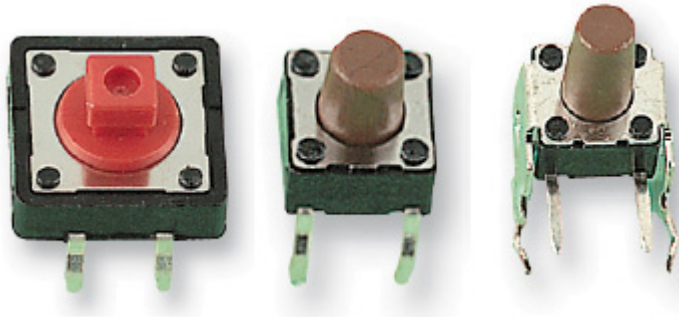


Tact Switches - SPNO & Caps



MCDTS Series



Specifications:

Materials

Cover	: Stainless steel
Base	: Nylon thermoplastic
Colour	: Black
Stem	: Nylon thermoplastic
Colours	: Black (100 gf), Brown (160 gf), Red (260 gf)
Contact Disc	: Phosphor bronze with silver cladding
Terminal	: Brass with silver cladding
Cap	: Thermoplastic ABS

Mechanical

Operation force	: 160 ±50 gf Brown (N) 260 ±50 gf Red (R) 100 ±50 gf Black (K) 350 g Salone (S)
Stop Strength	: Place the switch such that a vertical, static load of 3kgf shall be applied in the direction of the stem operation for a period of 15 seconds
Stroke	: (12 × 12) 0.35 ±0.1 mm (6 × 6) 0.25 +0.2 mm / -0.1 mm
Operating Temperature	: -25°C to +70°C
Storage Temperature	: -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 213B Condition A Gravity : 50 G (peak value), 11 m seconds Direction and Times : 6 sides and 3 times in each direction High reliability

Electrical

Electrical Life	: 260 gf has 50,000 cycles 100 gf, 160 gf has 500,000 cycles
Current Rating	: 50 mA, 12 V dc

Features:

- Sharp click feel with a positive tactile feedback. Due to small movement distance (stroke), user experiences distinct sensation when the switch “clicks” into place
- Ultraminiature and light weight structure suitable for high density mounting. Economic with high reliability
- Insert moulding in the contact has a special treatment which prevents flux build-up during soldering and permits auto-dipping
- Comprehensive range of SPNO tact switches
- Select by overall height, body, actuator length, and operating force

Contact Resistance	: 100 m maximum
Insulation Resistance	: 10 M 500 V dc
Dielectric Strength	: 250 V ac / 1 minute
Wave Solder	: 260°C maximum 5 seconds 1.6 mm PCB
Hand Solder	: 320°C 2 seconds 30 W iron
PCB Hole Diameter	: 1 ±0.05 mm

Wave Soldering	: Recommended solder temperature at 500°F (260°C) maximum 5 seconds subject to PCB thickness of 1.6 mm
Hand Soldering	: Use a soldering iron of 30 watts, controlled at 08°F (320°C) approximately for 2 seconds while applying solder

Figure 1 shows the dimensions of the MCDTS-6. The dimensions are as follows:

- Top View:**
 - Overall width: 6.2 (0.244)
 - Overall height: 6.2 (0.244)
 - Central hole diameter: $\varnothing 3.5$ (0.138)
 - Distance from center to corner hole center: 4.5 (0.177)
- Front View:**
 - Overall width: 6.2 (0.244)
 - Overall height: 6.2 (0.244)
 - Central hole diameter: $\varnothing 3.5$ (0.138)
 - Distance from center to corner hole center: 4.5 (0.177)
 - Distance from top edge to center hole center: 1.7 (0.067)
 - Distance from bottom edge to center hole center: 1.7 (0.067)
 - Distance from left edge to center hole center: 1.7 (0.067)
 - Distance from right edge to center hole center: 1.7 (0.067)
- Side View:**
 - Overall width: 6.2 (0.244)
 - Overall height: 6.2 (0.244)
 - Central hole diameter: $\varnothing 3.5$ (0.138)
 - Distance from center to corner hole center: 4.5 (0.177)
 - Distance from top edge to center hole center: 1.7 (0.067)
 - Distance from bottom edge to center hole center: 1.7 (0.067)
 - Distance from left edge to center hole center: 1.7 (0.067)
 - Distance from right edge to center hole center: 1.7 (0.067)
- Bottom View:**
 - Overall width: 6.2 (0.244)
 - Overall height: 6.2 (0.244)
 - Central hole diameter: $\varnothing 3.5$ (0.138)
 - Distance from center to corner hole center: 4.5 (0.177)
 - Distance from top edge to center hole center: 1.7 (0.067)
 - Distance from bottom edge to center hole center: 1.7 (0.067)
 - Distance from left edge to center hole center: 1.7 (0.067)
 - Distance from right edge to center hole center: 1.7 (0.067)

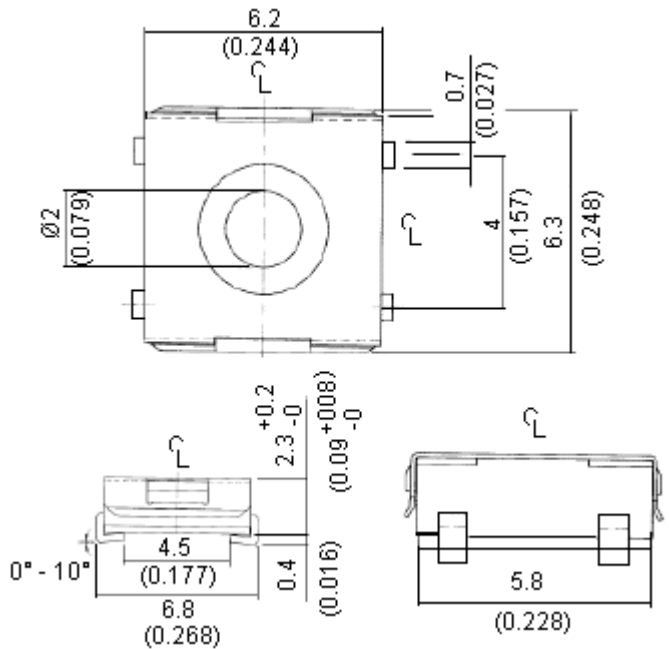


Tact Switches - SPNO & Caps



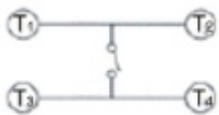
MCDTS Series

MCDTSJW6

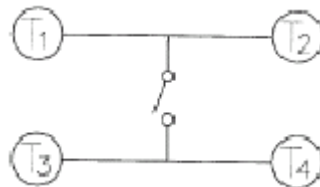


Circuit

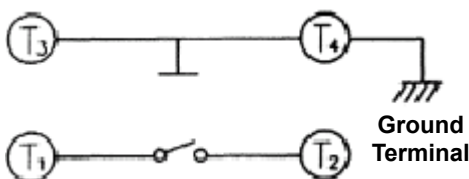
MCDTS-2 and MCDTS-6



MCDTSJW6

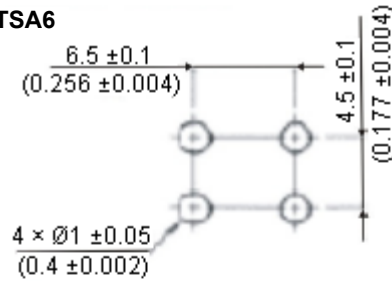


MCDTSA6

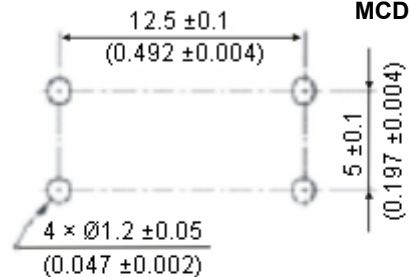


P.C.B. Layout

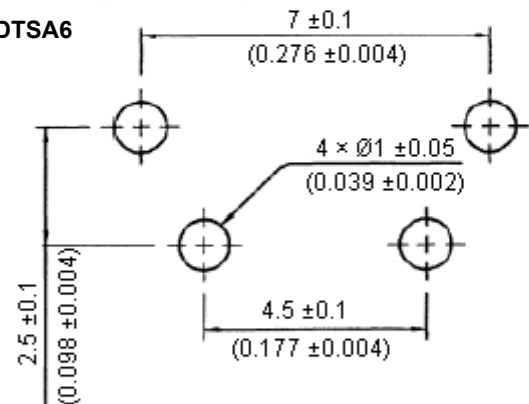
MCDTSA6



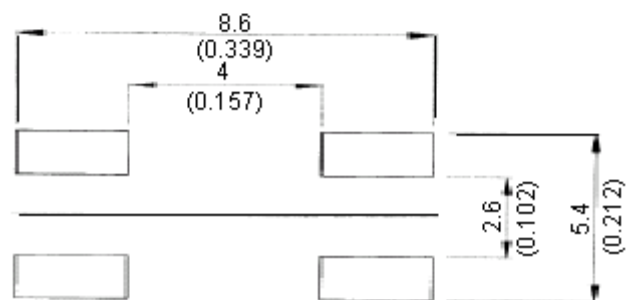
MCDTS-2



MCDTSA6



MCDTSJW6



Dimensions : Millimetres (Inches)

MCDTS2 Series (12 mm × 12 mm)

Actuator Style / Operating Force (gf)	PCB Drilling	Part Number
4.3 / 160	12.5 × 5	MCDTS2-1N
7.3 (SQ) × 3.8 / 260		MCDTS2-4R
4.3 / 260		MCDTS2-1R

Dimensions : Millimetres (Unless Specified)

Specification Table

Termination Type	Part Number
J Type S.M.T.	MCDTSJW6-6N

Tact Switches - SPNO & Caps



MCDTS Series

MCDTS6 Series (6 mm × 6 mm)

Overall Height / Operating Force (gf)	PCB Drilling	Part Number
4.3 / 100	6.5 × 4.5	MCDTS6-1K
4.3 / 160		MCDTS6-1N
4.3 / 260		MCDTS6-1R
5 / 160		MCDTS6-2N
5 / 260		MCDTS6-2R
7 / 100		MCDTS6-3K
7 / 160		MCDTS6-3N
7 / 260		MCDTS6-3R
9.5 / 100		MCDTS6-5K
9.5 / 160		MCDTS6-5N
9.5 / 260		MCDTS6-5R
8.35 / 100	-	MCDTSA6-5K
8.35 / 160	-	MCDTSA6-5N
8.35 / 260	-	MCDTSA6-5R
3.85 / 100	-	MCDTSA6-2K
3.85 / 160	-	MCDTSA6-2N

Dimensions : Millimetres (Unless Specified)

MCDTSHW6



Features:

- High reliability, long operating life
- MCDTSHW6 Series (6 mm × 6 mm) Washable - PCB drilling 6.5 mm × 4 mm

Specifications:

Electrical	
Current Rating	: 50mA
Minimum Voltage Rating	: 12 V dc
Maximum Contact Resistance	: 100 m
Insulation Resistance	: 10 M 500 V dc
Dielectric Strength	: 250 V ac / 1 minute
Stop Strength	: 3 kgf 15 Seconds
Wave Solder	: 260°C maximum 5 s 1.6 mm PCB
Electrical Life	: 100,000 operations minimum
Hand Solder	: 320°C 2 S 30 W iron
PCB Hole Diameter	: 1 ±0.05 mm
Operating Temperature	: -25°C to +70°C

Specifications Table

Overall Height / Operating Force (gf)	Part Number
3.8 / 160	MCDTSHW6-9N-B

Dimensions : Millimetres (Unless Specified)

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