Toggle Switches Miniature





RoHS Compliant



Contact Rating : Dependent upon content material Mechanical Life : 40,000 make and break cycles

 $\begin{tabular}{ll} Max. Contact Resistance & : $10m\Omega$\\ Initial Voltage & : 2 to 4V DC \\ \end{tabular}$

Current : 10mA for both silver and gold plated contacts

Min. Insulation Resistance : $1,000M\Omega$

Dielectric Strength : 1,000Vrms at sea level

Operating Temperature : -30°C to 85°C

Materials:

Case : Diallyl phthalate (DAP)
Actuator : Brass, chrome plated
Bushing : Brass, nickel plated
Housing : Stainless steel
Switch support : Brass, tin plated
Terminal/contact : Silver or gold plated

Switch Function

| Number of Poles | UL/CSA Model Numbers | Model Number | Switch Function | | | Connected Terminals/Schematic | | |
|-----------------|----------------------------|-----------------|-----------------|------------|------------|----------------------------------|-------------------|----------------------------------|
| | | | Position 1 | Position 2 | Position 3 | Position 1 | Position 2 | Position 3 |
| | | | 1 | • | 4 | i. | 1 | |
| SP | Q1111 | 1MS1 | On | None | ON | 2 to 3 | N/A | 2 to 1 |
| | Q1112 | 1MS2 | | None | MOM | | | |
| | Q1113 | 1MS3 | | Off | ON | 2(COMM) 1• \3 | Open | 2(COMM) 1• 3 |
| | Q1114 | 1MS4 | | | MOM | | | |
| | Q1115 | 1MS5 | | | MOM | | | |
| DP | Q1121 | 1MD1 | On MOM | None | ON | 2 to 3, 5 to 8 | N/A | 2 to 1, 5 to 4 |
| | Q1122 | 1MD2 | | None | MOM | | | 2101,5104 |
| | Q1123 | 1MD3 | | Off | ON | 1. \frac{2COMM5}{3} \frac{4.}{6} | Open | 2(COMM)5/ 14 • 3 44 • 6 |
| | Q1124 | 1MD4 | | | MOM | | | |
| | Q1125 | 1MD5 | On MOM | | MOM | | | |
| | Q1126 | 1MD6 | | On | On | 2 to 3, 5 to 6 | 2 to 3, 5 to 4 | 2 to 1, 5 to 4 |
| | Q1127 | 1MD7 | | | MOM | | | |
| | Q1128 | 1MD8 | | | MOM | | | |
| 3P | Q1131 | 1M31 | On | None | On | 2 to 3, 5 to 6, 8 to 9 | N/A | 2 to 1, 5 to 4, 8 to 7 |
| 4P | Q1141 | 1M41 | M41 | INOTIC | 1 | 2 to 3, 5 to 6, 8 to 9, 11 to 12 | IV/A | 2 to 1, 5 to 4, 8 to 7, 11 to 10 |



Toggle Switches Miniature



Soldering Process:

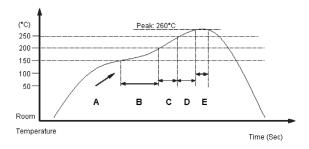
Manual soldering : Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder

Wave soldering : Recommended soldering temperature : 260 ±5°C

: Duration of solder immersion : 5 ±1 seconds. (PCB is 1.6mm in thickness)

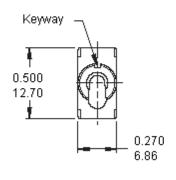
Soldering : Vapour Phase Temperature Profile

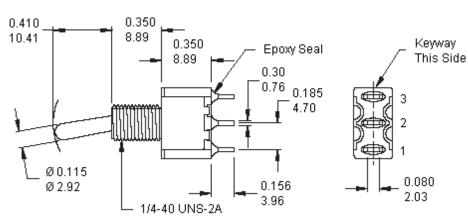
| Zone | Room Temperature | Time (seconds) |
|--------------|------------------|------------------|
| Pre-heat (A) | 150°C | Min. 120 seconds |
| Soak (B) | 180°C to 200°C | Min. 150 seconds |
| Peak (C) | 200°C to 235°C | Min. 30 seconds |
| Peak (D) | 235°C to 260°C | Min. 40 seconds |
| Peak (E) | 260°C | Max. 10 seconds |



Pole Options SPDT







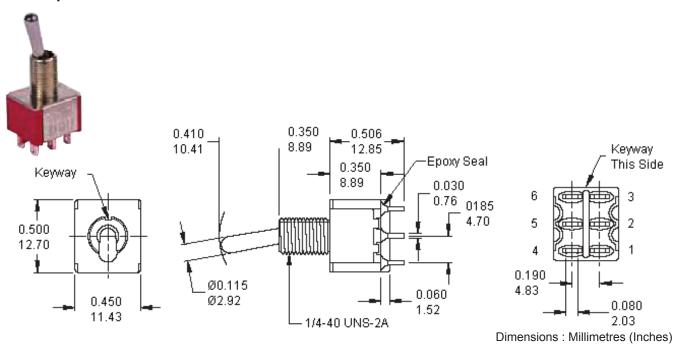
Dimensions: Millimetres (Inches)



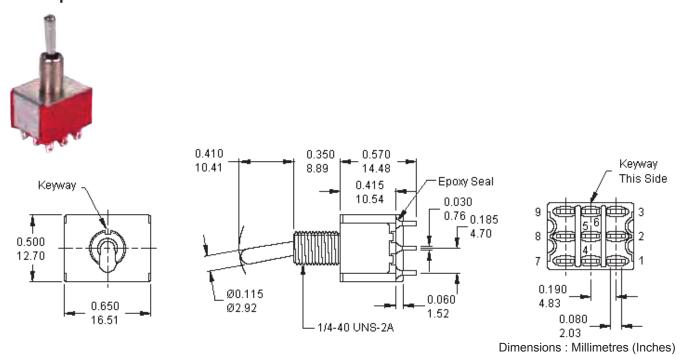
Toggle Switches Miniature



Pole Options DPDT



Pole Options 3PDT

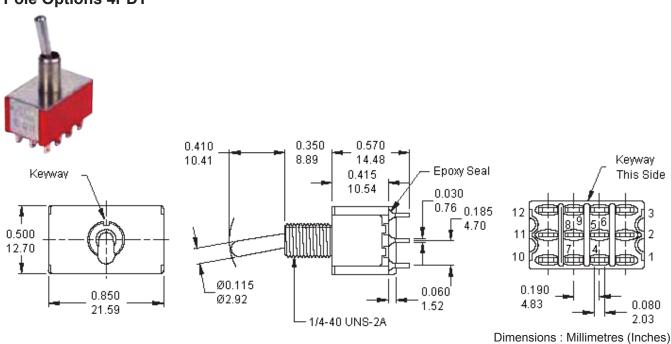




Toggle Switches Miniature



Pole Options 4PDT



Part Number Table

| Description | Part Number |
|--------------------------|--------------|
| Switch, PCB, SPDT, VERT | 1MS1T2B4V2RE |
| Switch, PCB, SPDT, VERT | 1MS3T2B4V2RE |
| Switch, PCB, SPDT, VERT | 1MS2T2B4V2RE |
| Switch, PCB, SPDT, VERT | 1MS4T2B4V2RE |
| Switch, PCB, SPDT, VERT | 1MS5T2B4V2RE |
| Switch, PCB, DPDT, VERT | 1MD1T2B4V3RE |
| Switch, PCB, SPDT, HORIZ | 1MS1T2B4M6RE |
| Switch, PCB, SPDT, HORIZ | 1MS3T2B4M6RE |
| Switch, PCB, SPDT, HORIZ | 1MS4T2B4M6RE |
| Switch, PCB, DPDT, HORIZ | 1MD1T2B4M6RE |
| Switch, PCB, DPDT, HORIZ | 1MD3T2B4M6RE |
| Switch, PCB, SPDT, HORIZ | 1MS1T2B4M7RE |
| Switch, PCB, SPDT, HORIZ | 1MS3T2B4M7RE |
| Switch, PCB, DPDT, HORIZ | 1MD1T2B4M7RE |
| Switch, SPDT | 1MS1T1B5M1QE |
| Switch, SPDT | 1MS3T1B5M1QE |
| Switch, DPDT | 1MD1T1B5M1QE |
| Switch, DPDT | 1MD3T1B5M1QE |

| Description | Part Number |
|--------------|--------------|
| Switch, SPDT | 1MS1T1B1M1QE |
| Switch, SPDT | 1MS1T1B1M1RE |
| Switch, SPDT | 1MS3T1B1M1QE |
| Switch, SPDT | 1MS3T1B1M1RE |
| Switch, SPDT | 1MS4T1B1M1QE |
| Switch, SPDT | 1MS4T1B1M1RE |
| Switch, SPDT | 1MS5T1B1M1QE |
| Switch, SPDT | 1MS5T1B1M1RE |
| Switch, SPDT | 1MS2T1B1M1QE |
| Switch, SPDT | 1MS2T1B1M1RE |
| Switch, DPDT | 1MD1T1B1M1QE |
| Switch, DPDT | 1MD1T1B1M1RE |
| Switch, DPDT | 1MD3T1B1M1QE |
| Switch, DPDT | 1MD3T1B1M1RE |
| Switch, DPDT | 1MD4T1B1M1QE |
| Switch, DPDT | 1MD4T1B1M1RE |
| Switch, DPDT | 1MD5T1B1M1QE |
| Switch, DPDT | 1MD5T1B1M1RE |



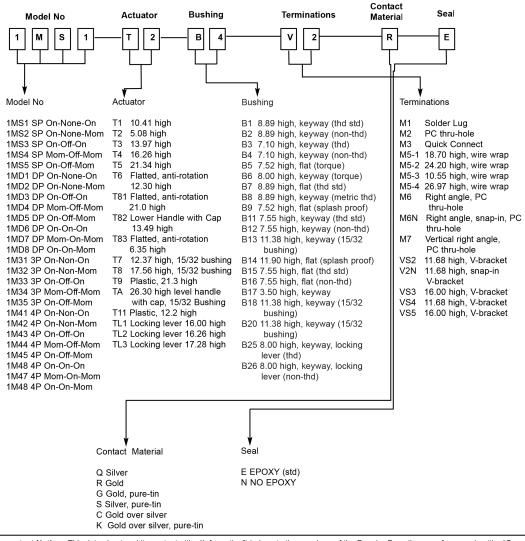
Toggle Switches Miniature



| Description | Part Number |
|--------------|---------------|
| Switch, 3PDT | 1M31T1B1M1QE |
| Switch, 4PDT | 1M41T1B1M1QE |
| Switch, SPDT | 1MS1T6B11M1QE |
| Switch, SPDT | 1MS3T6B11M1QE |
| Switch, SPDT | 1MS4T6B11M1QE |
| Switch, SPDT | 1MS5T6B11M1QE |

| Description | Part Number |
|--------------|---------------|
| Switch, SPDT | 1MS2T6B11M1QE |
| Switch, DPDT | 1MD1T6B11M1QE |
| Switch, DPDT | 1MD3T6B11M1QE |
| Switch, 3PDT | 1M31T6B11M1QE |
| Switch, 4PDT | 1M41T6B11M1QE |

Part Number Ordering:



Important Notice: This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.

