DTSM-32S-B - Tact Switches

**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 lightweight structure suitable for high density mounting. Economic but high reliability.
- Insert moulding in the contact with special treatment prevents flux build-up during soldering and permits auto-dipping.

**Materials:**
- **Cover**: Stainless steel.
- **Base**: Nylon or PPA high temperature thermoplastic.
  - Colour: Black.
- **Stem**: Nylon high temperature thermoplastic.
  - Colour: Salmon (320gf).
- **Contact disc**: Stainless steel with silver cladding.
- **Terminal**: Brass with silver cladding.

**Dimensions**: Millimetres (Inches)

**General Tolerance Maximum ±0.20mm**

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**TOLERANCES:**
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

**DRAWN BY:** S. Krishna  
**DATE:** 12/04/06

**CHECKED BY:** K. Suresh  
**DATE:** 12/04/06

**APPROVED BY:** N. Kiwomya  
**DATE:** 26/04/06
Specifications:

**Mechanical:**
- **Operation Force:** 320 ±80gf Salmon (S).
- **Stroke:** 0.25 (+0.2/-0.1mm).
- **Operating 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 213B.
- **Condition A.**
  - **Gravity:** 50G (peak value), 11 milliseconds.
  - **Direction and times:** 6 sides and 3 times in each direction.
  - High reliability.

**Electrical:**
- **Electrical Life:** 50,000 cycles for 320gf.
- **Contact Resistance:** 100mΩ maximum.
- **Insulation Resistance:** 100MΩ minimum at 500V dc.
- **Dielectric Strength:** 250V ac/1 minute.
- **Contact Arrangement:** 1 pole 1 throw.
Soldering Process:

Hand Soldering: Use a soldering iron of 30 watts, controlled at 608°F (320°C) approximately 2 seconds while applying solder.

Reflow Soldering: When applying reflow soldering, the peak temperature or the reflow oven should be set to 240°C maximum condition for soldering (Reflow and Non-washable type).

Wave Soldering: Recommended solder temperature at 500°F (260°C) maximum 5 seconds, for through hole type. Subject to PCB 1.6mm thickness.
DTSM-32S-B

**Part Number Explanation**

- **Switch**: Tactile switch.
- **Mounting Type**: M = Surface Mounting Type.
- **Product Size**: 3 = 3.5 x 6.
- **Dimension H**: 2 = 5.0mm.
- **Colour of the Stem Operating Force**: S = Salmon, 320gf.
- **Package**: B = Tube Package.

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**DRAWING TITLE**: DTSM-32S-B - Tact Switches

**SIZE**
**DRAW NO.**
**U.O.M.:** mm (Inches)
**SCALE:** NTS
**SHEET**: 4 OF 5

**ELECTRONIC FILE**

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