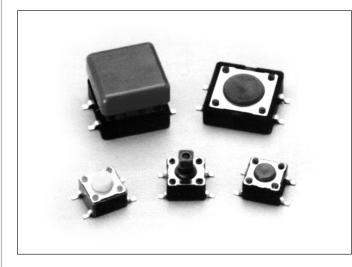
## ATECO Diptronics

## DTSM(G)-6(2) SERIES (SMT/Surface Mounting)



## **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**

(6x6)

- $\triangle$  Cover: Stainless Steel (for DTSM-6). Nickel Silver (for DTSMG-6).
- △ Contact Disc: Phosphor bronze with silver cladding (Standard). Stainless Steel (V option)
- $\bigtriangleup$  Terminal: Brass with silver plated.
- $\triangle$  Base: UL94V-O Nylon High-Temp. Thermoplastic.
- △ STEM: UL94V-O Nylon High-Temp. Thermoplastic. Color: Black (100gf), Brown (160gf), Red (260gf), Salmon (320gf), Yellow (520gf).

### (12x12)

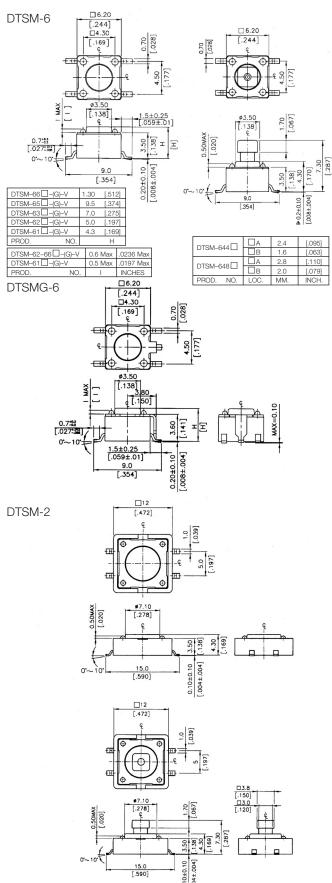
- $\bigtriangleup$  Cover: Stainless Steel (for DTSM-2).
- $\triangle$  Contact Disc: Phosphor bronze with silver cladding
- $\bigtriangleup$  Terminal: Brass with silver plated.
- $\triangle$  Base: UL94V-O Nylon High-Temp. Thermoplastic.
- △ STEM: UL94V-O Nylon High-Temp. Thermoplastic. Color: Brown (160gf),

Red (260gf), Salmon (320gf).

## PACKAGING

DTSM-6: 77 pcs/tube DTSM(G)-61: 1000 pcs/reel DTSM(G)-62: 900 pcs/reel DTSM-63: 700 pcs/reel DTSM-644/648: 500 pcs/reel DTSM-65: 380 pcs/reel DTSM-2 : 40 pcs/tube DTSM-21: 700 pcs/reel DTSM-24: 500 pcs/reel DTSM-25: 400 pcs/reel

## **DIMENSIONS**



General Tolerance: ± 0.2 mm (± 0.008")

Diptronics ATECC

# RoHS Compliant

## **SPECIFICATION**

#### Mechanical

- Operation Force: 520 ± 130gf Yellow (Y)
  - 320 ± 80gf Salmon (S) 260 ± 50gf Red (R)
  - $160 \pm 50gf$  Brown (N)
  - $100 \pm 50$ gf Black (K)
- 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.

### 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.

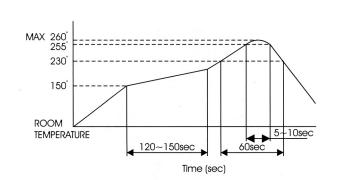
Temperature profile:

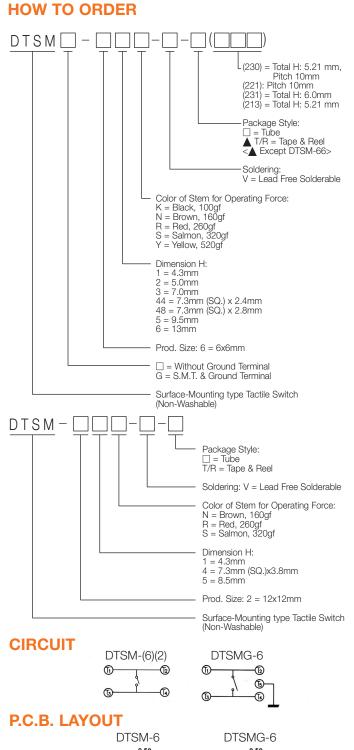
- Contact Resistance: 100 m $\Omega$  max.
- Insulation Resistance:100  $\mbox{M}\Omega$  min. at 500VDC.
- Dielectric Strength: 250VAC/1 minute.
- Contact Arrangement: 1 pole 1 throw.

## **SOLDERING PROCESSES**

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

△ Reflow soldering: When applying reflow Soldering, the peak temperature or the reflow oven should be set to 260 °C max.





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