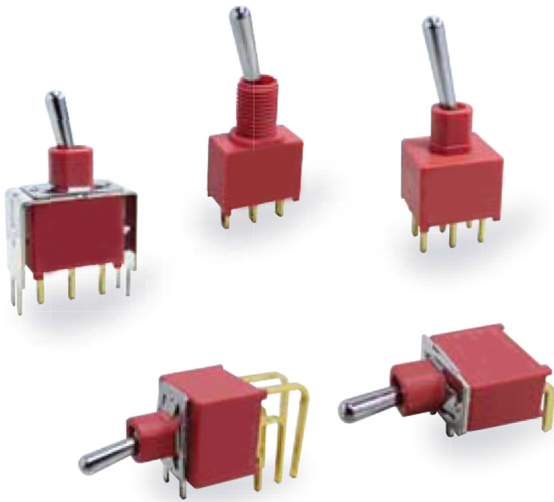


1A SERIES

SEALED MINIATURE TOGGLE SWITCH



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material

MECHANICAL LIFE: 30,000 make-and-break cycles.

CONTACT RESISTANCE: 10 mΩ max. initial @ 2-4VDC

100mA for both silver and gold plated contacts.

INSULATION RESISTANCE: 1,000 MΩ min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -40°C to 85°C.

MATERIALS

CASE & BUSHING: Glass filled nylon 6/6, flame retardant, heat stabilized (UL94v-0).

ACTUATOR: Brass, chrome plated with internal, O-ring seal standard.

SWITCH SUPPORT: Brass or steel, tin plated.

SWITCH SUPPORT RETAINER: Stainless steel.

CONTACT / TERMINALS: Copper alloy, with Silver or gold plated.

IP 67
ACCORDING TO
EN 60529:1991+A1:2001
IEC 60529:2001

UL US
E 187480

RoHS
compliant

Pb
lead-free

SWITCH FUNCTION

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
SP	Q11A11	1AS1	ON	NONE	ON		N/A	
	Q11A12	1AS2	ON	NONE	MOM			
	Q11A13	1AS3	ON	OFF	ON			
	Q11A14	1AS4	MOM	OFF	MOM			
	Q11A15	1AS5	ON	OFF	MOM			
DP	Q11A21	1AD1	ON	NONE	ON		N/A	
	Q11A22	1AD2	ON	NONE	MOM			
	Q11A23	1AD3	ON	OFF	ON			
	Q11A24	1AD4	MOM	OFF	MOM			
	Q11A25	1AD5	ON	OFF	MOM			
	Q11A26	1AD6	ON	ON	ON			
	▲ Q11A27	1AD7	MOM	ON	MOM			
	▲ Q11A28	1AD8	ON	ON	MOM			

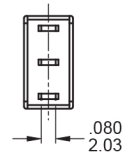
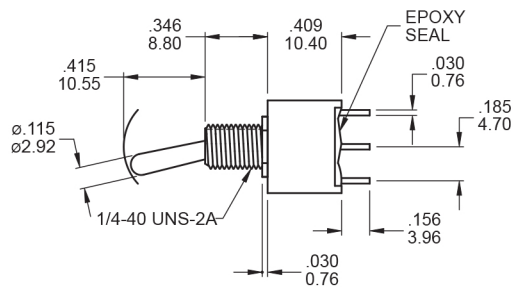
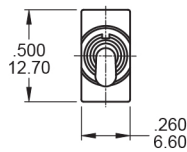
SWITCH FUNCTION

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
3P	Q11A31	1A31	ON	NONE	ON		N/A	
	Q11A32	1A32	ON	NONE	MOM			
	Q11A33	1A33	ON	OFF	ON			
	Q11A34	1A34	MOM	OFF	MOM			
	Q11A35	1A35	ON	OFF	MOM			

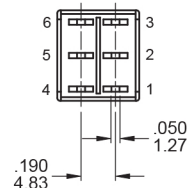
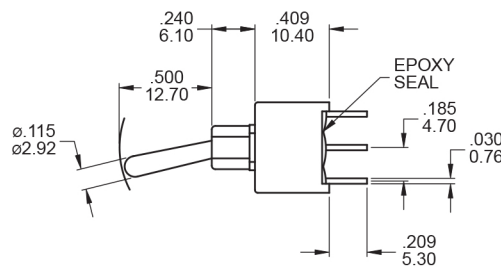
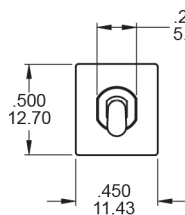
MOM=MOMENTARY

▲ Please check the availability in advance before order

POLE OPTIONS



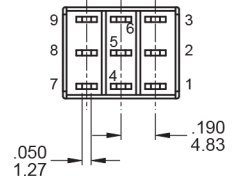
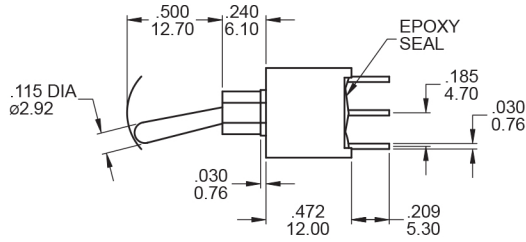
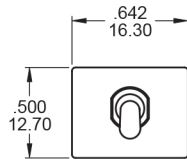
SPDT



DPDT

1A SERIES

SEALED MINIATURE TOGGLE SWITCH

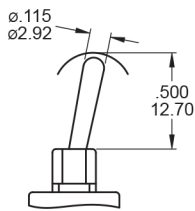


3PDT

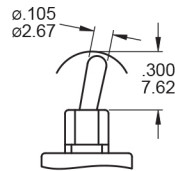
ACTUATOR OPTIONS

Actuator shown with standard B4 Bushing,
Subtract .085 (2.15) for B1 bushing.

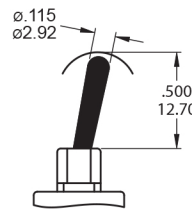
T1



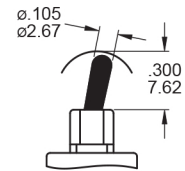
T2



TA



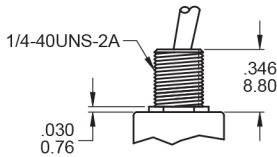
TB



PLASTIC ACTUATOR
(TC, Silver)

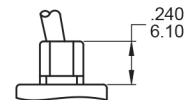
BUSHING OPTIONS

B1



Std for M1

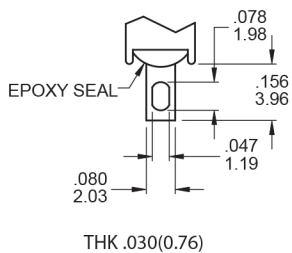
B4



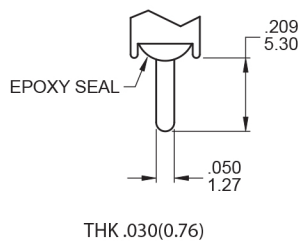
Std for M2, M6, M7, VS termination

TERMINATION OPTIONS

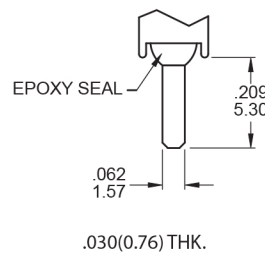
M1 Solder lug



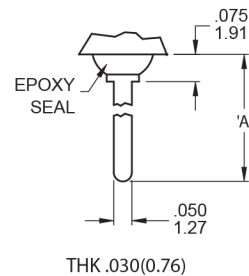
M2 PC Thru-hole



M3 Quick connect



M5 Wire Wrap



OTHER TERMINATION OPTIONS

- M6** Right angle P.C. Mount
- M7** Vertical right angle P.C. Mount
- VS2** Vertical bracket P.C. Mount
- VS3** Vertical bracket P.C. Mount

- M6N** Right angle P.C. Mount with snap-in bracket
- V2N** Vertical bracket P.C. Mount with snap-in bracket

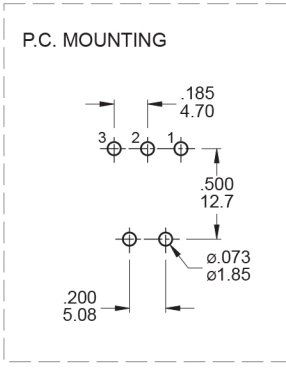
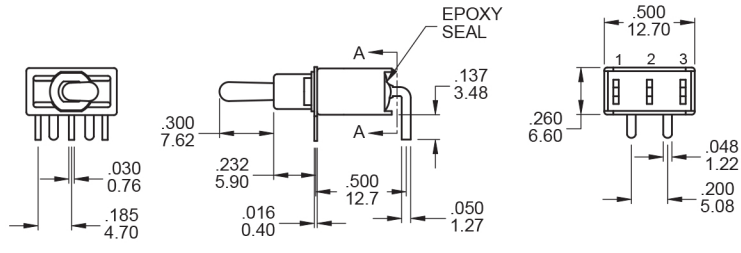
OPTION CODE	DIM. 'A'
M51	.736 (18.70)
M52	.953 (24.20)
M53	.415 (10.55)
M54	1.062 (26.97)

1A SERIES

SEALED MINIATURE TOGGLE SWITCH



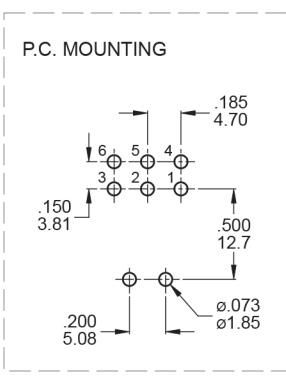
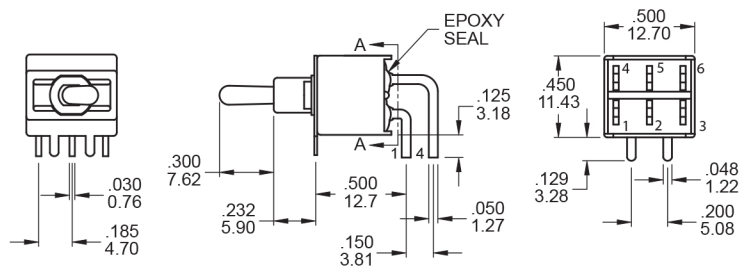
M6



SPDT

SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

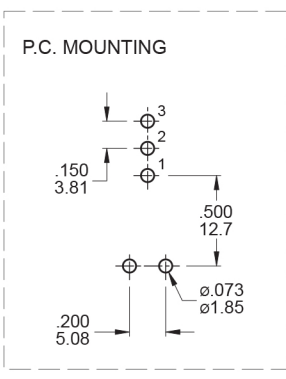
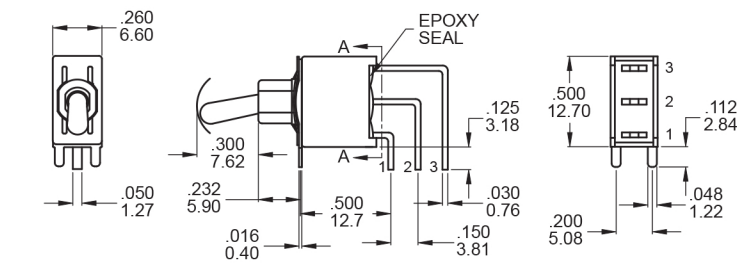
M6



DPDT

SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

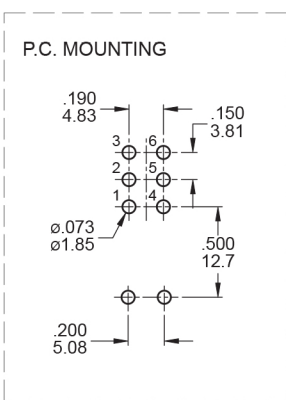
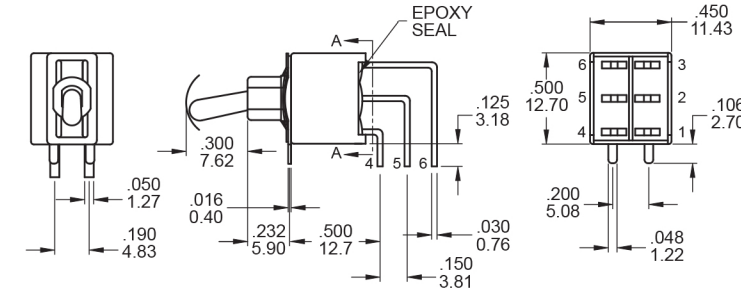
M7



SPDT

SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

M7



DPDT

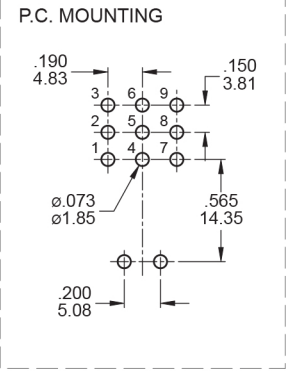
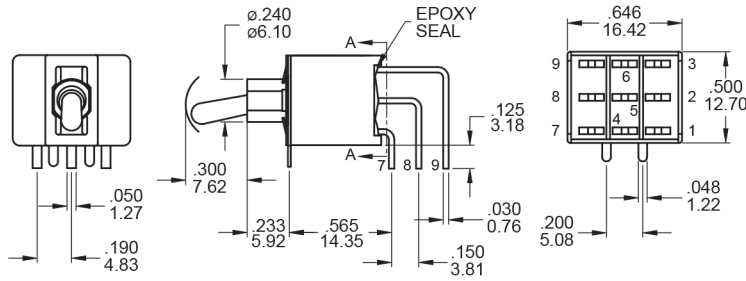
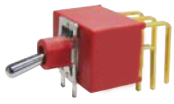
SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

1A SERIES

SEALED MINIATURE TOGGLE SWITCH



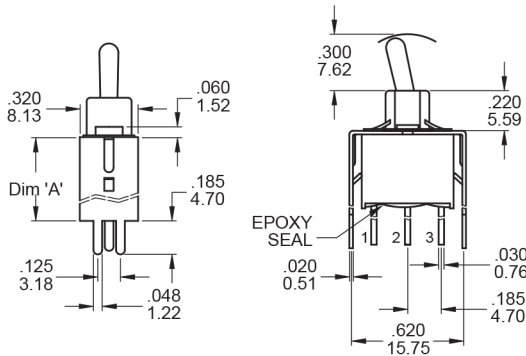
M7



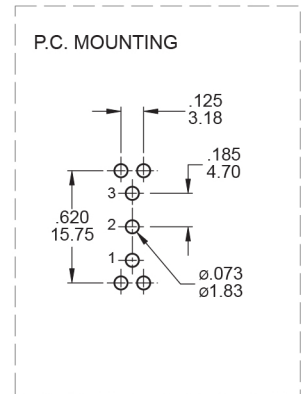
SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

3PDT

VS2 - VS3

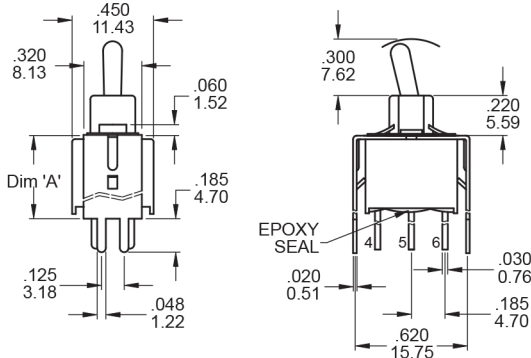


OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00

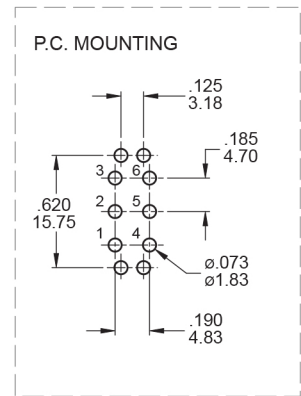


SPDT

VS2 - VS3

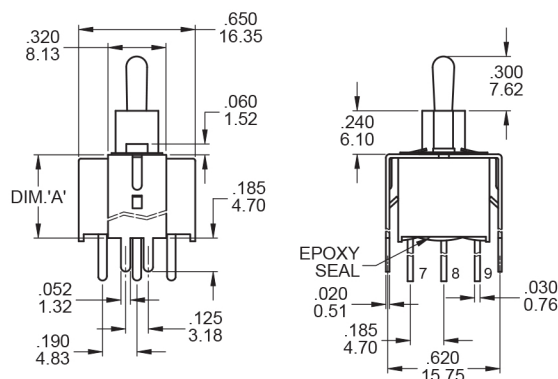


OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00

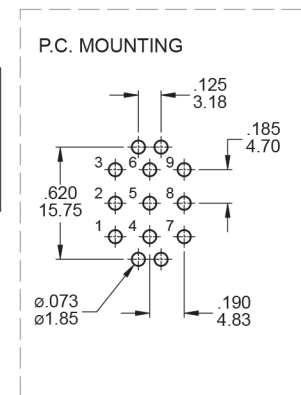


DPDT

VS2 - VS3



OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00



3PDT

1A SERIES

SEALED MINIATURE TOGGLE SWITCH

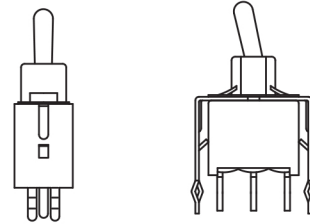


SNAP-IN TERMINATION OPTIONS

M6N

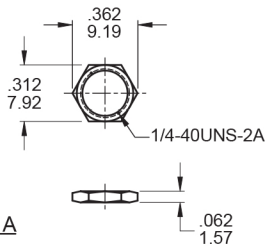


V2N

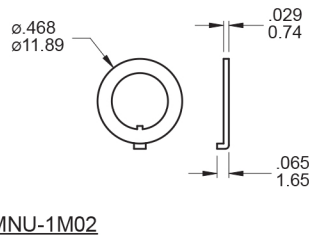


HARDWARE

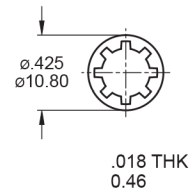
1/4 NUT



LOCKING RING



LOCKWASHER



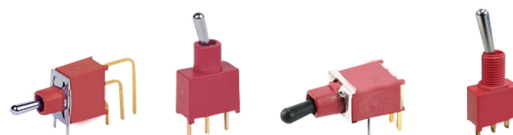
CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Q = Gold flash over silver	5 Amps with resistant load @ 120VAC or 28VDC 2 Amps with resistant load @ 250VAC
C	Gold over Silver	C = Gold over silver	
R	Gold	R = Gold	0.4 Volt - Amps (VA) max. @ 20V max. (AC or DC)

SOLDERING PROCESSES

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

WAVE SOLDERING: Recommended Soldering Temperature: 270 ± 5°C
Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)



1A SERIES

SEALED MINIATURE TOGGLE SWITCH



SPECIFICATIONS

CONTACT RATING: 0.4Volt-Amps(VA) max.@20V max(AC or DC)

MECHANICAL LIFE: 100,000 make-and-break cycles.

ELECTRICAL LIFE: 50,000 cycles.

CONTACT RESISTANCE: 10 mΩ max. initial @ 2-4VDC
100mA for both silver and gold plated contacts.

INSULATION RESISTANCE: 1,000 MΩ min.

DIELECTRIC STRENGTH: 1,000 V RMS@sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

GENERAL SPECIFICATIONS

TORQUE: 0.8Nm max. applied to unt.

PANEL THICKNESS: 6mm max. ,2mm min.

MATERIALS

CASE & BUSHING: Glass filled nylon 6/6, flame retardant.heat stabilized (UL94v-0).

ACTUATOR: Brass,chrome plated with internal,O-ring seal standard.

SWITCH SUPPORT: Brass or steel,tin plated.

CONTACT / TERMINALS: Copper alloy,gold plated.

SEALIND: IP67.

IP 67
ACCORDING TO
EN 60529:1991+A1:2001
IEC 60529:2001

RoHS
compliant

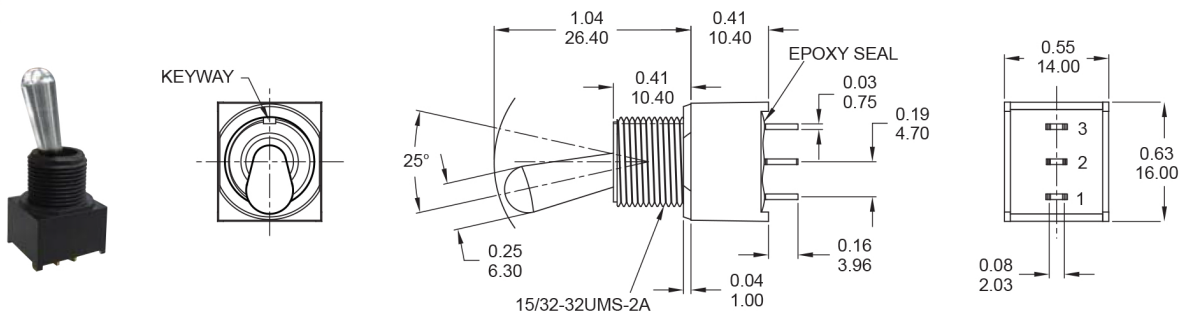
Pb
lead-free

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
		POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
SP	1AS1	ON	NONE	ON	2-3 	N/A	2-1
	1AS2	ON	NONE	MOM			
	1AS3	ON	OFF	ON	OPEN 	OPEN	
	1AS4	MOM	OFF	MOM			
	1AS5	ON	OFF	MOM			
	1AS9	ON	NONE	OFF	2-3	N/A	OPEN
	1ASD	MOM	NONE	OFF			

MOM=MOMENTARY

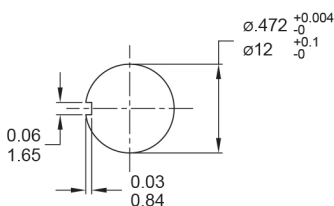
M1



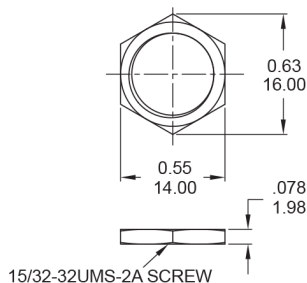
Part No. Shown : 1AS1T8B22M1RPES

PANEL MOUNTING / HARDWARE

PANEL MOUNTING

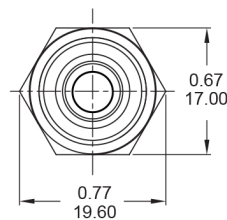


NUT



MNU-1M07

SEALING BOOTS



PG2A-RUBBER-HOOD



O-Ring (FCP-A390)