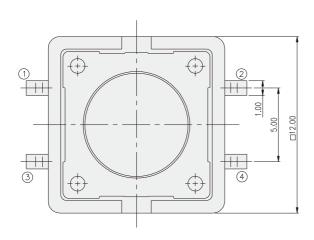


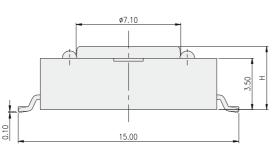
PACKAGE

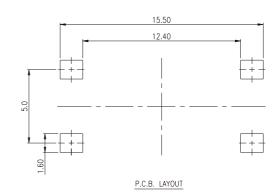
<Tube> DTSM-2: 40 pcs <Tape & Reel> DTSM-21: 700 pcs DTSM(P)-23, 24: 500 pcs DTSM(P)-25: 400 pcs

<Bag> DTSMP-21: 500 pcs

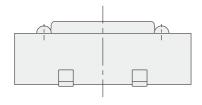
DTSM-2





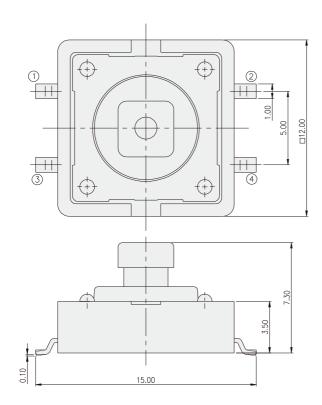


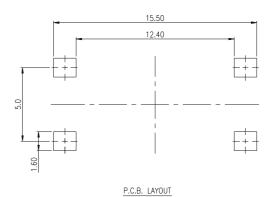
PART NO.	Н
DTSM-21	4.30
DTSM-23	7.40
DTSM-25	8.50



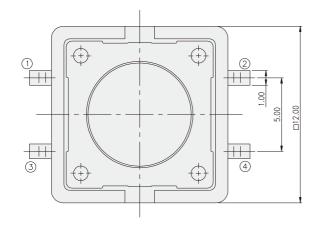


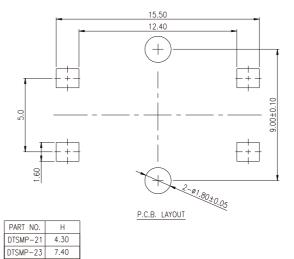
DTSM-24



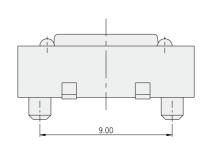


DTSMP-2





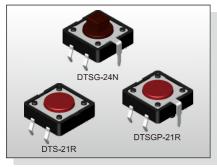
		-	Ø7.10 	-	
1		ı		ı	3.50
0.10			ø1.50		
	-		15.00		



DTSMP-25

8.50





Snap in type with ground pinGuide bosses available**Cap options

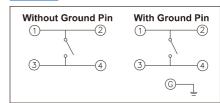
APPLICATION

※Audio, OA equipment
※Instrumentation
※Industrial

SPECIFICATION

	Contact Rating	50mA, 12V DC
	Contact Resistance	100m $Ω$ max.
	Insulation Resistance	100M Ω 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
		Phosphor Bronze Dome 100,000 cycles for 520/320/260gf 200,000 cycles for 160gf
	Operating Life	100,000 cycles for 520/320/260gf
	Operating Life Operating Temp.	100,000 cycles for 520/320/260gf 200,000 cycles for 160gf <u>Stainless Steel Dome</u> 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160gf 10,000,000 cycles for 130gf
	, <u> </u>	100,000 cycles for 520/320/260gf 200,000 cycles for 160gf <u>Stainless Steel Dome</u> 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160gf 10,000,000 cycles for 130gf

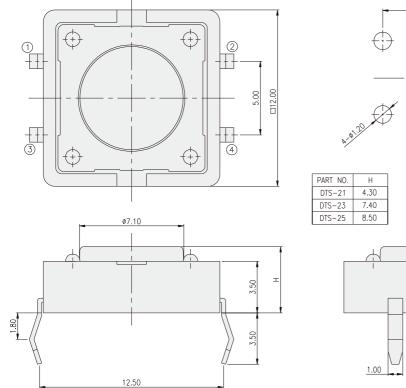
CIRCUIT

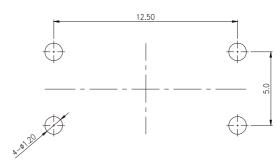


PACKAGE

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

DTS-2





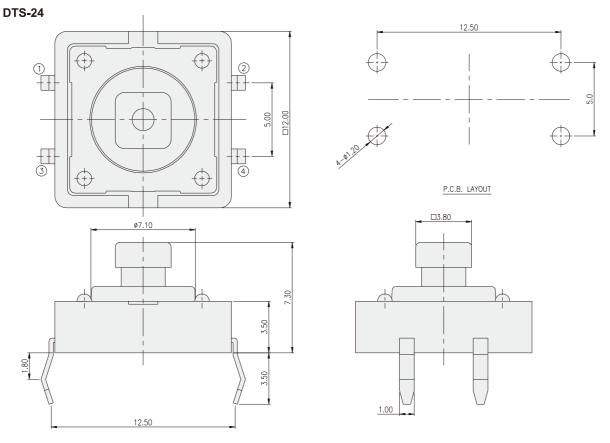
P.C.B. LAYOUT

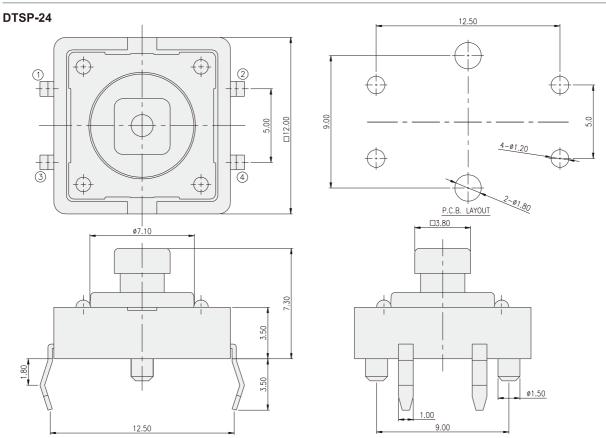
DTS-25	8.50		
	4	<u> </u>	



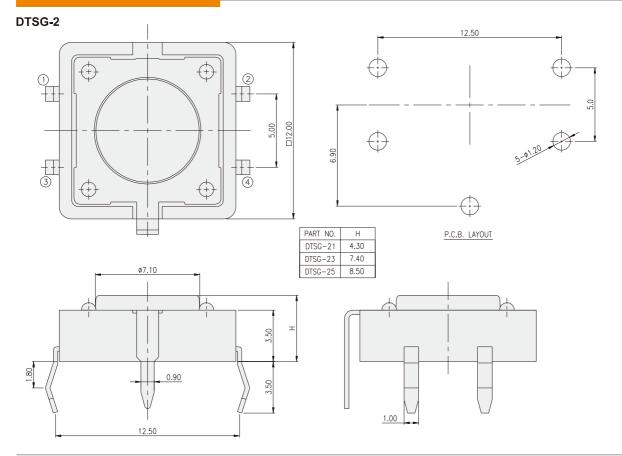


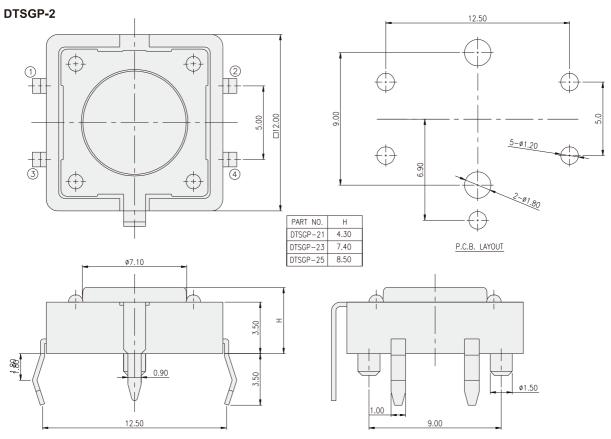












6x6 Through Hole & Ground Terminal Type







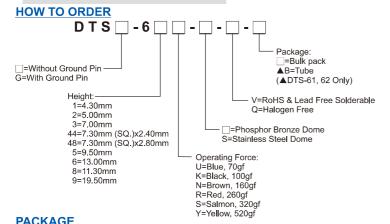
DTS-62K DTSG-65Y

FEATURES

※Cap options

APPLICATION

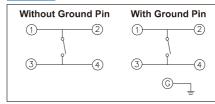
※Audio, OA equipment
※Instrumentation



SPECIFICATION

Contact Rating	50mA, 12V DC		
Contact Resistance	100m $Ω$ max.		
Insulation Resistance	100M Ω min. 500V DC		
Dielectric Strength	250V AC/1 minute		
Operating Force	70±30gf, Bule(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		
	<u>Stainless Steel Dome</u> 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		

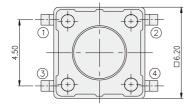
CIRCUIT



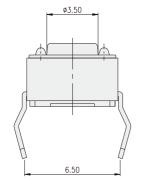
PACKAGE

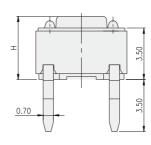
<Bag> 1000 pcs **<Tub>** DTS-61/62: 75 pcs

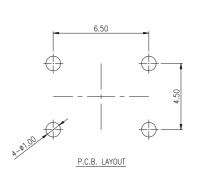
DTS-6



PART NO.	Н
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

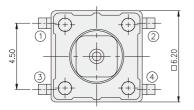




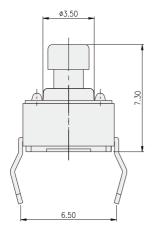


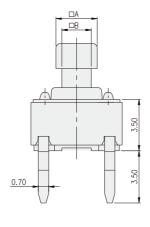


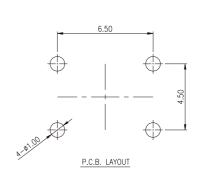
DTS-644(8)



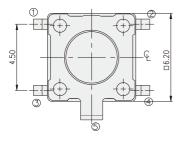
PART NO.	□A	□В
DTS-644	2.40	1.60
DTS-648	2.80	2.00





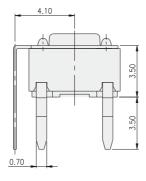


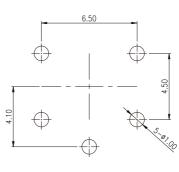
DTSG-6



ø3.50 -
\\
Ф Ф
6.50

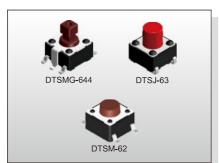
PART NO.	Н
DTSG-61	4.30
DTSG-62	5.00
DTSG-63	7.00
DTSG-65	9.50
DTSG-66	13.00
DTSG-68	11.30
DTSG-69	19.50





P.C.B. LAYOUT

6x6 Surface Mounting Type (Ground Terminal Optional)



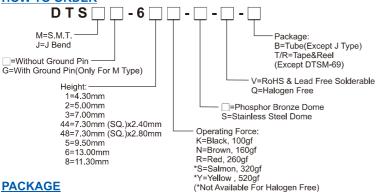
FEATURES

※Optional ground pin ※Reflow solderable

APPLICATION

※Audio, OA equipment ※Instrumentation, Communication

HOW TO ORDER



CIRCUIT

SPECIFICATION

50mA, 12V DC

100MΩ min. 500V DC

250V AC/1 minute

100±50gf, Black(K) 160±50gf, Brown(N) 260±50gf, Red(R) 320±80gf, Salmon(S) 520±130gf, Yellow(Y)

Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100gf

<u>Stainless Steel Dome</u> 300,000 cycles for 520/320gf 500,000 cycles for 260gf 1,000,000 cycles for 160/100gf

100mΩ max.

0.25mm

Operating Temp. -25°C ~ +70°C

Storage Temp. -30°C ~ +80°C

Contact Rating

Operating Force

Operating Life

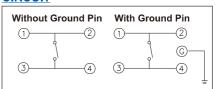
Contact Resistance

Insulation

Resistance

Dielectric Strength

Travel

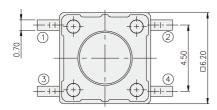


<Tube>

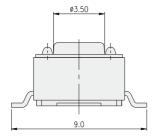
77 pcs

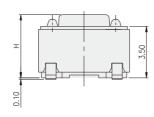
<Tape & Reel>

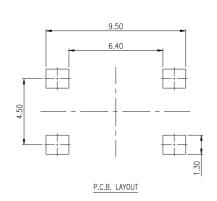
DTSM-6



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

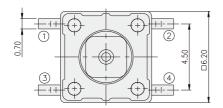




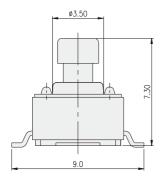


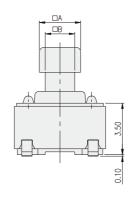


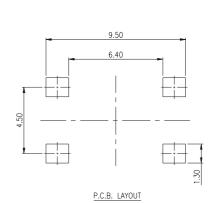
DTSM-644(8)



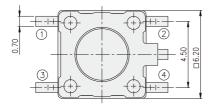
PART NO.	□A	□В
DTSM-644	2.40	1.60
DTSM-648	2.80	2.00



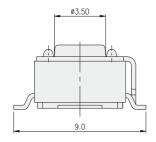


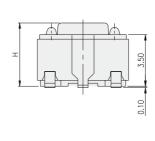


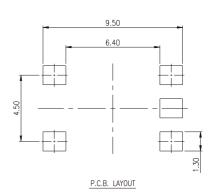
DTSMG-6



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

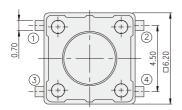




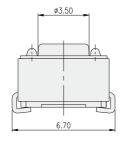


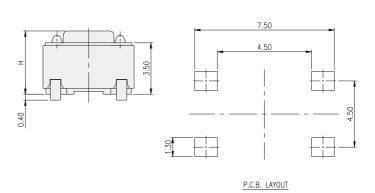


DTSJ-6



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



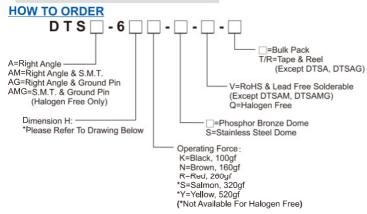




※ Variety of actuator lengths *Optional ground pin «Cap options

APPLICATION

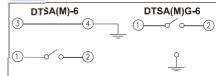
%Audio, OA equipment *Instrumentation



SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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
	0.25mm Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100gf
Travel Operating Life	Phosphor Bronze Dome 50,000 cycles for 520/320gf 100,000 cycles for 260gf
	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
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

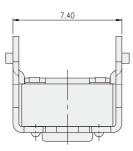
CIRCUIT



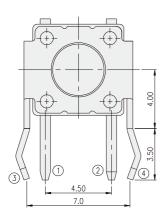
PACKAGE

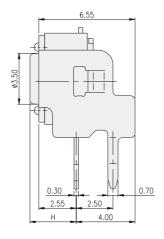
<Bag>DTSA(G)-6: 500 pcs **<Tape & Reel>**DTSAM-6: 500 pcs
DTSAM-6: 500 pcs
DTSAMG-61, 62: 500 pcs
DTSAMG-63, 64, 65: 380 pcs

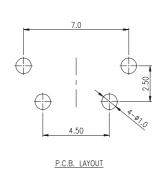
DTSA-6



PART NO.	Н	
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	

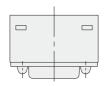




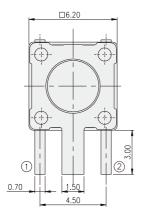


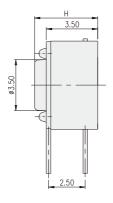


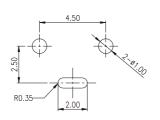
DTSAG-6



PART NO.	Н	
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	

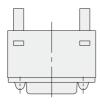




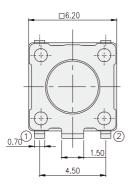


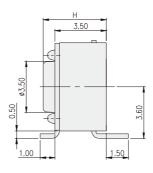
P.C.B. LAYOUT

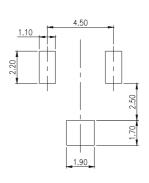
DTSAMG-6



PART NO.	Н	
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	



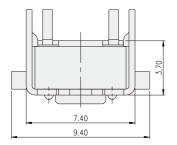




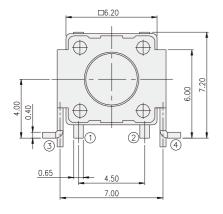
P.C.B. LAYOUT

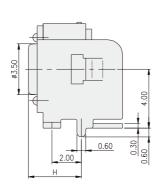


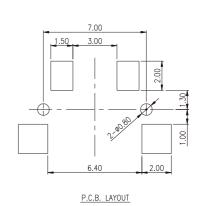
DTSAM-6



PART NO.	Н	
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	







7.3x13.16 Right Angle & Through Hole Type





FEATURES

※Two Circuit

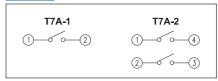
※Audio, OA equipment
※Instrumentation

APPLICATION

SPECIFICATION

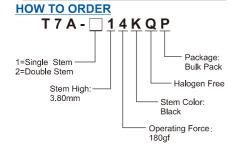
Contact Rating	50MA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	180±50gf
Travel	0.20mm
Operating Life	100,000 cycles
Operating Temp.	-20°C ~ +70°C
Storage Temp.	-30°C ~ +80°C

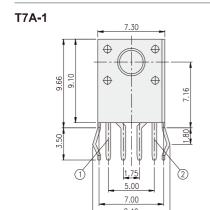
CIRCUIT

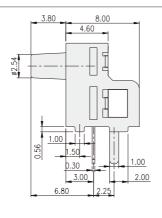


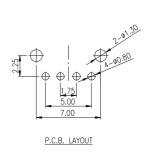
PACKAGE

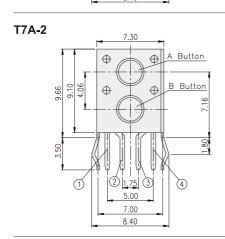
<Bag> 400 pcs

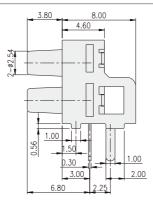


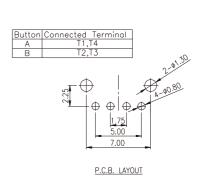




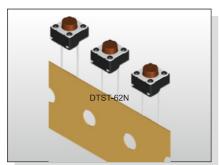










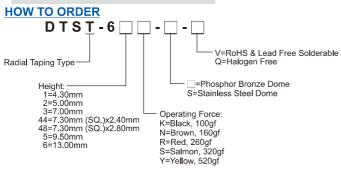


※Radial taping type ※ Variety of actuator lengths ※Allow automatic insertion onto PCB.

APPLICATION

※White goods , OA equipment

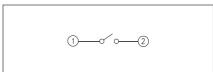
※Audio, DVD player, TV *Instrumentation



SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100M Ω 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
On austina Life	Phosphor Bronze Dome
Operating Life	50,000 cycles for 520/320gf 100,000 cycles for 260gf 200,000 cycles for 160/100gf
Operating Life	100,000 cycles for 260gf
Operating Life Operating Temp.	100,000 cycles for 260gf 200,000 cycles for 160/100gf <u>Stainless Steel Dome</u> 300,000 cycles for 520/320gf 500,000 cycles for 260gf

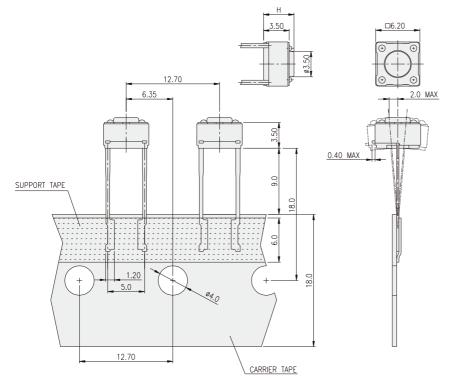
CIRCUIT



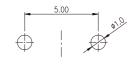
PACKAGE

<Box> 900 pcs

DTST-6



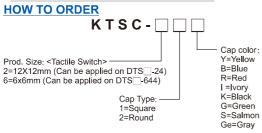
PART NO.	Н
DTST-61	4.30
DTST-62	5.00
DTST-63	7.00
DTST-644	7.30(SQ.2.40)
DTST-648	7.30(SQ.2.80)
DTST-65	9.50
DTST-66	13.00



P.C.B. LAYOUT

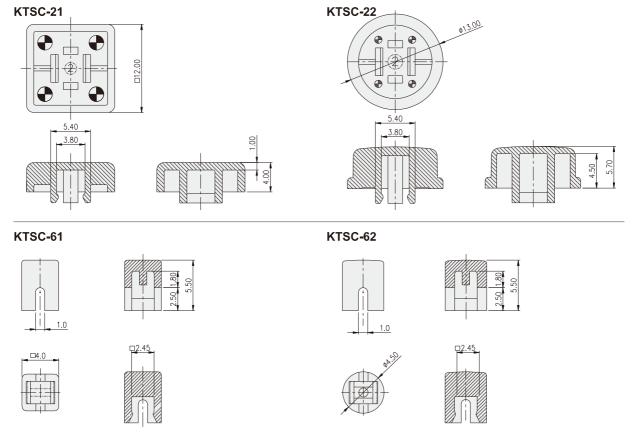






PACKAGE

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



DTS()W-2 series

12x12 SMT & Through Hole Washable Type











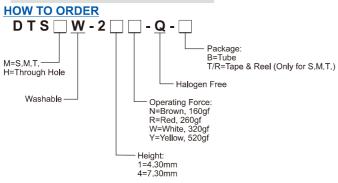
FEATURES

%Sealed

%Through hole & SMT type
%1 million operating life cycle

APPLICATION

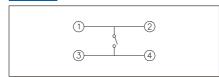
※Audio, OA equipment
※Instrumentation
※Industrial



SPECIFICATION

Contact Rating	50mA, 24V DC
Contact Resistance	100m $Ω$ 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

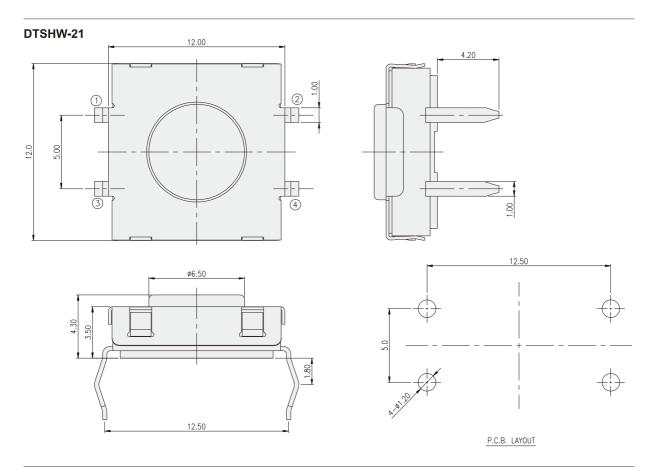
CIRCUIT



PACKAGE

<Tube>
39 pcs
<Tape & Reel>

DTSMW-21: 700 pcs DTSMW-24: 500 pcs



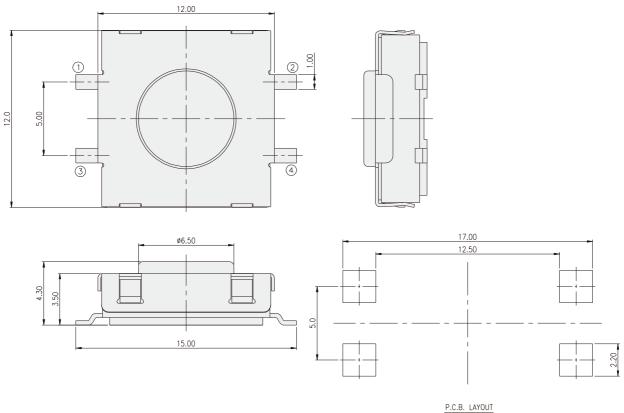


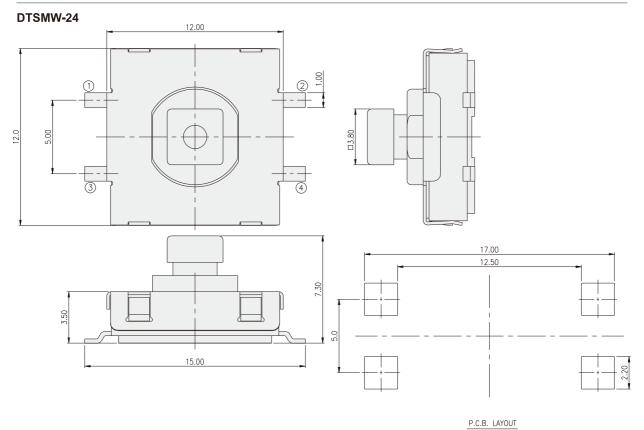




DTSMW-21

TACT SWITCH DTS()W-2 SERIES



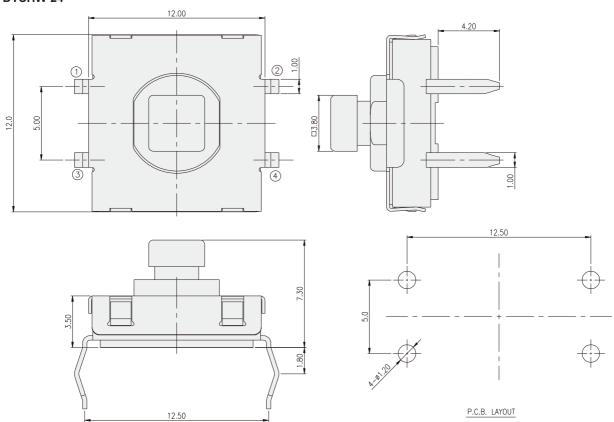


DTS()W-2 SERIES

12x12 SMT & Through Hole Washable Type



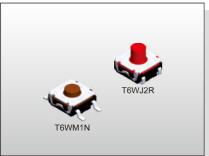
DTSHW-24











%Long Travel type *Long operation cycles *IP67

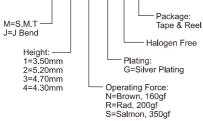
- APPLICATION

 **Automotive

 **Cellular phones

 **Industrial electronics
- ※Network infrastructure and IT

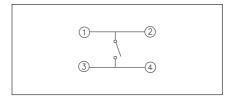
HOW TO ORDER $T 6 W \square \square \square \square \square \square R$



SPECIFICATION

Contact Rating	20mV DC~32V DC/1.0 mA~50 mA
Contact Resistance	100m $Ω$ 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) ~ $+85^{\circ}$ C(4 days)

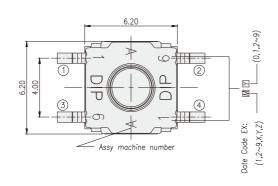
CIRCUIT



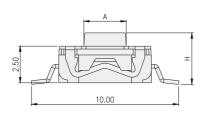
PACKAGE

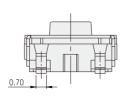
<Tape & Reel>T6W☐1: 2000 pcs
T6W☐2,3,4: 1000 pcs

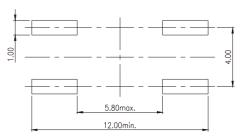
T6WM



PART NO.	Α	Н
T6\\M1	ø2.90	3.50
T6WM2	ø2.70	5.20
T6WM3	ø2.70	4.70
T6WM4	ø2.70	4.30





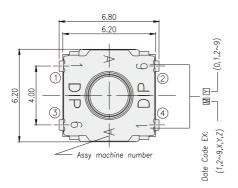


P.C.B. LAYOUT

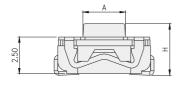


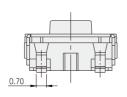


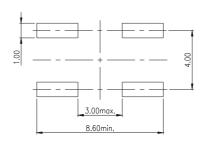
T6WJ



PART NO.	Α	Н
T6\J1	ø2.90	3.50
T6₩J2	ø2.70	5.20
T6₩J3	ø2.70	4.70
T6WJ4	ø2.70	4.30







P.C.B. LAYOUT









DTSHW-6 - - - B

FEATURES

Package: Tube

Operating Force:
N=Brown, 160gf(66N, 677N)
180gf(69N, 67N, 65N, 64N)
S=Silver, R0gf(68S)
R=Red, 260gf(69R, 67R, 66R, 65R, 64R)
T=Transparent, 360gf(69T, 67T, 65T, 67T7)

V=RoHS & Lead Free Solderable Q=Halogen Free

%Sealed

%Snap in type

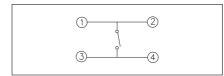
APPLICATION

**Audio, OA equipment **Instrumentation, Communication **White goods

<u>SPECIFICATION</u>

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

CIRCUIT



PACKAGE

<Tube>

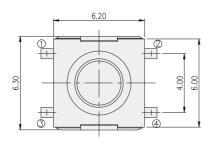
DTSHW-66

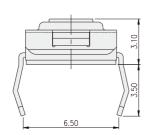
HOW TO ORDER

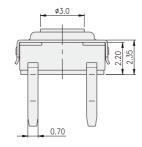
Washable

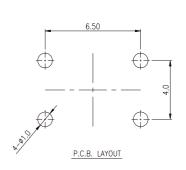
Dimension H: 4=4.50mm (N, R) 5=3.50mm (N, R, T) 6=3.10mm (N, R) 7=5.20mm (N, R, T) 77=7.30mm (N, T) 8=2.30mm (S) 9=3.80mm (N, R, T)

Through Hole





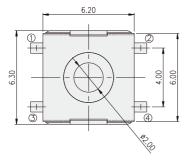


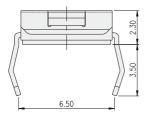


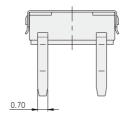


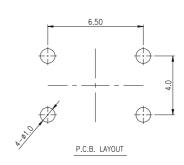


DTSHW-68

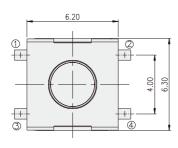




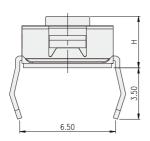


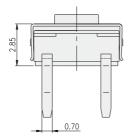


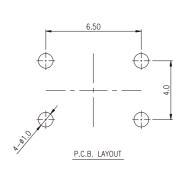
DTSHW-6



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







6x6 Gull-Wing SMT Washable Type











FEATURES

※Reflow solderable

※Dust proof with high reliability

APPLICATION

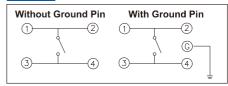
HOW TO ORDER D T S W - 6 Package: B=Tube T/R=Tape & Reel V=RoHS & Lead Free Solderable Q=Halogen Free

Dimension H: — Operating Force: N=Brown, 160gf(66N, 677N) 180gf(69N, 67N, 65N, 64N) S=3.50mm (N, R, T) 6=3.10mm (N, R) 7=5.20mm (N, R, T) 77=7.30mm (N, T) 8=2.30mm (S) 9=3.80mm (N, R, T)

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	$100M\Omega$ 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

CIRCUIT



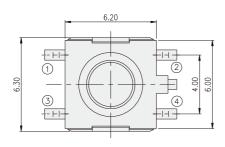
PACKAGE

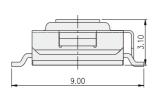
<Tube>
75 pcs

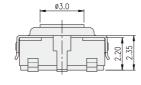
Tape & Reel>
DTSGMW-66: 2000 pcs
DTSMW-68, 66: 2000 pcs

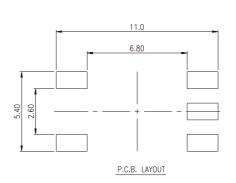
DTSMW-68, 66: 2000 pcs DTSMW-69, 65: 1900 pcs DTSMW-67, 64: 900 pcs DTSMW-677: 650 pcs

DTSGMW-66







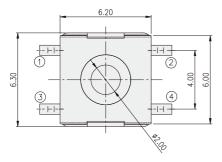


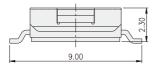


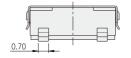


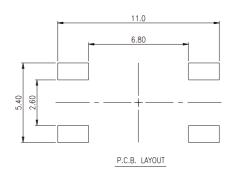


DTSMW-68

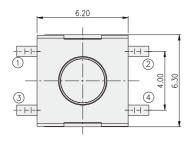




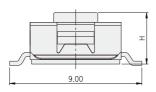


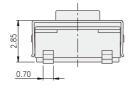


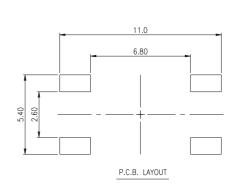
DTSMW-6



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















DTSJW-6 - - -

HOW TO ORDER

J Bend-

Washable -

FEATURES

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)

※Reflow solderable

※Dust proof with high reliability

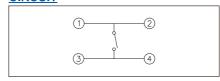
APPLICATION

※Audio, OA equipment
※Instrumentation, Communication

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	$100M\Omega$ 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

CIRCUIT

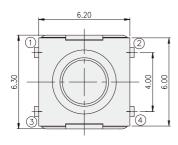


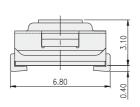
PACKAGE

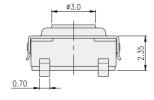
PACKAGE<**Tube>**75 pcs

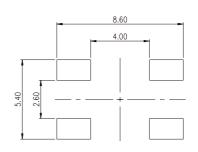
<**Tape & Reel>**DTSJW-64, 67: 900 pcs
DTSJW-65, 69: 1800 pcs
DTSJW-66: 1900 pcs
DTSJW-68: 2000 pcs
DTSJW-677: 650 pcs

DTSJW-66







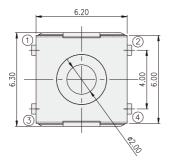


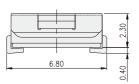
P.C.B. LAYOUT

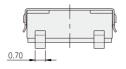


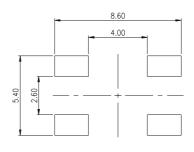


DTSJW-68



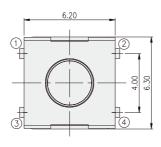




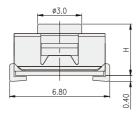


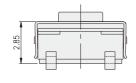
P.C.B. LAYOUT

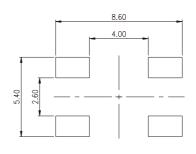
DTSJW-6



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







P.C.B. LAYOUT







DTSJW2-67S

FEATURES

≪Sealed

※Dust proof with high reliability

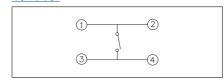
APPLICATION

Audio, OA equipmentInstrumentation, Communication**White goods

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

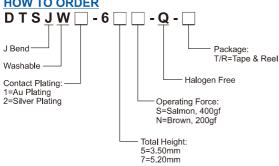
CIRCUIT



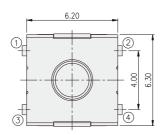
PACKAGE

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

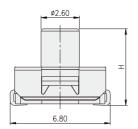
HOW TO ORDER

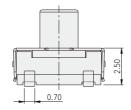


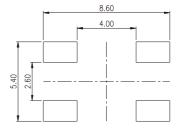
DTSJW□-6



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







P.C.B. LAYOUT





*Low profile with 2.5-3.5mm height %Snap-in type

%Sharp click feeling

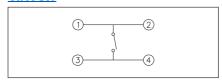
APPLICATION

HOW TO ORDER DTSYHL-6 - - - B Terminal Pitch 4.0mm Package: Tube Through Hole -V=RoHS & Lead Free Solderable Q=Halogen Free Height: — 1=2.50mm 2=3.10mm 3=3.50mm Operating Force: K=Black,100gf N=Brown,160gf R=Red,260gf

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

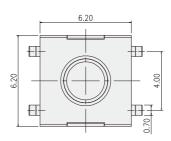
CIRCUIT



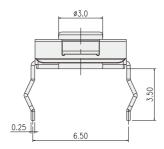
PACKAGE

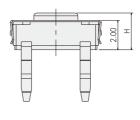
<Tube>

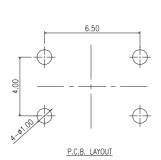
DTSYHL-6



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

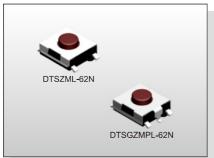






6x6 Thinner Type With Ground Terminal (Pitch 4.5mm)





DTS __ Z M __ L - 6 __ _ - _ -

HOW TO ORDER

=Without Ground Pin-G=With Ground Pin

Terminal Pitch 4.5mm

=Without Post P=With Post

FEATURES

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

Package:

=Bag T/R=Tape & Reel B=Tube (Only For Without Post)

V=RoHS & Lead Free Solderable Q=Halogen Free

APPLICATION

*Audio, OA equipment **%Instrumentation** ※Consumer electronics

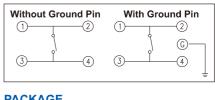
Operating Force: K=Black,100gf N=Brown,160gf R=Red,260gf

Height: 1=2.50mm 2=3.10mm 3=3.50mm 4=5.25mm

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max.
Insulation Resistance	100M Ω 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

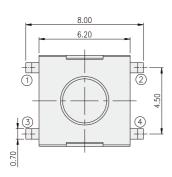
CIRCUIT



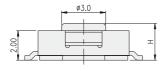
PACKAGE

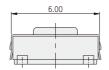
<Tube> <Tape & Reel> DTS(G)ZML-61□: 2500 pcs DTS(G)ZML-62: 2500 pcs DTS(G)ZMPL-61, 62: 1200 pcs DTS(G)ZM(P)L-63: 1200 pcs DTS(G)ZML(P)L-64: 900 pcs

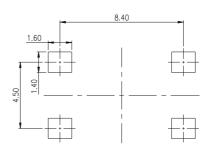
DTSZML-6



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





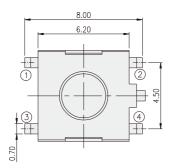


P.C.B. LAYOUT

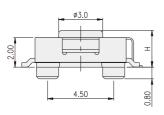
DTS(G)ZML-6 series

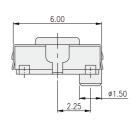


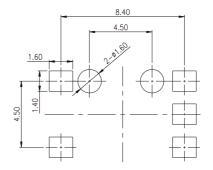
DTSGZMPL-6



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





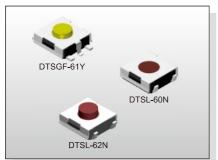


P.C.B. LAYOUT

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







FEATURES

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

APPLICATION

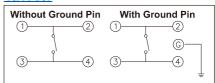
Audio, OA equipmentInstrumentation**White goods

N=Brown, 200gf <Soft actuator 62 Only>

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

CIRCUIT



PACKAGE

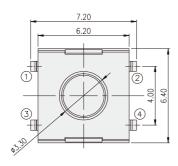
<Tube>

<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

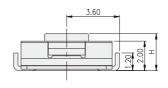
DTSGF-61 : 2500 pcs

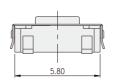
DTSL-6

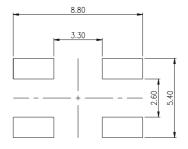


S=White, 320gf Y=Yellow, 520gf

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





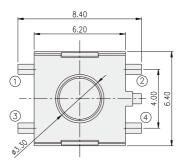


P.C.B. LAYOUT

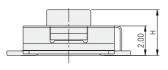
TACT SWITCH DTS(G)(L)(F)-6 SERIES

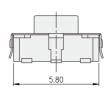


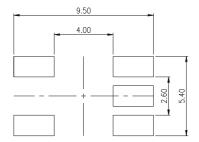
DTSGF-6



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



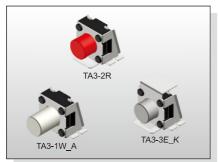




P.C.B. LAYOUT

6x6 Right Angle Type With Supporting Terminal & Tab Available





FEATURES

Sealed type IP57Extended bracket availableEasy to pick & place with top tab

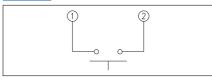
APPLICATION

*Data storage, Server*Instrumentation*Audio, OA equipment

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	$10M\Omega$ 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

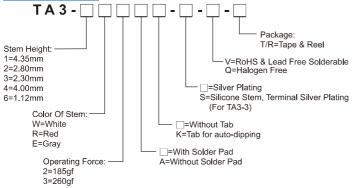
CIRCUIT



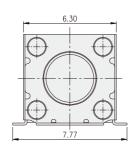
PACKAGE

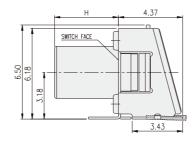
<Tape & Reel>
TA3: 600 pcs
TA3-___K: 550 pcs

HOW TO ORDER

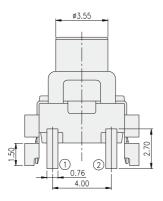


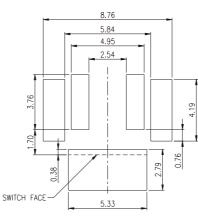
TA3-





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

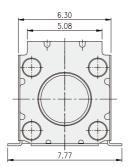


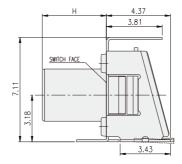


P.C.B. LAYOUT

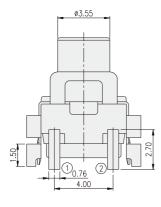


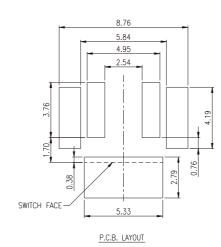
TA3-□□K



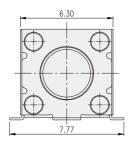


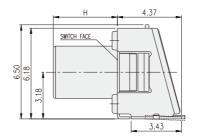
PART NO.	Н
TA3-1□□K	4.35
TA3-2□□K	2.80
TA3-3□□ K	2.30
TA3-4□□K	4.00
TA3-6□□K	1.12



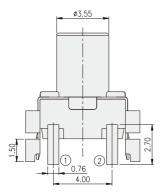


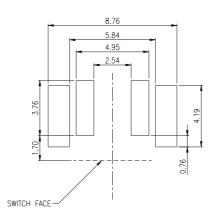
TA3-___A





PART NO.	Н
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

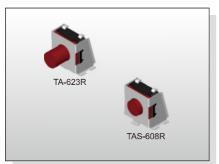




P.C.B. LAYOUT

6x6 SMT & Right Angle Type Soft Stem





FEATURES

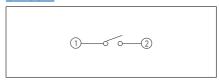
APPLICATION

※Audio, OA equipment
※Instrumentation
※Hair dryers

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

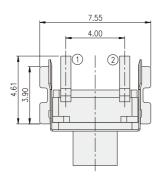
CIRCUIT



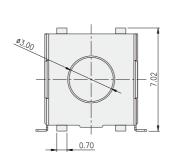
PACKAGE

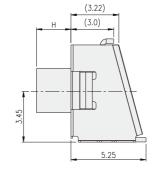
<Bag>
500 pcs
<Tape & Reel>
TA(S)-600 / 608 / 610 / 623: 700 pcs
TA(S)-633: 500 pcs

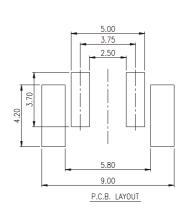
TA-6



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

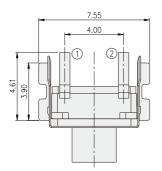




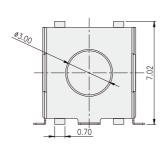


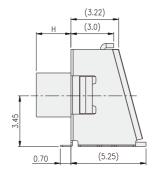


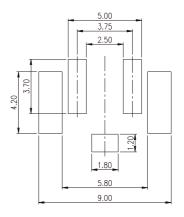
TAS-6



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







P.C.B. LAYOUT

HOW TO ORDER T1B QR









-Package: Tape & Reel

-Halogen Free

Operating Force: 2=160gf

FEATURES

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

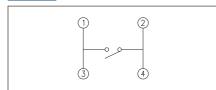
APPLICATION

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

SPECIFICATION

Contact Rating	10uA,2V DC to 20mA,15V DC
Contact Resistance	500m $Ω$ max.
Insulation Resistance	$50M\Omega$ 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

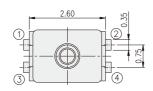
CIRCUIT

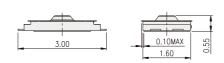


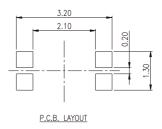
PACKAGE

<Tape & Reel> 8000 pcs

T1B







TACT SWITCH T1A SERIES

2.8*1.9 J Terminal SMT Type (H=0.60mm)











FEATURES

%Long operation cycles

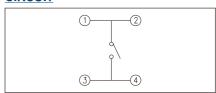
APPLICATION

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

SPECIFICATION

Contact Rating	10uA,1V DC to 50mA,12V DC
Contact Resistance	500m $Ω$ max.
Insulation Resistance	100M Ω 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

CIRCUIT

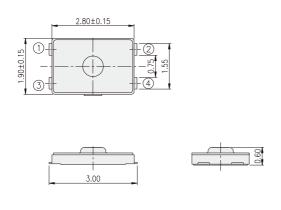


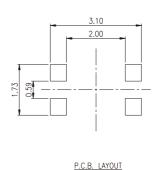
PACKAGE

<Tape & Reel> 16000 pcs

HOW TO ORDER T1A Q R -Package: Tape & Reel -Halogen Free Operating Force: 2=160gf 3=200gf

T1A





HOW TO ORDER





Heigh: —— 0=0.45mm 2=0.65mm

T 3 A L - 🗌 🔲 - Q - 🔲

FEATURES

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

APPLICATION

%Smart phone **Digital camera, Medical **Portable electronic device

-Package: T/R=Tape & Reel

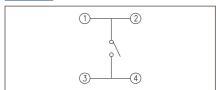
-Halogen Free

=For T3AL-0_Type S=For T3AL-2_Type

Contact Rating 50mA, 12V DC Contact Resistance $500 \text{m}\Omega$ 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

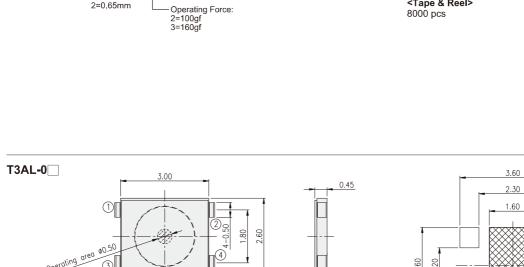
CIRCUIT

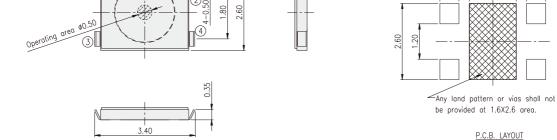
SPECIFICATION



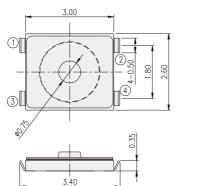
PACKAGE

<Tape & Reel> 8000 pcs

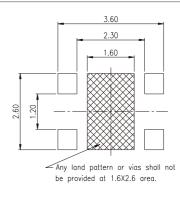












P.C.B. LAYOUT





※Compact-sized 3.7x3.7mm ※Low profile of 0.35mm height

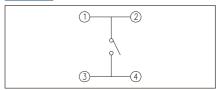
APPLICATION

HOW TO ORDER T 3 B L - 🔲 🗀 - Q - 🔲 Package: T/R=Tape & Reel - Halogen Free Operating Force: 03=160gf 05=235gf

SPECIFICATION

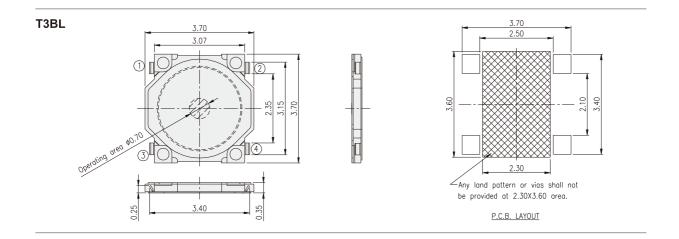
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf/235±60gf
Travel	0.15mm
Operating Life	50,000 cycles for 235gf 500,000 cycles for 160gf
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C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

CIRCUIT



PACKAGE

<Tape & Reel> 8000 pcs



3.0*2.0 J Terminal SMT Type (H=0.60mm)









FEATURES

%Low profile with 0.60mm %Long operation cycles

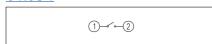
APPLICATION

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

SPECIFICATION

Contact Rating	TOUA, TV DC to SUMA, TZV DC
Contact Resistance	500m $Ω$ max.
Insulation Resistance	100M Ω 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

CIRCUIT

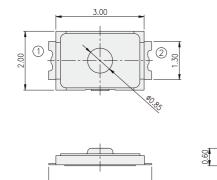


PACKAGE

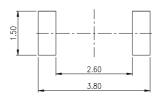
<Tape & Reel> 8000 pcs

HOW TO ORDER T3C QR -Package: Tape & Reel -Halogen Free Operating Force: 2=160gf 3=180gf 4=240gf

T3C







P.C.B. LAYOUT





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

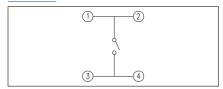
APPLICATION

*Smart phone*Digital camera, Medical*Portable electronic device

SPECIFICATION

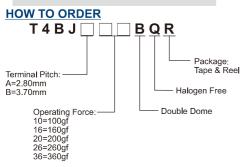
Contact Rating	50MA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	$100M\Omega$ min. $100V$ DC
Dielectric Strength	100V AC/1 minute
Operating Force	100±50gf/160±50gf/200±50gf 260±50gf/360±60gf
Travel	0.2mm
Operating Life	200,000 cycles for 360gf 500,000 cycles for 260/200gf 1,000,000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

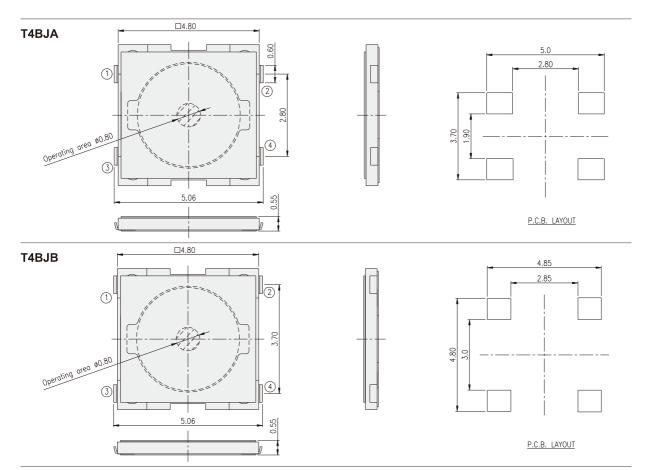
CIRCUIT



PACKAGE

<Tape & Reel> 8000 pcs







TJ-4

FEATURES

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

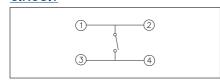
APPLICATION

Smart phoneDigital camera, MedicalPortable electronic device

SPECIFICATION

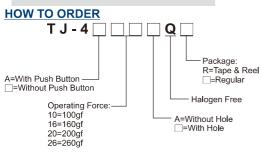
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 500V DC
Dielectric Strength	300V AC/1 minute
Operating Force	100±50gf/160±50gf/200±50gf 260±50gf
Travel	0.2mm
Operating Life	500,000 cycles for 260/200gf 1,000,000 cycles for 160/100gf
Operating Temp.	-20°C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

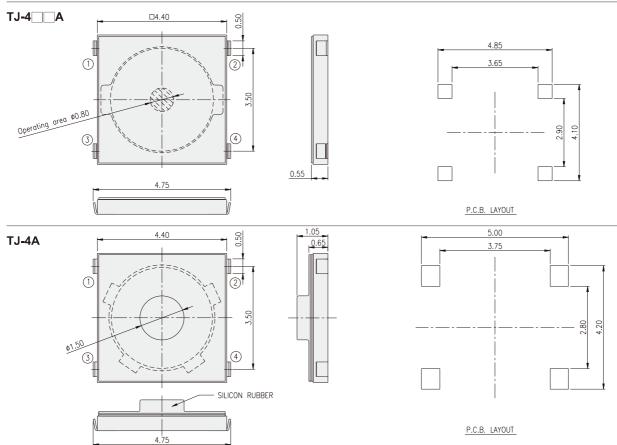
CIRCUIT



PACKAGE

<Tape & Reel> TJ-4: 8000 pcs

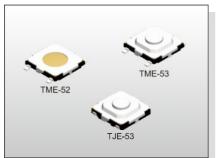




TACT SWITCH

5.2x5.2 SMT & J SMT Type (H: 0.8 / 1.5mm)



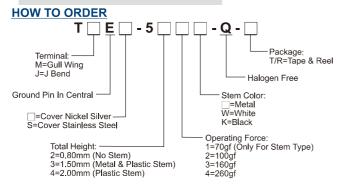


FEATURES

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

APPLICATION

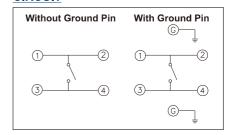
%Smart phone *Digital camera, Medical *Portable electronic device



SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	70±50gf/100±50gf/160±50gf 260±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

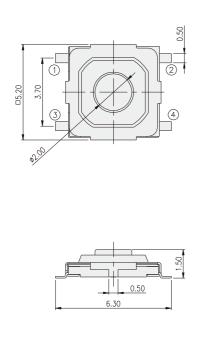
CIRCUIT

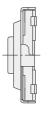


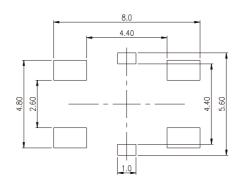
PACKAGE

<Tape & Reel>
T_E-52, 53=4000 pcs
T_E-54=3000 pcs

TME-5



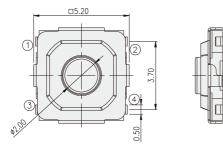


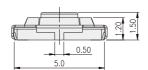


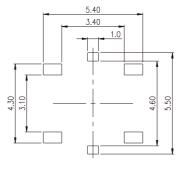
P.C.B. LAYOUT



TJE-53

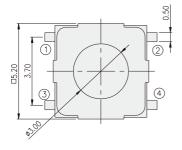


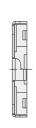


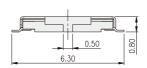


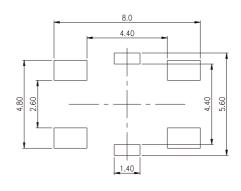
P.C.B. LAYOUT

TME-52



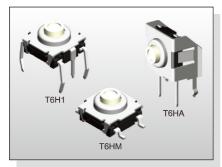






P.C.B. LAYOUT





5=11.34mm

FEATURES

- ★ Vertical actuation
- ★Dust proof structure

APPLICATION

- *Automotive
- ¾ Industrial
- *Instrumentation

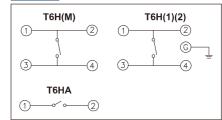
HOW TO ORDER T 6 H 🔲 - 🔲 Package Style: R=Tape & Reel (S.M.T. Type Only) A=Right angle series H=Through holes M=S.M.T Type 1=6x6 ground terminal type 2=S.M.T ground terminal type B=Tube -Halogen Free Contact Plating: G = Plating Ag A= Plating Au Total Height: SMT/Through hole Right angle 1=4.70mm 1=6.04mm Operating Force: 2=130gf 3=160gf 5=300gf 2=5.20mm 2=6.54mm 3=6.90mm 3=8.24mm

6=500gf

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

CIRCUIT

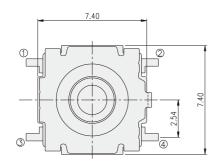


PACKAGE

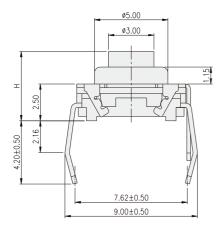
**<Tube> Tube> Tube> The Hamilton Control The Hamilton Control
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The Hamilton Control The Hamilton Control The Hamilton Control
The Hamilton Control
The Hamilton Control The Hamilton Control
The Hamilton Con**

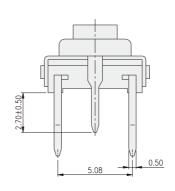
T6H1

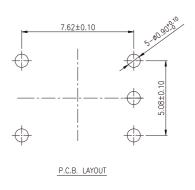
5=10.0mm



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

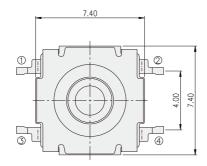




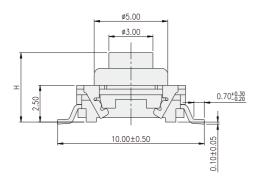


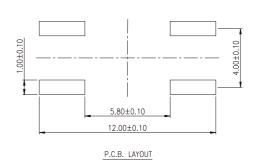


Т6НМ

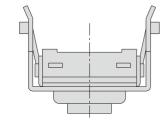


PART NO.	Н
T6HM-1	4.70
T6HM-2	5.20
T6HM-3	6.90
T6HM-5	10.00

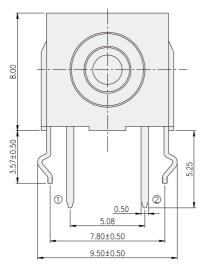


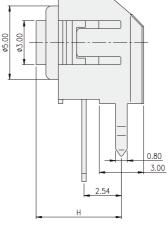


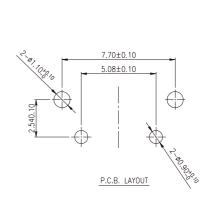
T6HA



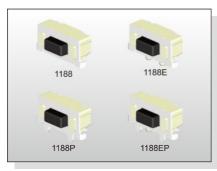
PART NO.	Н
T6HA-1	6.04
T6HA-2	6.54
T6HA-3	8.24
T6HA-5	11.34











※Support / Ground pins options

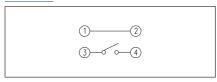
APPLICATION

**Audio, OA equipment
**Instrumentation
**Remote control

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

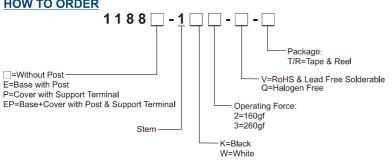
CIRCUIT



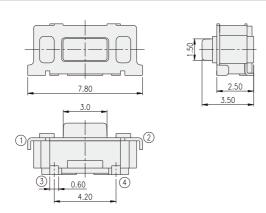
PACKAGE

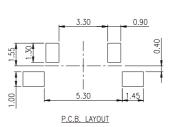
<Tape & Reel> 1500 pcs

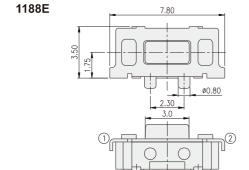
HOW TO ORDER



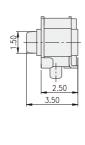
1188

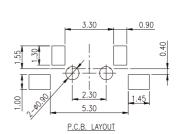






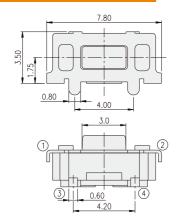
0.60

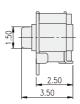


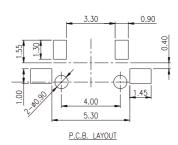




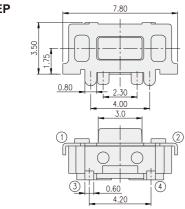
1188P



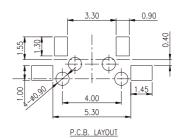




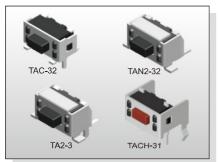
1188EP







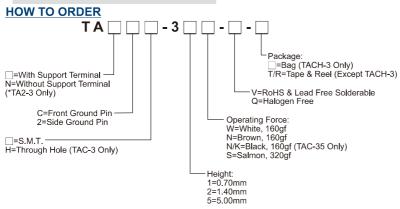




%Side actuated
%Support/Ground pin option
%High solder strength

APPLICATION

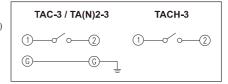
*Data storage, Server*Instrumentation*Audio, OA equipment



SPECIFICATION

50mA, 12V DC	
100mΩ max.	
$100M\Omega$ min. $500V$ DC	
250V AC/1 minute	
160±50gf, 260±50gf	TAC-3
160±50gf, White(W) 160±50gf, Brown(N) 320±50gf, Salmon(S)	TA2-3
0.25mm	
50,000 cycles	
-25°C ~ +70°C	
-40°C ~ +80°C	
	100MΩ min. 500V DC 250V AC/1 minute 160±50gf, 260±50gf 160±50gf, White(W) 160±50gf, Brown(N) 320±50gf, Salmon(S) 0.25mm 50,000 cycles -25°C ~ +70°C

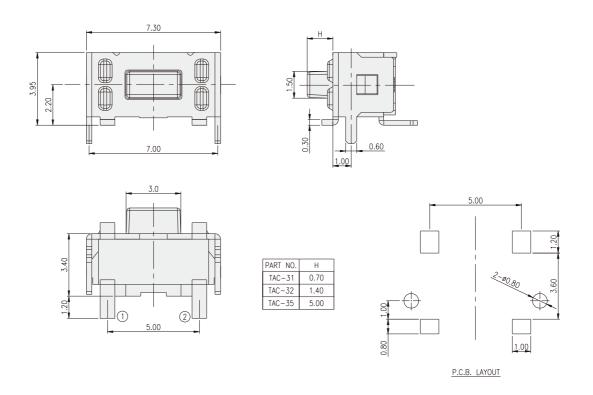
CIRCUIT



PACKAGE

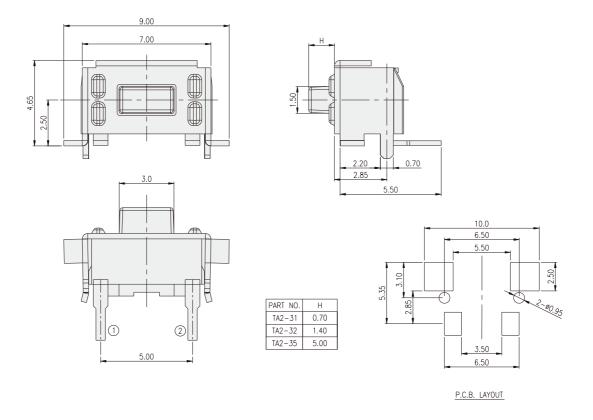
<Bag>
500 pcs(TACH-3 Only)
<Tape & Reel>
900 pcs

TAC-3

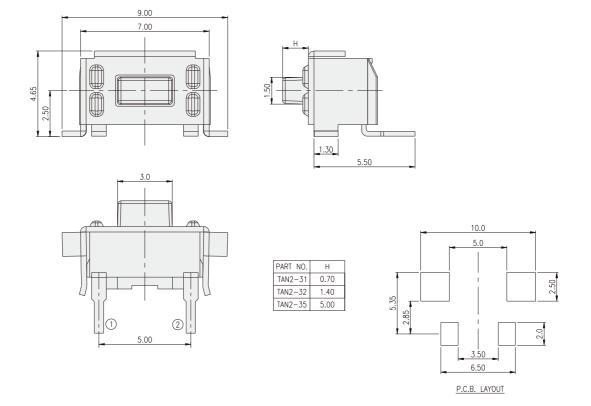


TACT SWITCH

TA2-3

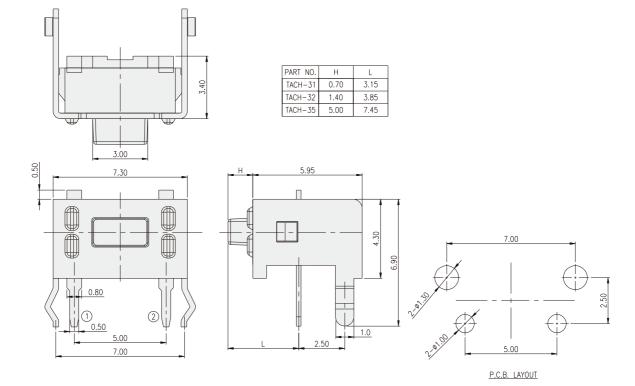


TAN2-3

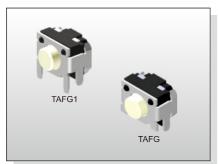




TACH-3







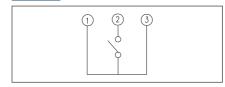
※Miniature 3.3x4.5mm side push type

APPLICATION

SPECIFICATION

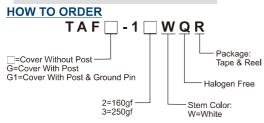
Contact Rating	50mA, 12V DC
Contact Resistance	500m $Ω$ max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf/250±50gf
Travel	0.2mm
Operating Life	100,000 cycles
Operating Temp.	-40°C ~ +85°C
Storage Temp.	-40°C ~ +85°C

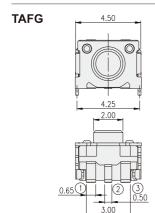
CIRCUIT

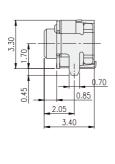


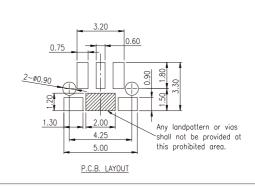
PACKAGE

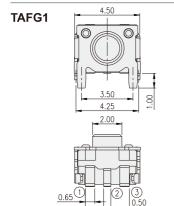
<Tape & Reel> 1800 pcs

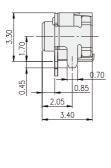


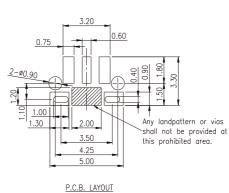
















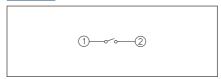
※Compact-sized 1.9x4.5mm **%**Side actuated ※Sealed with dust proof structure

APPLICATION

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

CIRCUIT

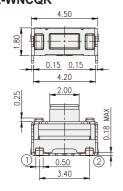


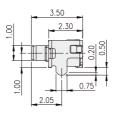
PACKAGE

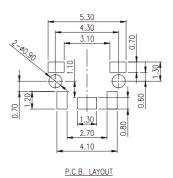
<Tape & Reel>

HOW TO ORDER MTA2-WNCQR Height: =2.05mm 1=1.95mm Package: Tape & Reel Washable Type Operating Force: 180gf Halogen Free - With Post

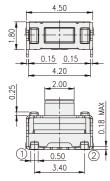
MTA2-WNCQR

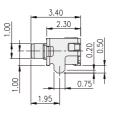


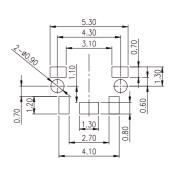




MTA2-WNCQR1







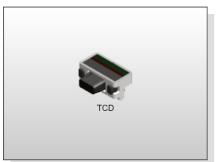
P.C.B. LAYOUT











*Compact-sized %Side actuated *Sealed with dust proof

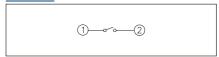
APPLICATION

*Smart phone*Digital Camera, Medical*Portable electronic device

SPECIFICATION

Contact Rating	50mA, 12V DC	
Contact Resistance	100m $Ω$ max.	
Insulation Resistance	100M Ω 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	

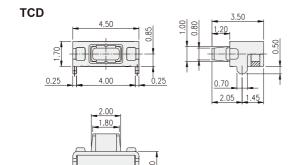
CIRCUIT

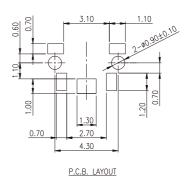


PACKAGE

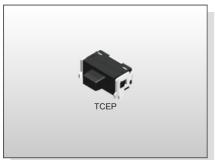
<Tape & Reel>

HOW TO ORDER TCD-C2KQR Package: Tape & Reel Cover With Post Halogen Free Operating Force: 160gf Color Of Stem: Black









※1.65mm above PCB

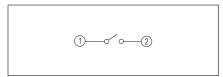
APPLICATION

※Personal audio *Mobile phone*Audio, OA equipment

SPECIFICATION

Contact Rating	20MA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

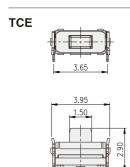
CIRCUIT



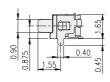
PACKAGE

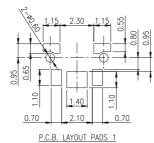
<Tape & Reel>

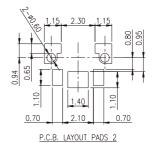




0.40







2.8*1.95 Side Push Type **Mid-mount Switch**











FEATURES

※Miniature 2.8*1.95mm ※Side push mid-mount type 300,000 operation life cycles

300,000 operation life cycles

300,000 operation life cycles **Better soldering peeling strength **Height from surface of PCB:0.975mm

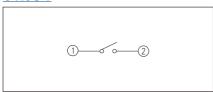
APPLICATION **Smart phone **Medical

- ※Portable electronic device

SPECIFICATION

Contact Rating	10uA,2V DC to 20mA,15V DC
Contact Resistance	$500m\Omega$ max.
Insulation Resistance	$50M\Omega$ 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

CIRCUIT



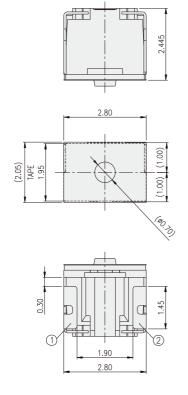
PACKAGE

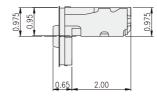
<Tape & Reel> 5000 pcs

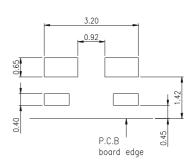
HOW TO ORDER T1C QR -Package: Tape & Reel -Halogen Free

Operating Force: 2=160gf

T1C







P.C.B. LAYOUT

HOW TO ORDER

Operating Force: 2=160gf 3=240gf

=Without Post

TCF QR

Package: Tape & Reel

Halogen Free





FEATURES

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

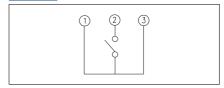
APPLICATION

*Smart phone*Portable personal audio*Digital camera

SPECIFICATION

Contact Rating	10μA, 2V DC to 20mA, 15V DC
Contact Resistance	1000m $Ω$ max.
Insulation Resistance	100M Ω 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

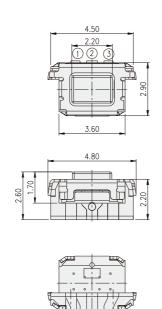
CIRCUIT



PACKAGE

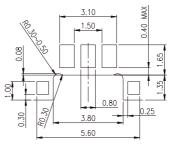
<Tape & Reel> 2400 pcs

TCF

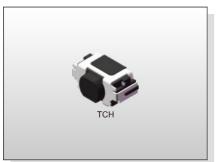


0.60









※Miniature 4.5*2.2mm %Side push mid-mount type

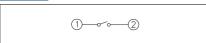
APPLICATION

**Smart phone **Portable personal audio **Digital camera **3C products

SPECIFICATION

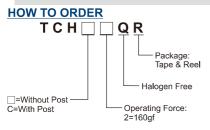
Contact Rating	50mA, 12V DC
Contact Resistance	500m $Ω$ max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	100V AC/1 minute
Operating Force	160±50gf
Travel	0.15mm
Operating Life	600,000 cycles
Operating Temp.	-30°C ~ +85°C
Storage Temp.	-40°C ~ +90°C

CIRCUIT

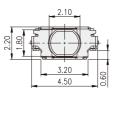


PACKAGE

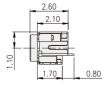
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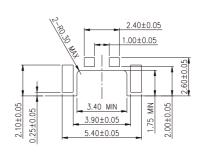
TCH





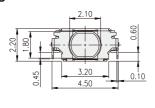




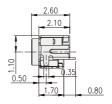


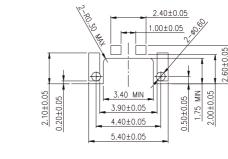
P.C.B. LAYOUT

TCHC









P.C.B. LAYOUT

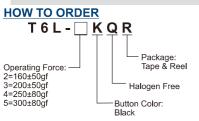




*Miniature 5.9*6.0mm %Long Travel type %100,000 operation life cycles

APPLICATION

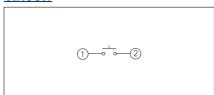
*Automotive*Instrumentation*Audio



SPECIFICATION

Contact Rating	10uA,1V DC to 50mA,16V DC
Contact Resistance	100m Ω max. 500V DC
Insulation Resistance	100M Ω 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

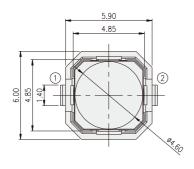
CIRCUIT

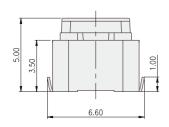


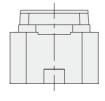
PACKAGE

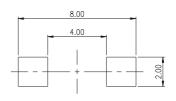
<Tape & Reel> 1200 pcs

T6L









P.C.B. LAYOUT



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

APPLICATION

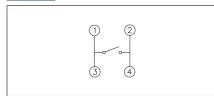
*Automotive*Instrumentation*Audio

HOW TO ORDER LT L - 6 1 3 - - Package: T/R=Tape & Reel V=RoHS & Lead Free Solderable Q=Halogen Free Operating Force: R=200gf S=350gf Travel:1.30mm

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100mΩ max. 500V DC
Insulation Resistance	100M Ω 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

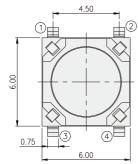
CIRCUIT

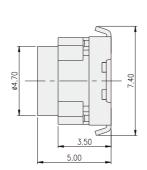


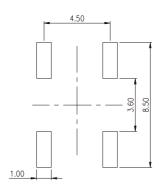
PACKAGE

<Tape & Reel> 900 pcs

LTL-6







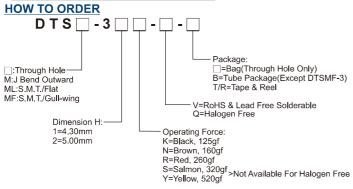
P.C.B. LAYOUT



Compact size 3.5x6 mmSharp click feelingChoice of SMT terminal type

APPLICATION

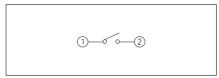
**Audio, OA equipment **Instrumentation **Industrial



SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

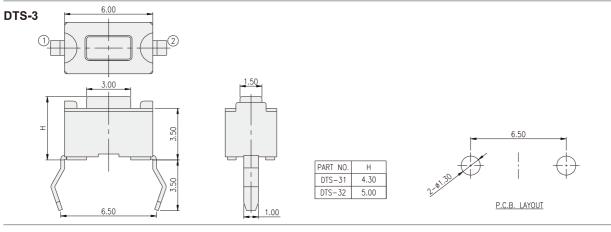
CIRCUIT

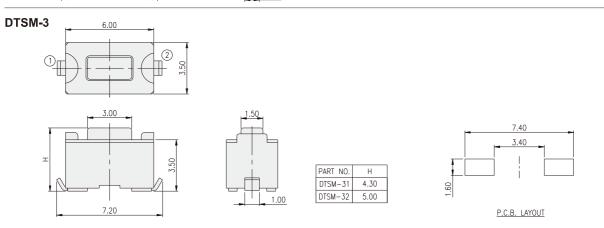


PACKAGE

<Tube>
DTS(M)(L)-3: 135 pcs
<Bulk>
1000 pcs
<Tape & Reel>

DTSM(L)(F)-31: 1800 pcs DTSM(L)(F)-32: 1600 pcs

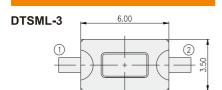


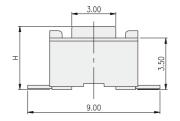


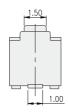
3.5x6 Through Hole & SMT Type Tactile Switch



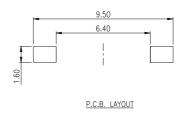


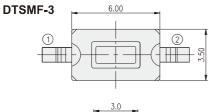


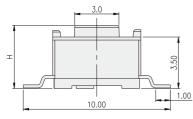


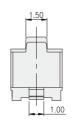


PART NO.	Н
DTSML-31	4.30
DTSML-32	5.00

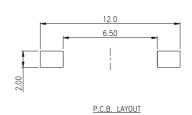








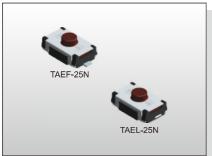




TACT SWITCH

3.8x6 Thinner Type **Tactile Switch**



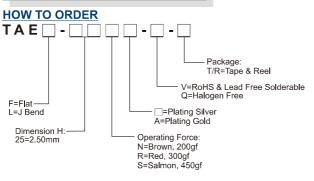


FEATURES

%Choice of actuation force

APPLICATION

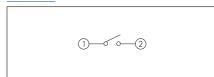
**Car remote control **Audio, OA equipment **Instrumentation



SPECIFICATION

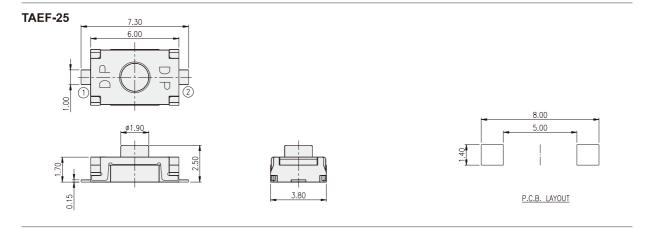
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 100V DC
Dielectric Strength	300V AC/1 minute
Operating Force	200gf, Brown(N) 300gf, Red(R) 450gf, Salmon(S)
Travel	0.30mm, Brown(N) 0.35mm, Red(R) 0.45mm, Salmon(S)
Operating Life	100,000 cycles (S) 200,000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

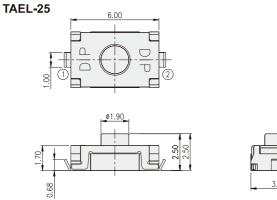
CIRCUIT



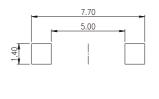
PACKAGE

<Tape & Reel> 2700 pcs







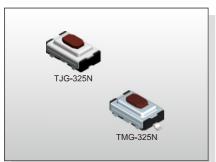


P.C.B. LAYOUT

3.7x6 Thinner Type Tactile Switch





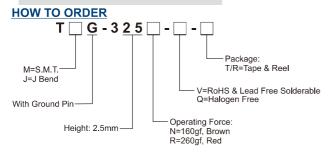


FEATURES

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

APPLICATION

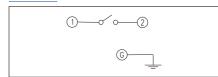
**Consumer products **Instrumentation **Industrial



SPECIFICATION

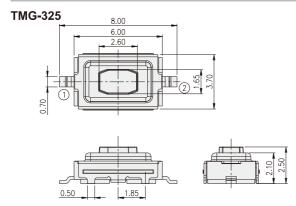
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	$100M\Omega$ min. $500V$ DC
Dielectric Strength	300V AC/1 minute
Operating Force	160±50gf, Brown(N) 260±50gf, Red(R)
Travel	0.25mm
Operating Life	20,000 cycles for 260gf 50,000 cycles for 160gf
Operating Temp.	-25°C ~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

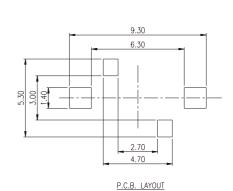
CIRCUIT

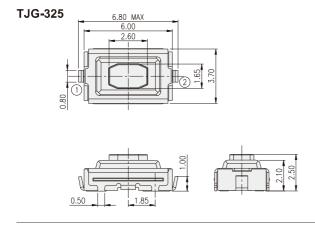


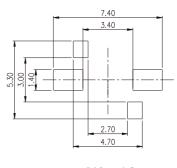
PACKAGE

<Tape & Reel> 2800 pcs









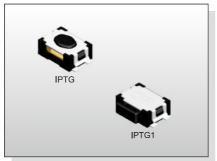
P.C.B. LAYOUT

TACT SWITCH IPT SERIES

2.8x3.8 Side Push / Vertical Push Type



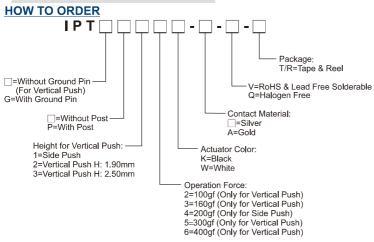




FEATURES

※Compact-sized 2.8x3.8mm XVertical or side actuation

APPLICATION



SPECIFICATION

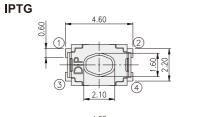
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 500V DC
Dielectric Strength	100V AC/1 minute
Operating Force	100±50gf, 160±50gf (Vertical Push) 200±65gf (Side Push) 300±80gf, 400±80gf (Vertical Push)
Travel	0.13mm (Vertical Push) 0.20mm (Side Push)
Operating 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

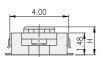
CIRCUIT

Without Ground Pin	With Ground Pin
1 2	1 2
3 4	3—4

PACKAGE

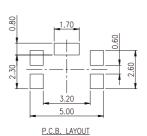
<Tape & Reel>
IPTGP1: 3000 pcs
IPTG1: 3500 pcs IPTG2: 7000 pcs IPTG3: 6000 pcs

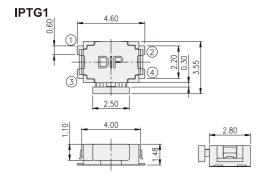


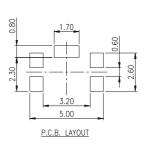




PART NO.	Н
IPTG2	1.90
IPTG3	2.50









MPTCFGP1 MPTCFGP2

FEATURES

*Compact-sized 2.9x3.9mm ※Reflow solderable

APPLICATION

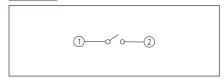
HOW TO ORDER $\mathsf{MPT} \ \square \ \square$ Package: T/R=Tape & Reel -V=RoHS & Lead Free Solderable Q=Halogen Free =Without Post C=With Post Height for Vertical Push: =Side Push P1=Vertical Push H: 1.50mm P2=Vertical Push H: 2.00mm P6=Vertical Push H: 2.50mm F=Flat— L=J Bend

- ☐=Without Ground Pin G=With Ground Pin

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

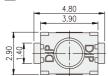
CIRCUIT

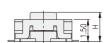


PACKAGE

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

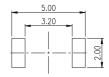
MPTFP_





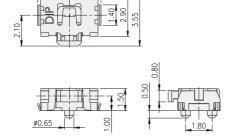


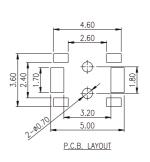
PART NO.	Н
MPTFP1	1.50
MPTFP2	2.00
MPTFP6	2.50



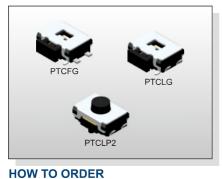
P.C.B. LAYOUT

MPTCLG









%For high density mounting %Vertical or side actuation %Reflow solderable

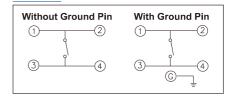
APPLICATION

Package: T/R=Tape & Reel V=RoHS & Lead Free Solderable Q=Halogen Free C=With Post =Without Top Sealed T=With Top Sealed(For Side Push) Height for Vertical Push: =Side Push P1=Vertical Push H: 2.10mm P2=Vertical Push H: 2.50mm P4=Vertical Push H: 4.30mm

SPECIFICATION

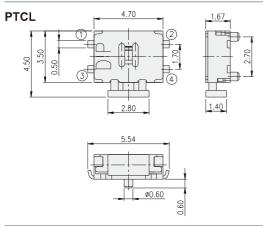
Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω min. 500V DC
Dielectric Strength	250V AC/1 minute
Operating Force	160±50gf (Vertical Push) 220+80/-70gf (Side Push)
Travel	0.20mm (Vertical Push) 0.30mm (Side Push)
Operating Life	100,000 cycles
Operating Temp.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

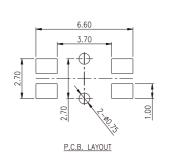
CIRCUIT

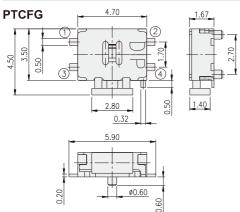


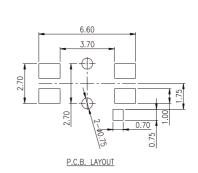
PACKAGE

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



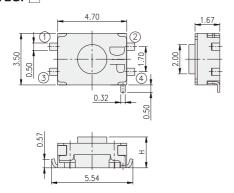




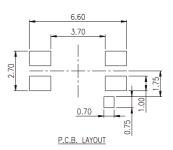




PTLGP_



PART NO.	Н
PTLGP1	2.10
PTLGP2	2.50
PTLGP4	4.30







%Miniature 2.9x3.5mm

%Vertical or side actuation
%Long operating life

APPLICATION

*Mobile phone
*Consumer electronics
*Automotive

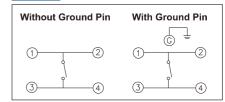
HOW TO ORDER TBF Package: Tape & Reel Halogen Free Color Stem: K=Black W=White A Through Hole (For Side Push) L=J Bend F=Flat D=2 Flat & Through Hole (For Side Push) =Without Post P=With Post Height For Vertical Push: 1=Side Push 2=Vertical Push H:1.70mm

TBF31_K

SPECIFICATION

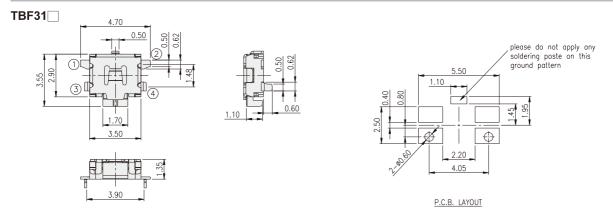
	Contact Rating	10μA, 2V DC to 20mA, 15V DC
	Contact Resistance	100m $Ω$ max.
	Insulation Resistance	100M Ω min. 100V DC
	Dielectric Strength	250V AC/1 minute
	Operating Force	100±50/160±50/240±80/350±100gf (Vertical Push)
		160+70/-40, 220+80/-70gf (Side Push)
	Travel	0.15mm (Vertical Push)
		0.20mm (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

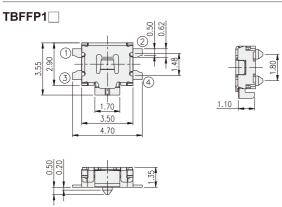
CIRCUIT

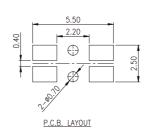


PACKAGE

<Tape & Reel>

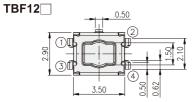




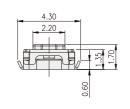


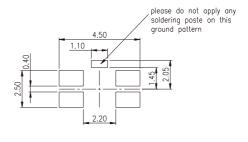






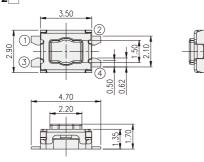


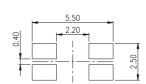




P.C.B. LAYOUT

TBFF2





P.C.B. LAYOUT





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

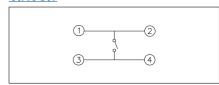
APPLICATION

SPECIFICATION

Contact Rating	50mA, 12V DC
Contact Resistance	100m $Ω$ max.
Insulation Resistance	100M Ω 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

CIRCUIT

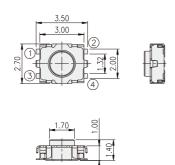
Storage Temp. -40°C ~ +90°C

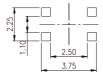


PACKAGE <Tape & Reel> 8000 pcs

HOW TO ORDER TBE - - Q - - Package: T/R=Tape & Reel G=With Ground Pin— □=Without Ground Pin Halogen Free Operating Force: N=Brown, 160gf W=White, 200gf =Black, 400gf

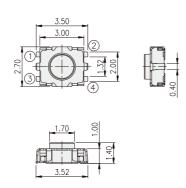
TBE

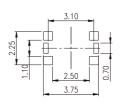




P.C.B. LAYOUT

TBEG





P.C.B. LAYOUT