MCDTS Series









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

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 : $(12 \times 12) 0.35 \pm 0.1 \text{ mm}$

(6 × 6) 0.25 +0.2 mm / -0.1 mm

Operating Temperature
Storage Temperature

: -25°C to +70°C : -30°C to +80°C

Vibration Test

: MIL-STD-202F method 201A

Francisco A 40

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

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MCDTS Series



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

Soldering Process

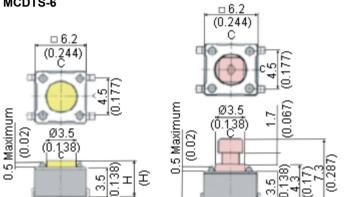
: Recommended solder temperature at 500°F (260°C) maximum 5 seconds subject to PCB thickness of Wave Soldering

Hand Soldering : Use a soldering iron of 30 watts, controlled at 08°F (320°C) approximately for 2 seconds while applying

solder

Dimensions:

MCDTS-6



.0714

1.8 - 0.5

0.3

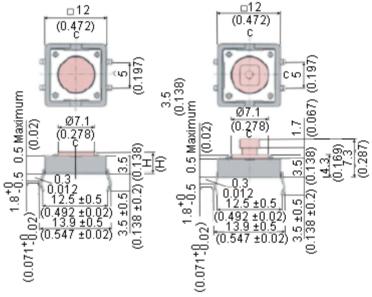
(0.012)

6.5 ±0.5

(0.256 ±0.2) + 7.9 ±0.5 % (0.311 ±0.02) **



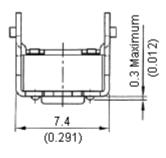
MCDTS-2



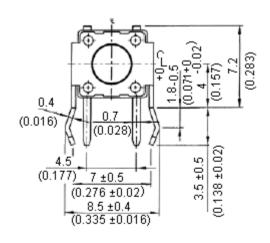
MCDTSA6

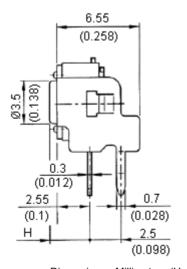
6.5 ±0.5

 (0.256 ± 0.2)



 (0.141 ± 0.02)





Dimensions: Millimetres (Unless Specified)

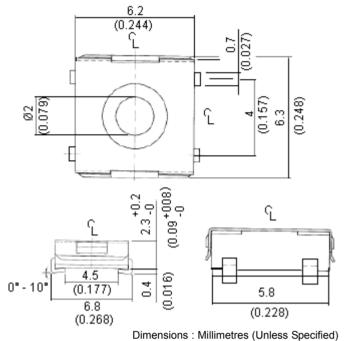
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MCDTS Series

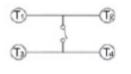


MCDTSJW6

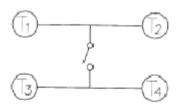


Circuit

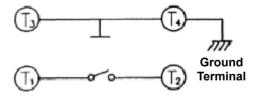
MCDTS-2 and MCDTS-6



MCDTSJW6



MCDTSA6

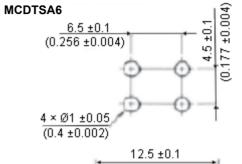


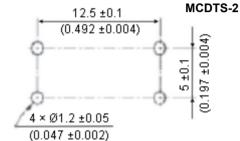
MCDTS2 Series (12 mm × 12 mm)

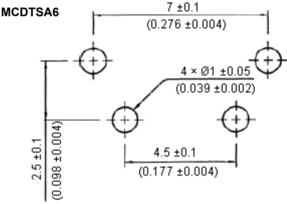
Actuator Style / Operating Force (gf)	PCB Drilling	Part Number
4.3 / 160	12.5 × 5	MCDTS2-1N
7.3 (SQ) × 3.8 / 260		MCDTS2-4R
4.3 / 260		MCDTS2-1R

Dimensions : Millimetres (Unless Specified)

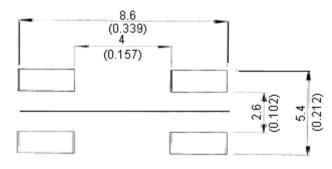
P.C.B. Layout







MCDTSJW6



Dimensions: Millimetres (Inches)

Specification Table

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

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MCDTS Series



MCDTS6 Series (6 mm × 6 mm)

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

MCDTSHW6

Features:



High reliability, long operating life

Dimensions: Millimetres (Unless Specified)

• 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 $+70^{\circ}$ C

Specifications Table

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

Dimensions : Millimetres (Unless Specified)

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