

Sealed Ultraminiature Toggle Switches-PTMUS series



SPECIFICATIONS

MECHANICAL LIFE: 40,000 make-and-break cycles.

CONTACT RATING: 0.4 VA max. @ 20 V AC or DC max.

CONTACT RESISTANCE: Below 100 mΩ typ. initial@ 2-4 V DC, 100 mA.

INSULATION RESISTANCE: 500 MΩ min.

DIELECTRIC STRENGTH: 500 Vrms min.@ sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

DEGREE OF PROTECTION: IP67

MATERIALS

HOUSING AND BASE: Glass filled nylon 6/6 or 4/6, flame retardant, heat stabilized (UL94V-0)

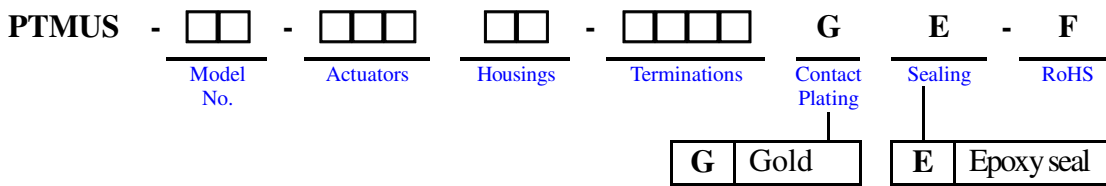
ACTUATOR: Glass filled nylon 6/6, flame retardant, heat stabilized (UL94V-0), with standard internal o-ring seal.

SWITCH SUPPORT: Steel, with Sn plated.

CONTACT: Phosphor bronze, Gold plated.

TERMINAL: Brass, Gold plated.

PART NUMBERING SYSTEM

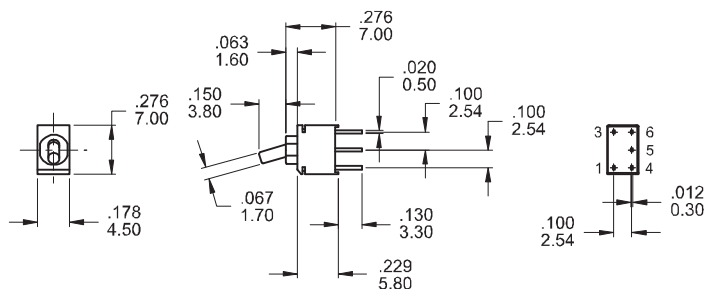


Model No./ Switching function

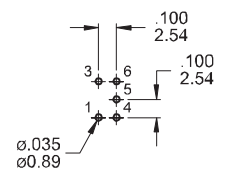
Unit: Inch/ mm

SPDT				SPDT			
Model No.	Switching function			Model No.	Switching function		
S1	On	None	On	S2	On	Off	On
Connected terminals	5-6	N/A	5-4	Connected terminals	5-6	Open	5-4
Schematic				Schematic			

Part No. Shown: PTMUS-S1/S2-T1A1-M2GE-F
SPDT



P. C. B. Layout



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Model No./ Switching function

Unit: Inch/ mm

SPST			
Model No.	Switching function		
S9	Off	None	On
Connected terminals	Open	N/A	4-6
Schematic			

Part No. Shown: PTMUS-S9-T1A1-M2GE-F SPST		P. C. B. Layout

DPDT				DPDT			
Model No.	Switching function			Model No.	Switching function		
D1	On	None	On	D2	On	Off	On
Connected terminals	2-3,5-6	N/A	2-1,5-4	Connected terminals	2-3,5-6	Open	2-1,5-4
Schematic				Schematic			

Part No. Shown: PTMUS-D1/D2-T1A1-M2GE-F DPDT		P. C. B. Layout

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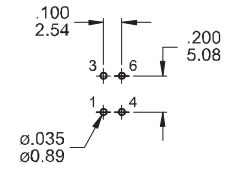
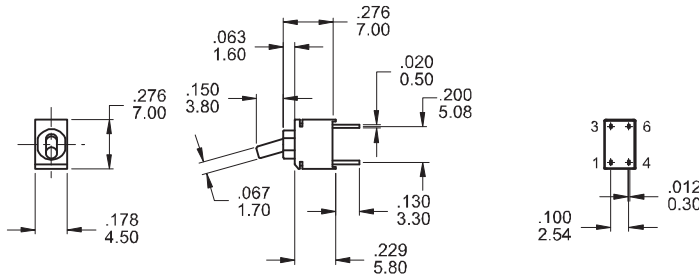
Model No./ Switching function

Unit: Inch/ mm

DPST			
Model No.	Switching function		
D9	Off	None	On
Connected terminals	Open	N/A	1-3,4-6
Schematic			

Part No. Shown: PTMUS-D9-T1A1-M2GE-F
DPST

P. C. B. Layout



Actuators

Housings

Unit: Inch/ mm

T1	T29
<p>STD.</p> <p>Color: Black</p>	<p>COLOR:GRAY</p>

A1	A2
<p>STD.</p>	<p>COLOR:BLACK</p>

T29A2 type only for PTMUS-S1, PTMUS-S2, PTMUS-D1, PTMUS-D2 function.

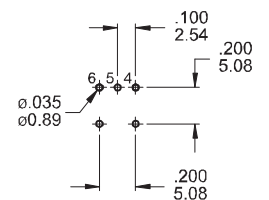
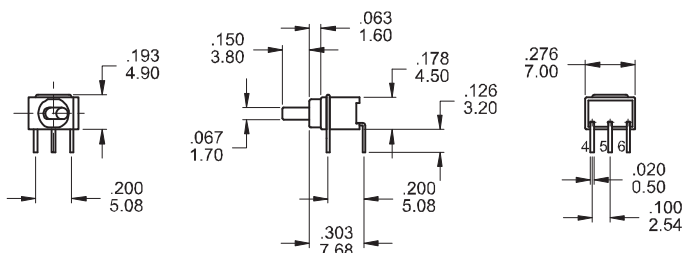
Terminations & Sealing

Unit: Inch/ mm

M6 Right angle P.C. Mount

Part No. Shown: PTMUS-S□-T1A1-M6GE-F
SPDT

P. C. B. Layout



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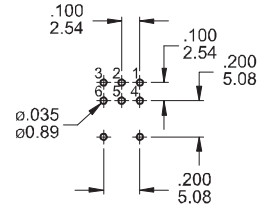
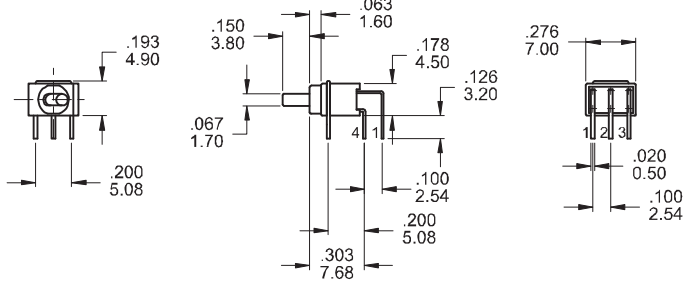
Terminations & Sealing

Unit: Inch/ mm

M6 Right angle P.C. Mount

Part No. Shown: PTMUS-D□-T1A1-M6GE-F
DPDT

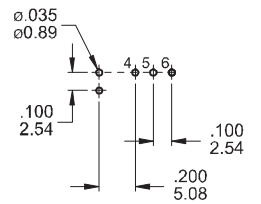
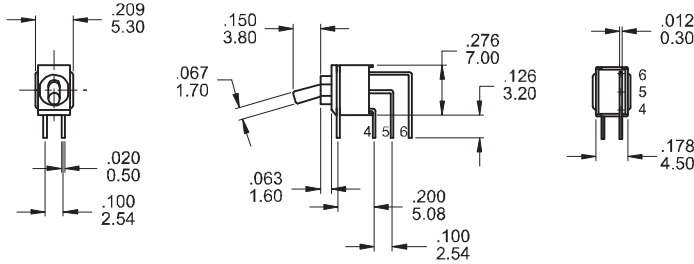
P. C. B. Layout



M7 Vertical right angle P.C. Mount

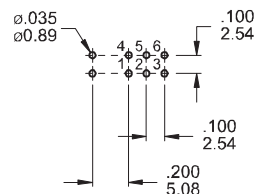
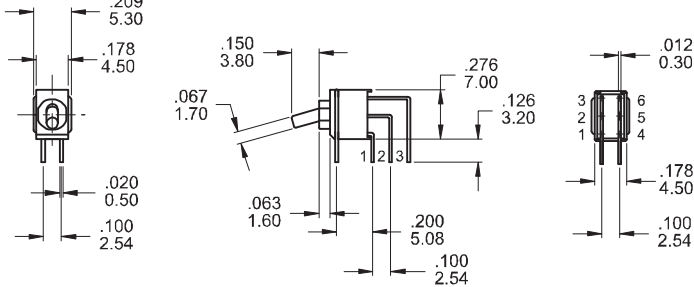
Part No. Shown: PTMUS-S□-T1A1-M7GE-F
SPDT

P. C. B. Layout



Part No. Shown: PTMUS-D□-T1A1-M7GE-F
DPDT

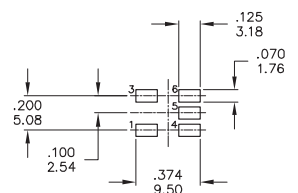
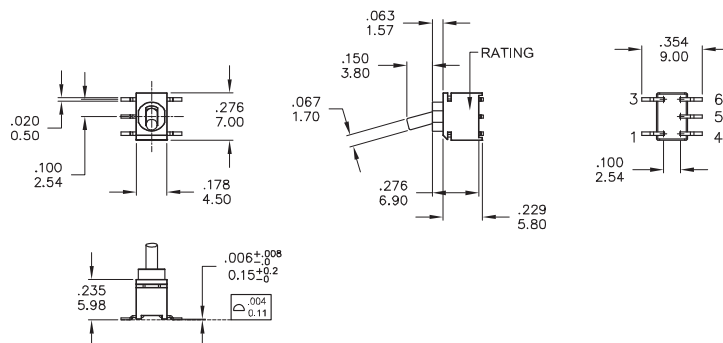
P. C. B. Layout



SMT1 Surface Mount

Part No. Shown: PTMUS-S□-T1A1-SMT1GE-F
SPDT

P. C. B. Layout



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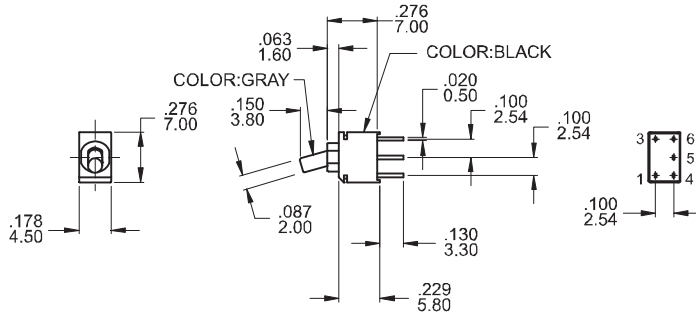
Terminations & Sealing

Unit: Inch/ mm

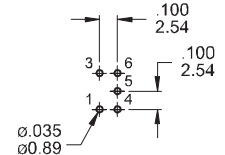
T29A2 type only for PTMUS-S1, PTMUS-S2, PTMUS-D1, PTMUS-D2 function.

M2 PC Through hole

Part No. Shown: PTMUS-S□-T29A2-M2GE-F
SPDT

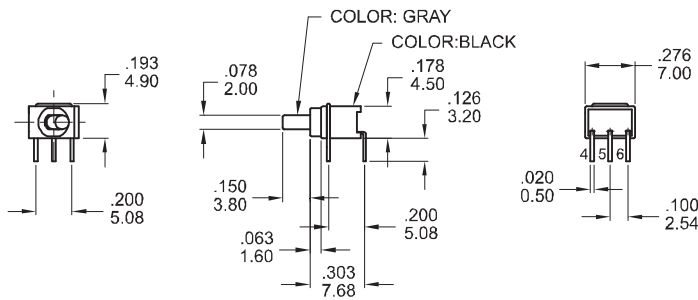


P. C. B. Layout

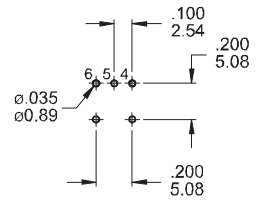


M6 Right angle P.C. Mount

Part No. Shown: PTMUS-S□-T29A2-M6GE-F
SPDT



P. C. B. Layout



SOLDERING PROCESSES

WAVE SOLDERING: Recommended Soldering Temperature: $270 \pm 5^{\circ}\text{C}$

Duration of Solder Immersion: Max 5 sec.(PCB is 1.6mm in thickness)