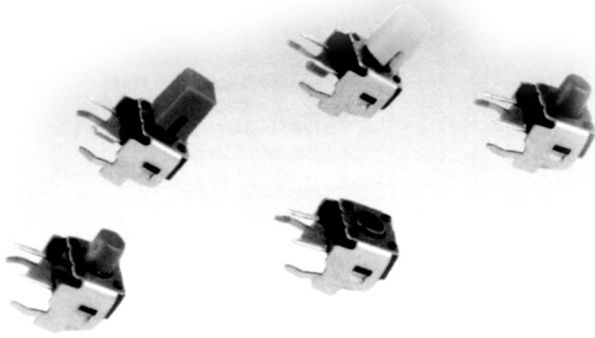
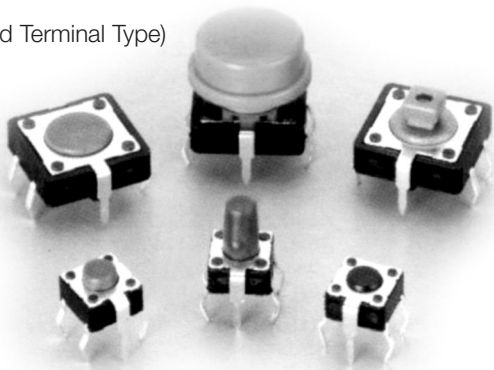


DTSA (RIGHT ANGLE) & DTSG (GROUND TERMINAL) SERIES (Square STEM with CAP Options)

DTSA (Right Angle Type)



DTSG (Ground Terminal Type)



FEATURES

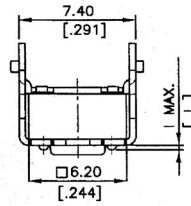
1. Sharp click feel with a positive tactile feedback. Due to a small movement distance (stroke), user experiences distinct sensation when the switch “clicks” into place.
2. Ultraminiature and light weight structure suitable for high density mounting. Economic but high reliability.
3. Insert molding in the contact with special treatment prevents flux build-up during soldering and permits auto-dipping.

MATERIALS

- △ Cover: Steel, Tin plated.
- △ Base: UL94V-O Nylon Thermoplastic.
Color: Black.
- △ STEM: UL94V-O Nylon Thermoplastic.
Color: Black (100gf), Brown (160gf), Red (260gf), Salmon (320gf), Yellow (520gf).
- △ Contact Disc: Phosphor bronze with silver cladding (standard).
Stainless Steel (V – Option) Only for 6x6
- △ Terminal: Brass with silver plated.
- △ CAP: Thermoplastic ABS.

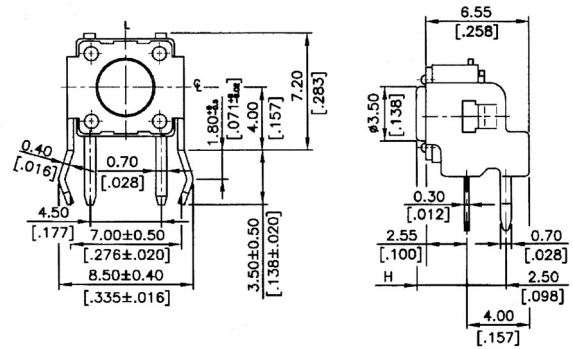
DIMENSIONS

DTSA-6

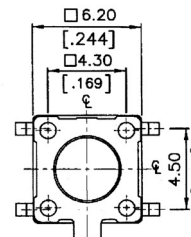


DTSA-62-66 □-(G)-V	0.4 Max	.016 Max
DTSA-61 □-(G)-V	0.3 Max	.012 Max
PROD.	NO.	I INCHES

DTSA-66 □-(G)-V	11.85 [0.467]
DTSA-65 □-(G)-V	8.35 [0.329]
DTSA-63 □-(G)-V	5.85 [0.250]
DTSA-62 □-(G)-V	3.85 [0.152]
DTSA-61 □-(G)-V	3.15 [0.124]
PROD.	NO. H

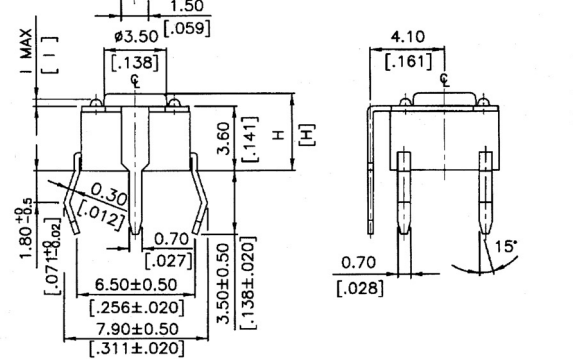


DTSG-6

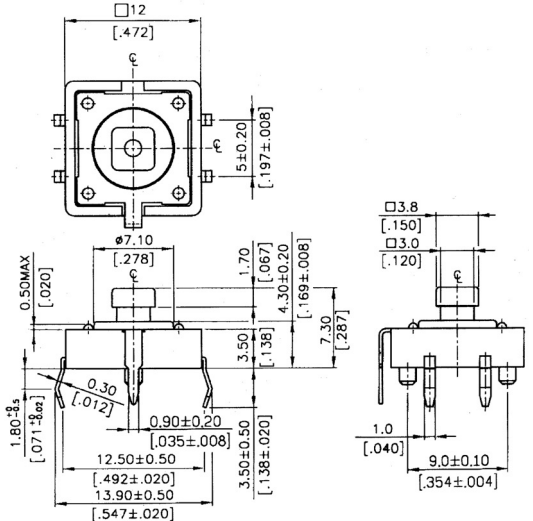


DTSG-62-66 □-(G)-V	0.5 Max	.0196 Max
DTSG-61 □-(G)-V	0.4 Max	.016 Max
PROD.	NO.	I INCHES

DTSG-66 □-(G)-V	13.0 [0.512]
DTSG-65 □-(G)-V	9.5 [0.374]
DTSG-63 □-(G)-V	7.0 [0.275]
DTSG-62 □-(G)-V	5.0 [0.197]
DTSG-61 □-(G)-V	4.3 [0.169]
PROD.	NO. H



DTSG(P)-2



General Tolerance: ± 0.2 mm (± 0.008")



SPECIFICATION

Mechanical

- Operation Force: 520 ± 130gf Yellow (Y)
320 ± 80gf Salmon (S)
260 ± 50gf Red (R)
160 ± 50gf Brown (N)
100 ± 50gf Black (K)
- Stop Strength: Max 3kgf vertical static load continuously for 15 seconds
- Stroke: (6x6) 0.25±0.2mm -0.1mm
(12x12) 0.35±0.1mm
- Operation Temperature Range: -25 °C to 70 °C
- Storage Temperature Range: -30 °C to 80 °C
- Vibration Test: MIL-STD-202F METHOD 201A.
Frequency: 10-55-10Hz/1 minute.
Directions: X, Y, Z, three mutually perpendicular directions.
Time: 2 hours each direction.
High reliability.
- Shock Test: MIL-STD-202F METHOD 213 B.
CONDITION A.
Gravity: 50G (peak value), 11 msec.
Direction and times: 6 sides and 3 times in each direction.
High reliability.

Electrical

- Electrical Life (6x6): 300,000 cycles for 320gf, 520gf.
500,000 cycles for 260gf.
1,000,000 cycles for 100gf, 160gf.
- Electrical Life (12x12): 100,000 cycles for 320gf.
100,000 cycles for 260gf.
200,000 cycles for 160gf.
- Rating: 50 mA, 12VDC.
- Contact Resistance: 100 mΩ max.
- Insulation Resistance: 100 MΩ min. at 500VDC.
- Dielectric Strength: 250VAC/1 minute.
- Contact Arrangement: 1 pole 1 throw.

SOLDERING PROCESSES

△ Wave soldering: Recommended solder temperature at 500 °F (260 °C) max. 5 seconds subject to PCB 1.6mm thickness. (For through hole type).

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

PACKAGING

- DTSA-6 series: 500 pcs/bag
- DTSG-2 series: 500 pcs/bag
- DTSG-6 series: 1000 pcs/bag

HOW TO ORDER

D T S □ □ - □ □ □ □ - (□ □ □ □)

(046) = Total H: 7.0mm

Soldering:
V = Lead Free Solderable

Color of Stem for Operating Force:
▲ K = Black, 100gf
N = Brown, 160gf
R = Red, 260gf
S = Salmon, 320gf
▲ Y = Yellow, 520gf
<▲ 12x12 K, Y Unavailable>

Dimension H:

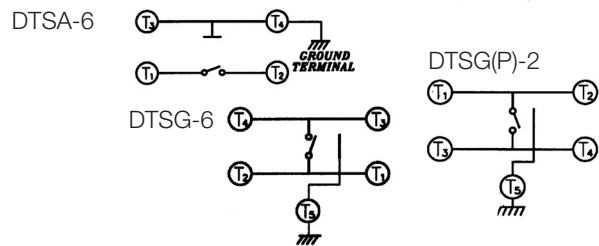
CODE	DTSA-6	DTSG-6	DTSG(P)-2
▲(SQ.)x2.4 mm	1 = 3.15 mm	1 = 4.3 mm	1 = 4.3 mm
(SQ.)x2.8 mm	2 = 3.85 mm	2 = 5.0 mm	4 = 7.3 mm
	3 = 5.85 mm	3 = 7.0 mm	(SQ)x3.8 mm
	▲44 = 6.15 mm	▲44 = 7.3 mm	5 = 8.5 mm
	▲48 = 6.15 mm	▲48 = 7.3 mm	
	5 = 8.35 mm	5 = 9.5 mm	
	6 = 11.85 mm	6 = 13.0 mm	

Prod. Size
6 = 6x6mm
▲ 2 = 12x12mm
<▲ 12x12 only for DTSG>

□ = None Post
▲ P = With Post
<▲ Only for 12x12>

DTSA = Right Angle Type Tactile Switch
DTSG = With Ground Terminal Type Tactile Switch

CIRCUIT



P.C.B. LAYOUT

