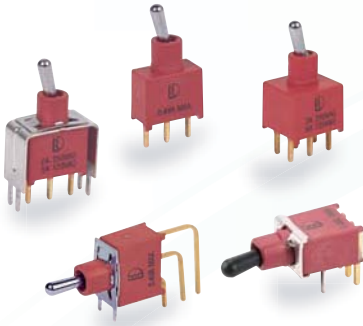




IP 67
ACCORDING TO
EN 60529:1991+A1:2001
IEC 60029:2001

C **UL** US
E 187490

RoHS
compliant



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See page 17.

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: -30°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 at standard.

SWITCH SUPPORT: Brass or steel, tin plated.

SWITCH SUPPORT RETAINER: Stainless steel.

CONTACT / TERMINALS: Copper alloy, with Silver or gold plated.
(See Page 17)

HOW TO ORDER

MODEL NO.	ACTUATOR	BUSHING	TERMINATIONS	CONTACT MATERIAL	SEAL	RoHS SOLDERING
Model NO. 1AS1 1AS2 1AS3 1AS4 1AS5 1AD1 1AD2 1AD3 1AD4 1AD5 1AD6 1AD7 1AD8 1A31 1A32 1A33 1A34 1A35 SP On-None-On SP On-None-Mom. SP On-Off-On SP Mom.-Off-Mom. SP On-Off -Mom. DP On-None-On DP On-None-Mom. DP On-Off-On DP Mom.-Off-Mom. DP On-Off-Mom. DP On-On-On DP Mom.-On-Mom. DP On-On-Mom. 3P On-None-On 3P On-None-Mom. 3P On-Off-On 3P Mom.-Off-Mom. 3P On-Off-Mom.	Actuator T1 T2 TA TB TC 12.70 high 7.62 high Plastic, anti-static, black 12.70 high Plastic, anti-static, black 7.62 high Plastic, anti-static, silver 12.70 high	Bushing B1 B4 8.89 high 6.10 high	Terminations M1 M2 M51 M52 M53 M54 M6 M6N M7 VS2 V2N VS3 Solder Lug PC thru-hole 18.70 high, wire wrap 24.20 high, wire wrap 10.55 high, wire wrap 26.97 high, wire wrap Right angle, PC thru-hole Right angle, snap-in, PC thru-hole Vertical right angle, PC thru-hole 11.68 high, V-bracket 11.68 high, snap-in V-bracket 16.00 high, V-bracket	Contact material Q R G S C K Silver Gold Gold, tin-lead Silver, tin-lead Gold over silver Gold over silver, tin-lead	Seal E EPOXY (std)	RoHS soldering □ S F RoHS Compliant RoHS & Lead Free Halogen Free+RoHS

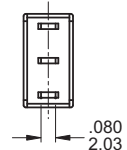
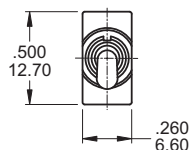
1A

1A

1A

1A

1A

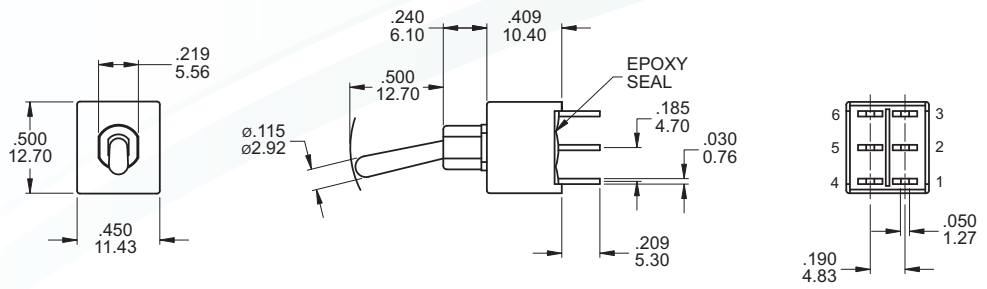


Part No. Shown : 1AS1T1B1M1QE



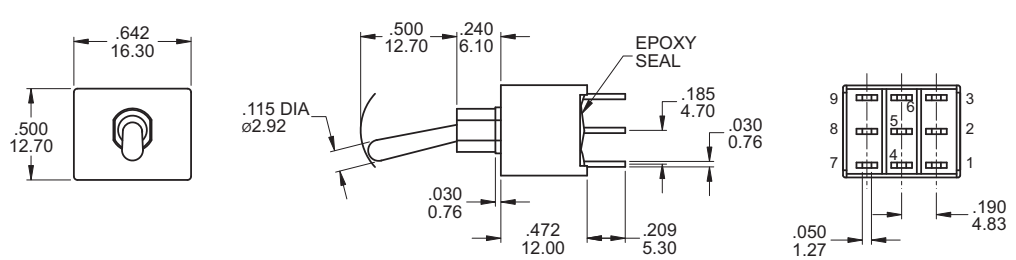
DPDT

Part No. Shown : 1AD1T1B4M2QE



3PDT

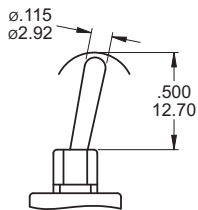
Part No. Shown : 1A31T1B4M2QE



ACTUATOR OPTIONS

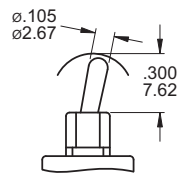
Actuator shown with standard B4 Bushing,
Subtract .085 (2.15) for B1 bushing.

T1



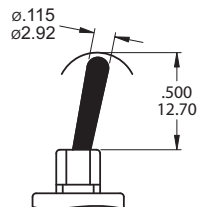
Standard with
M1,M2 terminations.

T2



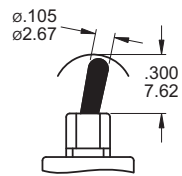
Standard with
M6,M7,VS2-3 terminations.

TA



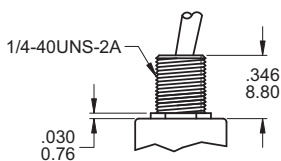
ESD
PLASTIC ACTUATOR
(TC anti-static , silver)

TB



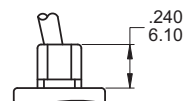
BUSHING OPTIONS

B1



Std for M1

B4

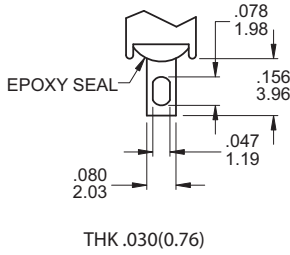


Std for M2, M6, M7, VS termination

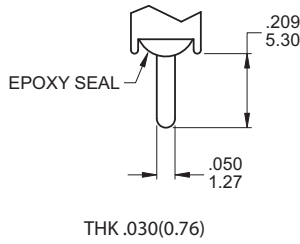


TERMINATION OPTIONS

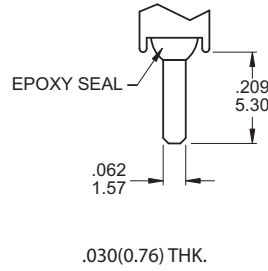
M1 Solder lug



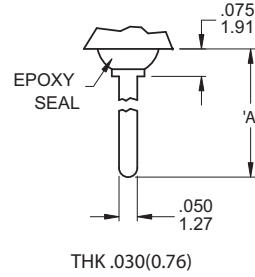
M2 PC Thru-hole



M3 Quick connect



M5 Wire Wrap



OTHER TERMINATION OPTIONS

M6 RIGHT ANGLE P.C. MOUNT

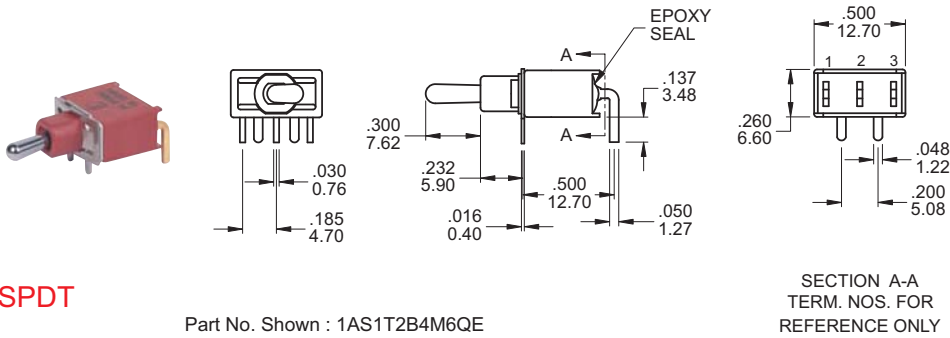
M7 RIGHT ANGLE P.C. MOUNT

VS2 VERTICAL BRACKET P.C. MOUNT

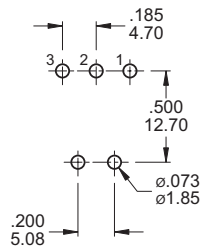
VS3 VERTICAL BRACKET P.C. MOUNT

OPTION CODE	DIM. 'A'
M5-1	.736 (18.70)
M5-2	.953 (24.20)
M5-3	.415 (10.55)
M5-4	1.062 (26.97)

M6

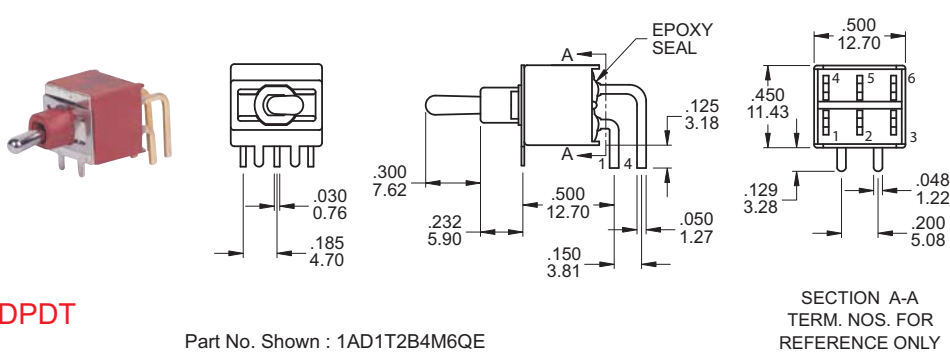


P.C. MOUNTING

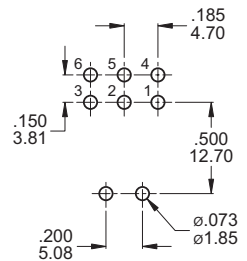


SPDT

M6

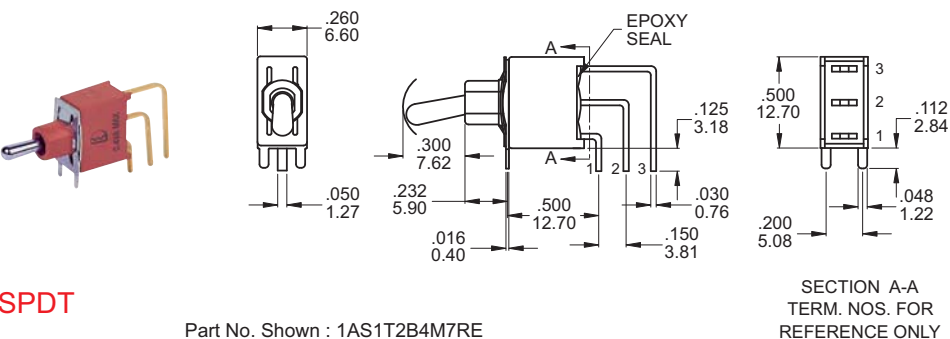


P.C. MOUNTING

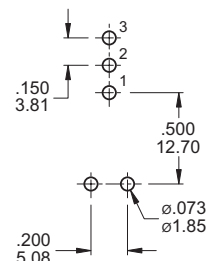


DPDT

M7



P.C. MOUNTING



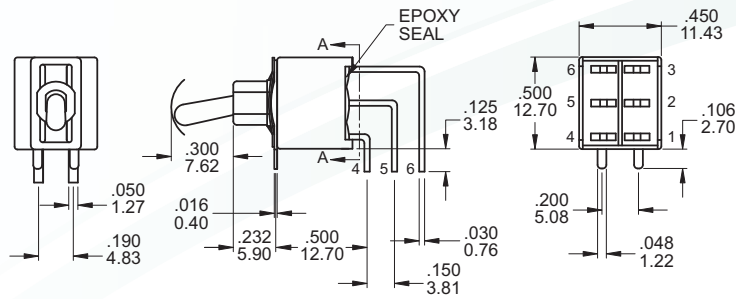
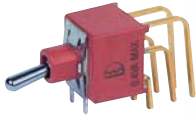
SPDT



1A

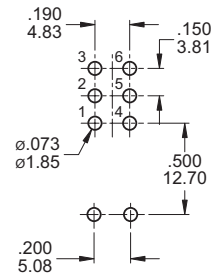
Sealed Toggle Switches

M7



SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

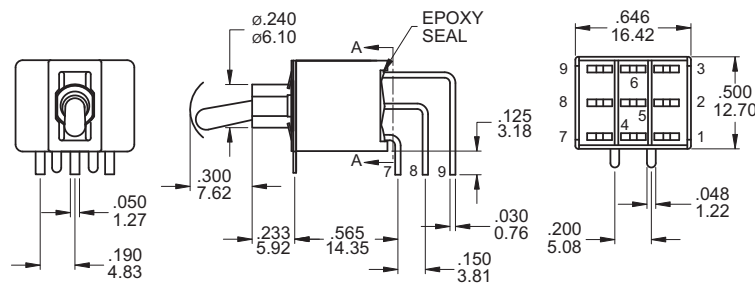
P.C. MOUNTING



DPDT

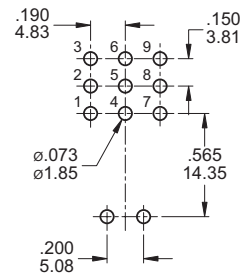
Part No. Shown : 1AD1T2B4M7RE

M7



SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

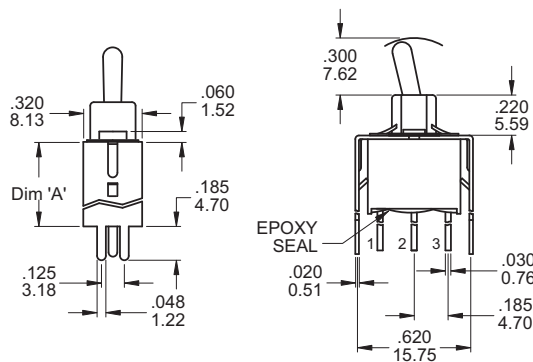
P.C. MOUNTING



3PDT

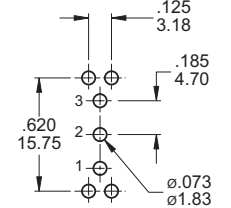
Part No. Shown : 1A31T2B4M7QE

VS2 - VS3



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

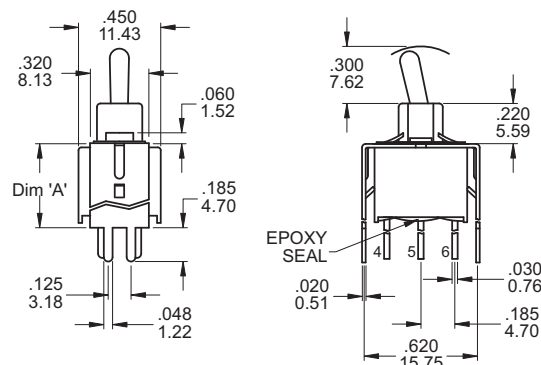
P.C. MOUNTING



SPDT

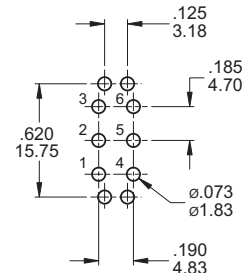
Part No. Shown : 1AS1T2B4VS2QE

VS2 - VS3



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

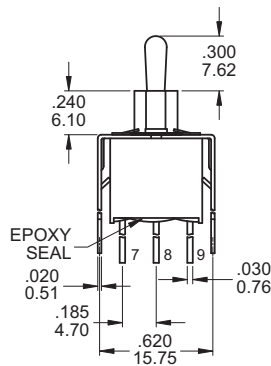
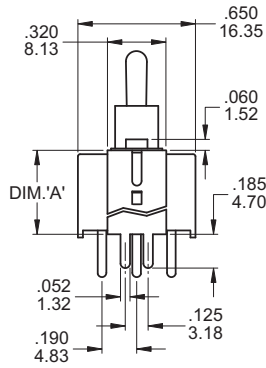
P.C. MOUNTING



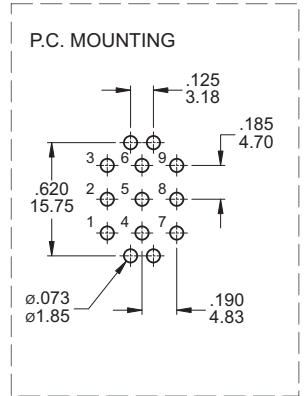
DPDT

Part No. Shown : 1AD1T2B4VS2QE

VS2 - VS3



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

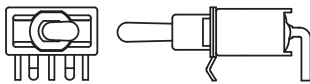


3PDT

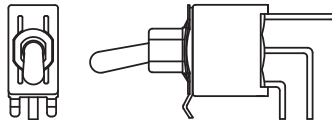
Part No. Shown : 1A31T2B4VS2QE

SNAP-IN TERMINATION OPTIONS

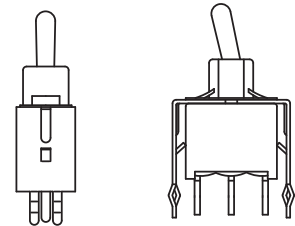
M6N



M7N

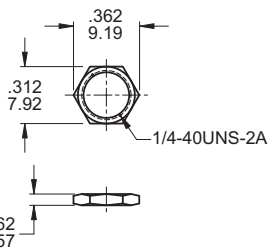


V2N

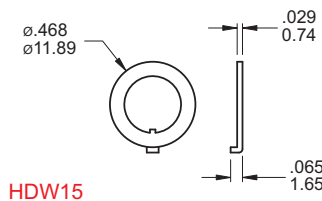


HARDWARE

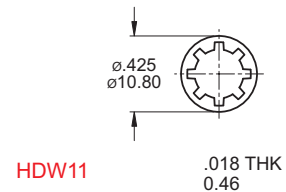
NUT



LOCKING RING



LOCK WASHER



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
S		S = Gold flash over silver, pure - tin	
C	Gold over Silver	C = Gold over silver	
K		K = Gold over silver, pure - tin	
R	Gold	R = Gold	0.4 Volt - Amps (VA) max. @ 20V max. (AC or DC)
G		G = Gold, pure - tin	

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: 260 ± 5°C

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