

## SPECIFICATIONS

CONTACT RATING: Dependent upon contact material. See Contact Plating \& Ratings.
MECHANICAL LIFE: 30,000 make-and-break cycles.
CONTACT RESISTANCE: $20 \mathrm{~m} \Omega$ max. initial @ 2-4VDC
100 mA for both silver and gold plated contacts.
INSULATION RESISTANCE: $1,000 \mathrm{M} \Omega \mathrm{min}$.
DIELECTRIC STRENGTH: 1,000 Vrms min.@ sea level.
OPERATING TEMPERATURE: $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$.
MATERIALS
CASE: Diallyl phthalate (DAP) (UL94v-0).
ACTUATOR: Brass, chrome plated.

YI models available,
consult sales representatives.

BUSHING: Brass or zinc, nickel plated.
HOUSING: Stainless Steel.
SWITCH SUPPORT: Brass,tin plated.
TERMINAL/CONTACT: Brass or copper alloy, with Silver or gold plated. See Contact Plating \& Ratings.
PART NUMBERING SYSTEM


| Model No./ Switching function |  |  |  | ( )= Momentary |  |  |  | Unit: Inch/ mm |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPST |  |  |  | SPDT |  |  |  | SPDT |  |  |  |
| Model No. | Switching function |  |  | Model <br> No. | Switching function |  |  | Model <br> No. | Switching function |  |  |
|  | 1 | + | 1 |  | 1 | 1 | \% |  | 1 | 1 | \% |
| S0 | On | None | Off | S1 | On | None | On | S2 | On | Off | On |
| Connected terminals | 2-3 | N/A | Open | S3 | On | None | (On) | S4 | (On) | Off | (On) |
| Schematic | ${ }^{2000 m}{ }^{\text {a }}$ |  |  |  |  |  |  | S5 | On | Off | (On) |
| S6 | Off | None | On | Connected terminals | 2-3 | N/A | 2-1 | Connected terminals | 2-3 | Open | 2-1 |
| Connected terminals | Open | N/A | 3-1 | Schematic |  |  |  | Schematic |  |  |  |
| Schematic |  |  | $\Gamma^{\circ}{ }^{\circ}$ |  |  |  |  |  |  |  |  |

Part No. Shown: PTM-S $\square$ T1B1-M1 $\square \mathrm{E}-\mathrm{F}$

| Sub-Miniature Togcle Switches - PTM series |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model No./ Switching function ( )= Momentary |  |  |  | Unit: Inch/ mm |  |  |  |
|  |  |  |  | DPDT |  |  |  |
| Model No. | Switching function |  |  | Model No. | Switching function |  |  |
|  | 1 | 1 | d |  | 1 | $\stackrel{1}{1}$ | 1 |
| D1 | On | None | On | D2 | On | Off | On |
| D3 | On | None | (On) | Connected terminals | 2-3,5-6 | Open | 2-1,5-4 |
| Connected terminals | 2-3,5-6 | N/A | 2-1,5-4 | Schematic |  |  |  |
| Schematic | - Comm, |  | (1) | D6 | On | On | On |
|  |  |  |  | Connected terminals | 2-3, 5-6 | 2-3, 5-4 | 2-1, 5-4 |
|  |  |  |  | Schematic |  | $0-\frac{9}{4} \%$ | 2 Comm, |
| Part No. Shown: PTM-D $\square$-T1B1-M1 $\square$ E-F DPDT |  |  |  |  |  |  |  |

## Actuators

## Unit: Inch/ mm


Bushings
Unit: Inch/ mm

| B1 Threaded Std. B2 Unthreaded | B3 Threaded Std. B4 Unthreaded | B5 Threaded Std. B6 Unthreaded | B7 Threaded Std. B8 Unthreaded |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

Terminations \& Sealing
Unit: Inch/ mm

| M1 $\square$ Solder, W/o epoxy seal $\mathbf{M 1} \square \mathbf{E}$ Solder, With epoxy seal |  | M2 $\square$ PCB through hole, W/o epoxy seal M2 $\square$ E PCB through hole, with epoxy seal |  |
| :---: | :---: | :---: | :---: |
| SPDT <br> .020(0.51) THK. | DPDT <br> .020(0.51) THK. | SPDT <br> . 020 (0.51) THK. | DPDT <br> .020(0.51) THK. |
| M51 $\square$ Wire wrap, W/o epoxy seal M51 $\square \mathbf{E}$ Wire wrap, With epoxy seal |  | M52 $\square$ Wire wrap, W/o epoxy seal M52 $\square \mathbf{E}$ Wire wrap, With epoxy seal |  |
| SPDT <br> .020(0.51) THK. | DPDT <br> .020(0.51) THK. | SPDT |  |
| M6 $\square$ Right angle P.C. Mount |  |  |  |
| Part No. Shown: PTM <br> SPDT | T2B2-M6 $\square \mathrm{E}-\mathrm{F}$ |  | P. C. B. Layout |



|  | 10-48 BUSHING | 1/4-IN. BUSHING |
| :---: | :---: | :---: |
| Without locking ring |  |  |
| With standard locking ring | Keyway bushing | Keyway bushing |



## Contact Plating \& Ratings

| Option code | Contact plating | Terminal plating | Ratings |
| :---: | :--- | :--- | :--- |
| $\mathbf{G}$ | Gold | Gold | 0.4 Volt-Amps (VA ) max. @ 20V max. (AC or DC ) |
| $\mathbf{S}$ | Silver | Silver | 3 Amps with resistant load @ 120VAC or 28VDC |
| $\mathbf{A}$ | Gold over silver | Gold over silver | 1 Amps with resistant load @ 250VAC |

## SOLDERING PROCESSES

Manual soldering: Use soldering iron of 30 watts, controlled at $350^{\circ} \mathrm{C}$ approximately 5 seconds while applying solder.
Wave soldering: Recommended soldering temperature: $270 \pm 5^{\circ} \mathrm{C}$. Duration of solder immersion: Max 5 sec . (PCB is 1.6 mm in thickness).

