



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See page 18.

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

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

INSULATION RESISTANCE: 1,000MΩ min.

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

OPERATING TEMPERATURE: -30°C to 85°C.

MATERIALS

CASE & BUSHING: Glass filled nylon 66, flame retardant, heat stabilized (UL94V-0)

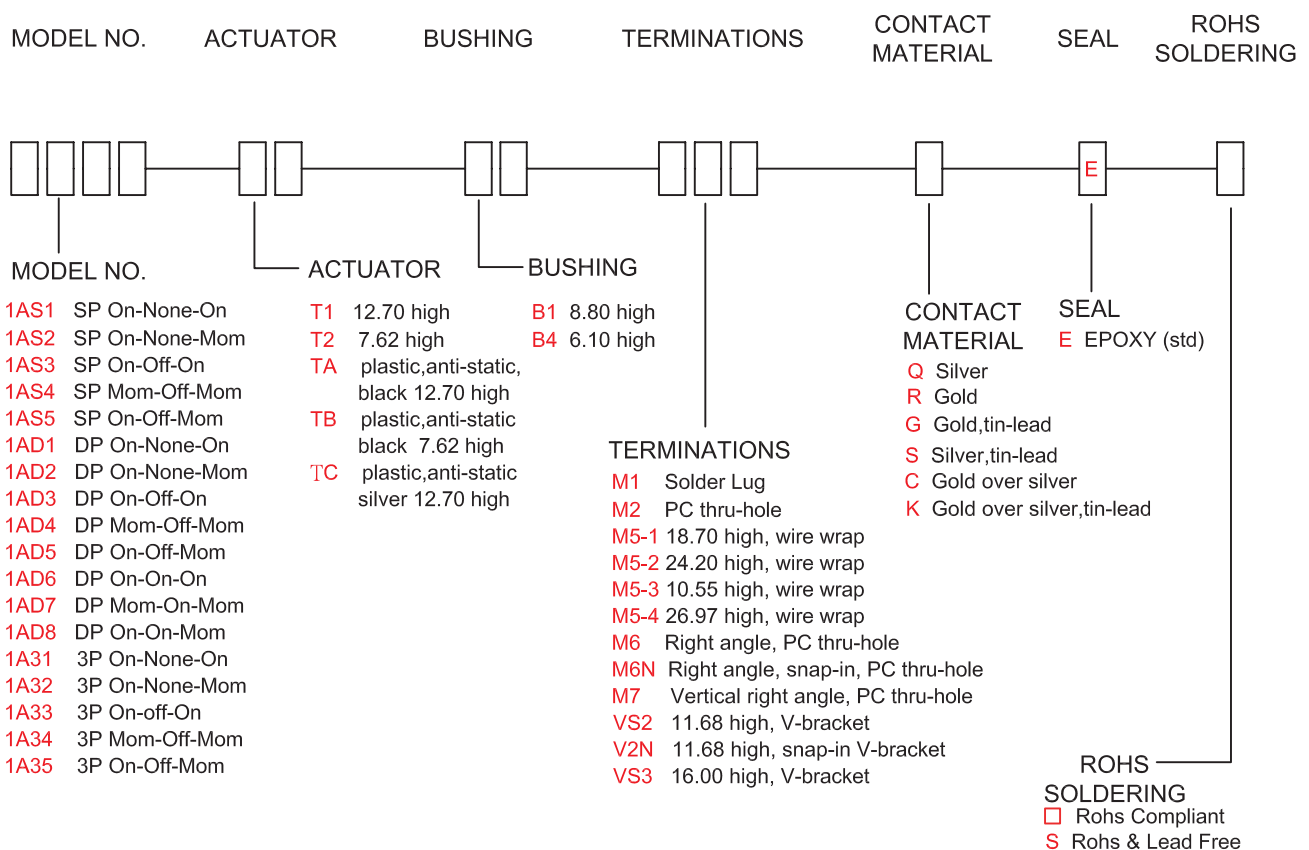
ACTUATOR: Brass, chrome plated with internal, O-ring seal standard.

SWITCH SUPPORT: Brass or steel, tin plated.

SWITCH SUPPORT RETAINER: Stainless steel.

CONTACTS/TERMINALS: copper alloy, with silver or gold plated. See Page 18 .

HOW TO ORDER



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	2-3 	N/A	2-1
	Q11A12	1AS2	ON	NONE	MOM		OPEN	
	Q11A13	1AS3	ON	OFF	ON			
	Q11A14	1AS4	MOM	OFF	MOM			
	Q11A15	1AS5	ON	OFF	MOM			
DP	Q11A21	1AD1	ON	NONE	ON	2-3,5-6 	N/A	2-1,5-4
	Q11A22	1AD2	ON	NONE	MOM		OPEN	
	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			
3P	Q11A31	1A31	ON	NONE	ON	2-3,5-6,8-9 	N/A	2-1,5-4,8-7
	Q11A32	1A32	ON	NONE	MOM		OPEN	
	Q11A33	1A33	ON	OFF	ON			
	Q11A34	1A34	MOM	OFF	MOM			
	Q11A35	1A35	ON	OFF	MOM			

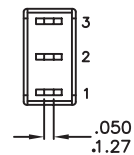
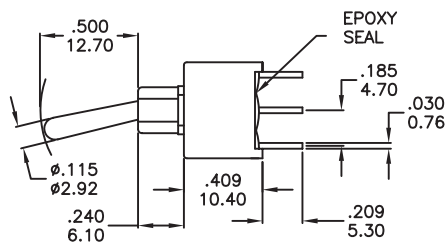
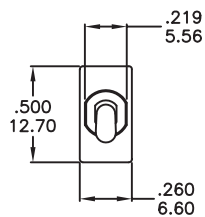
MOM=MOMENTARY

▲ Please check the availability in advance before order

POLE OPTION



SPDT



Part No. Shown : 1AS1T1B4M2RE

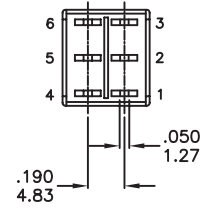
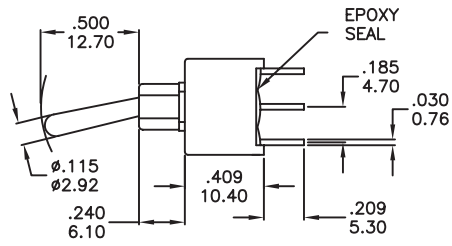
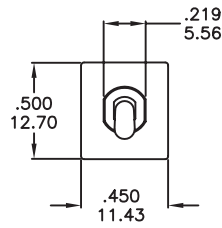
1A Series

Sealed Miniature Toggle Switches



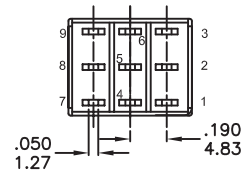
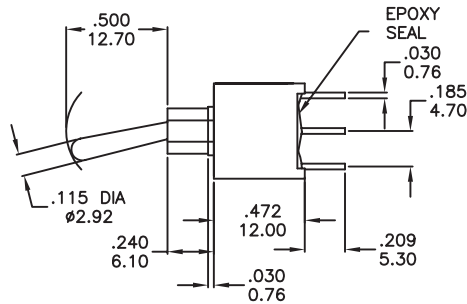
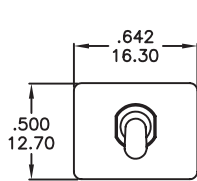
DPDT

Part No. Shown : 1AD1T1B4M2RE



3PDT

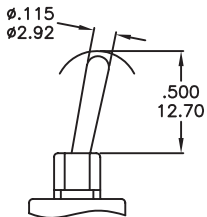
Part No. Shown : 1A31T1B4M2RE



ACTUATOR OPTIONS

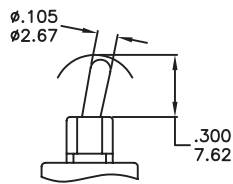
Actuator shown with standard B4 Bushing, Subtract .085(2.15) for B1 bushing.

T1



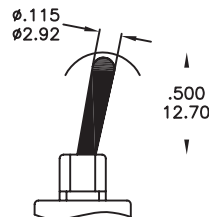
Standard with M1, M2 terminations.

T2



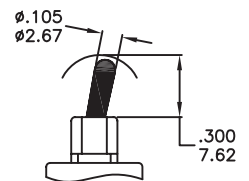
Standard with M6, M7, VS2-3 terminations.

TA



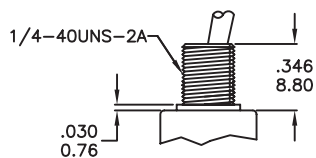
ESD PLASTIC ACTUATOR

TB



BUSHING OPTIONS

B1



Std for M1

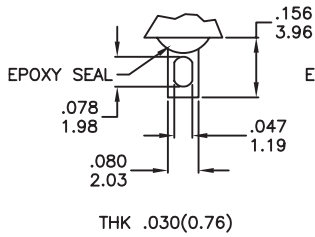
B4



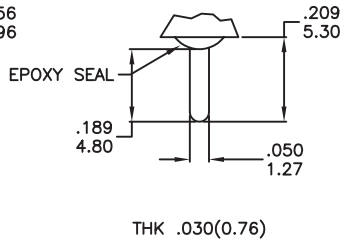
Std for M2, M6, M7, VS termination

TERMINATION OPTIONS

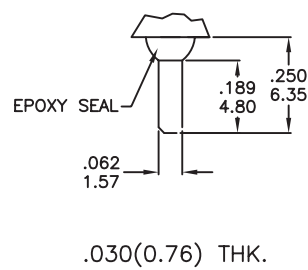
M1 SOLDER LUG



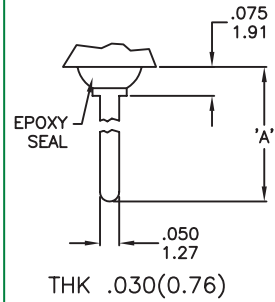
M2 PC THRU-HOLE



M3 QUICK CONNECT



M5 WIRE WRAP



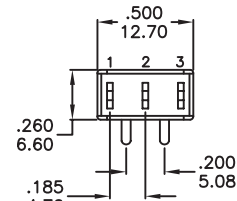
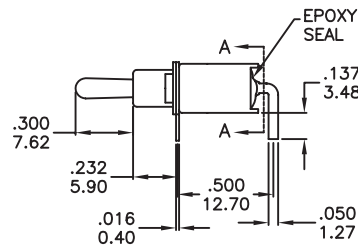
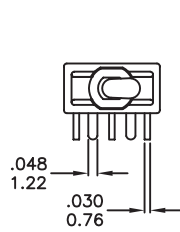
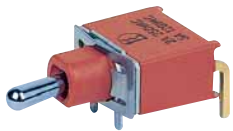
OTHER TERMINATION OPTIONS

- M6 RIGHT ANGLE P.C. MOUNT
- M7 RIGHT ANGLE P.C. MOUNT
- VS2 VERTICAL BRACKET P.C. MOUNT
- VS3 VERTICAL BRACKET P.C. MOUNT

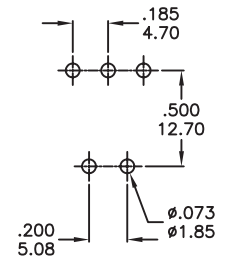
RE Mating Quick Connector
Amp P/N 60900-1

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

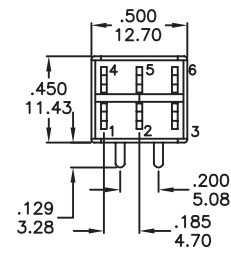
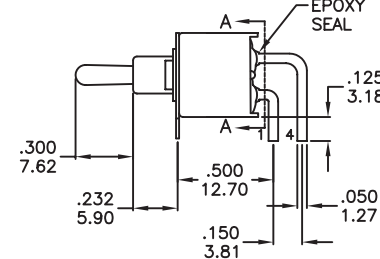
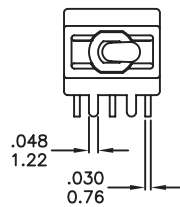


SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

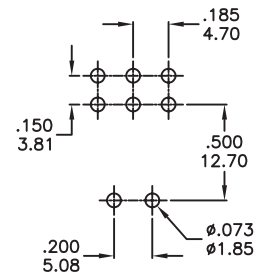
Part No. Shown : 1AS1T2B4M6RE

SPDT

M6



P.C. MOUNTING

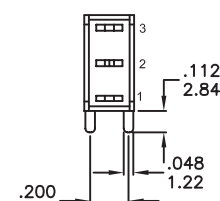
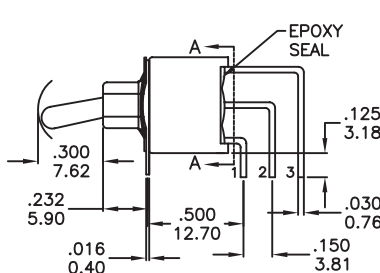
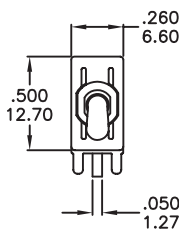
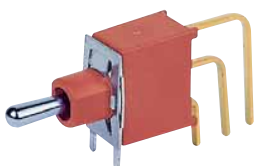


SECTION A-A
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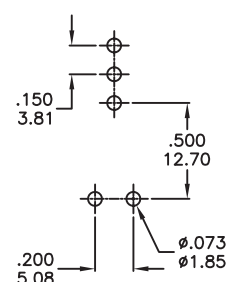
Part No. Shown : 1AD1T2B4M6RE

DPDT

M7



P.C. MOUNTING



SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

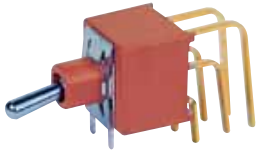
Part No. Shown : 1AS1T2B4M7RE

SPDT

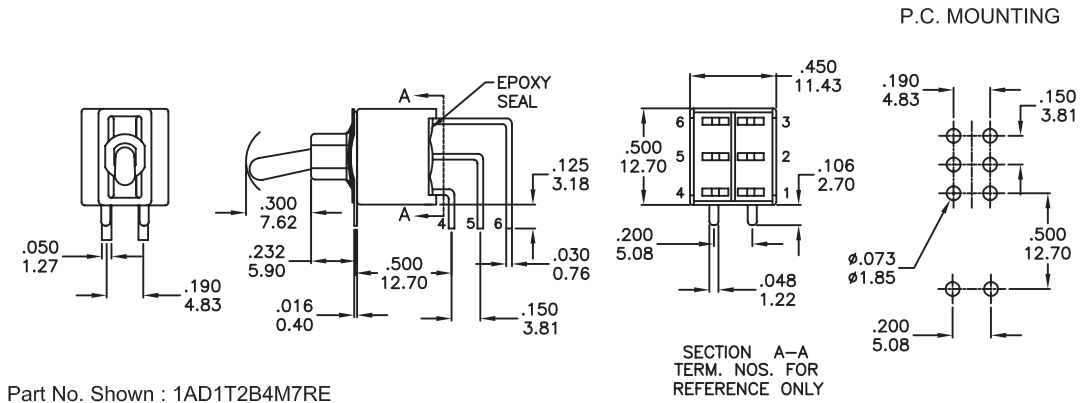
1A Series

Sealed Miniature Toggle Switches

M7

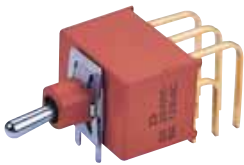


DPDT

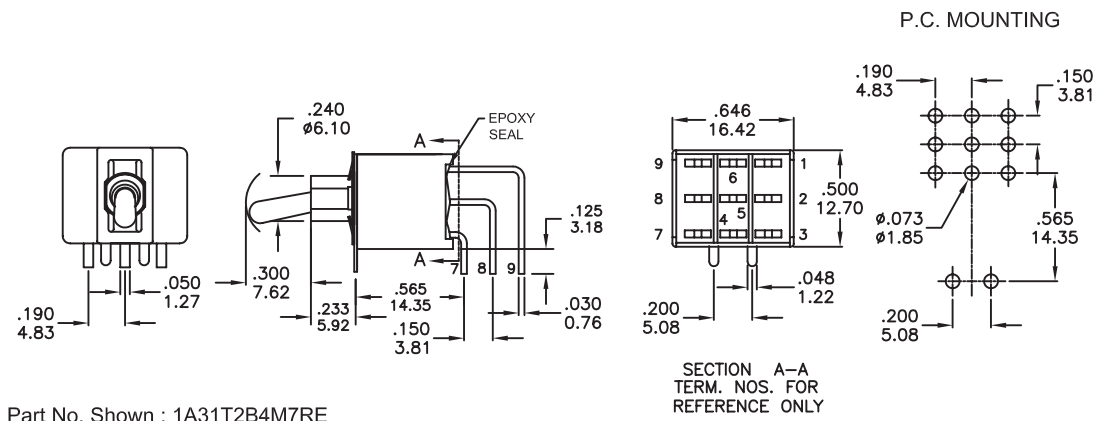


Part No. Shown : 1AD1T2B4M7RE

M7



3PDT

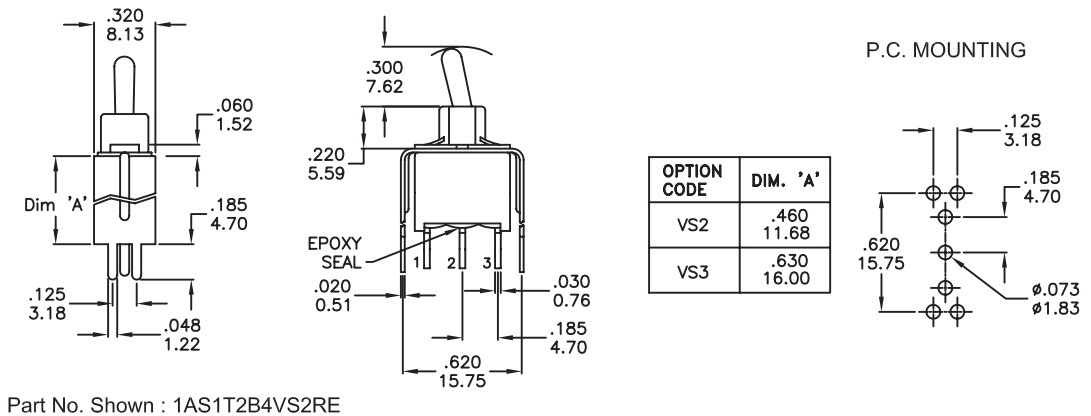


Part No. Shown : 1A31T2B4M7RE

VS2-VS3



SPDT

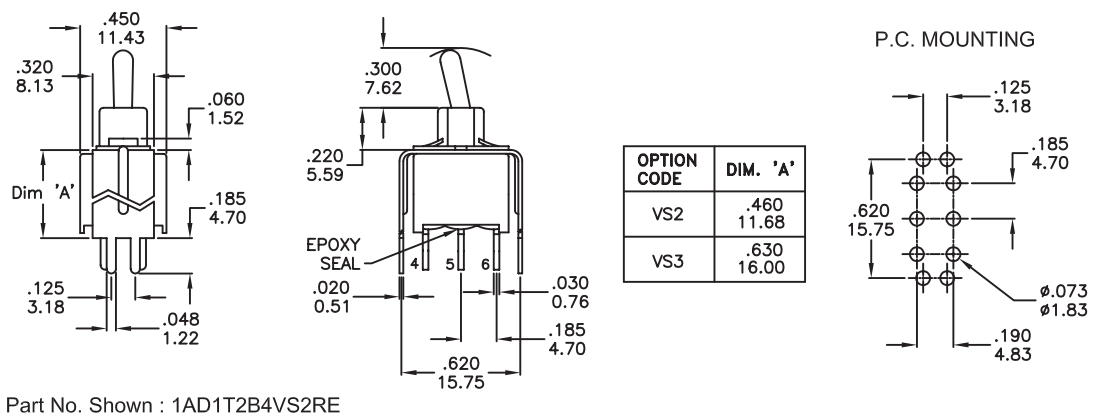


Part No. Shown : 1AS1T2B4VS2RE

VS2-VS3



DPDT



Part No. Shown : 1AD1T2B4VS2RE

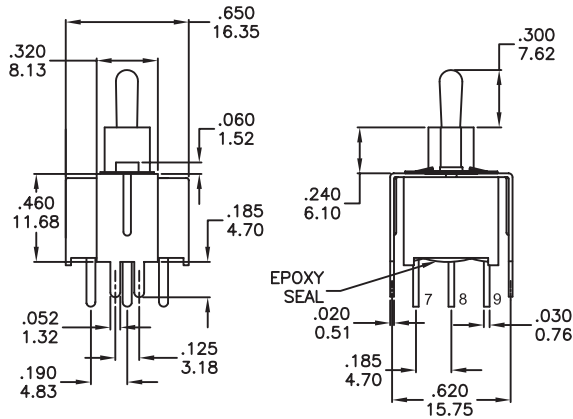
1A Series

Sealed Miniature Toggle Switches

VS2-VS3

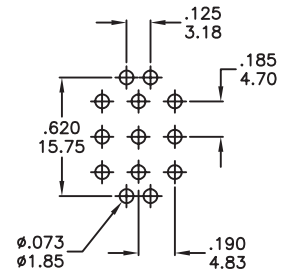


3PDT



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

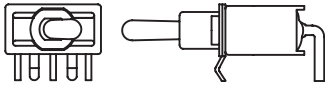
P.C. MOUNTING



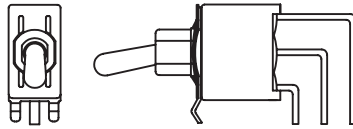
Part No. Shown : 1A31T2B4VS2RE

SNAP-IN TERMINATION OPTIONS

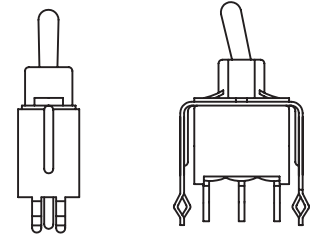
M6N



M7N



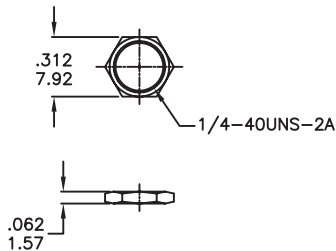
V2N



HARDWARE

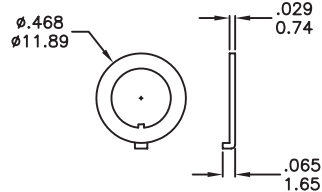
NUT

HDW2



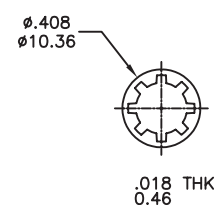
LOCKING RING

HDW15



LOCK WASHER

HDW11



CONTACT MATERIAL OPTIONS

Q=Silver	Q.C.S.K	R.G
R=Gold		
G=Gold, tin-lead	FIXED TERMINAL: Silver plated over copper alloy	FIXED TERMINAL: Copper alloy with gold plated over nickel plated
S=Silver, tin-lead	MOVABLE CONTACT: Silver plated over copper alloy	MOVABLE CONTACT: Copper alloy with gold plated over nickel plated
C=Gold over silver	RATING: 5 Amps with resistant load @ 120VAC or 28VDC 2 Amps with resistant load @ 250VAC	RATING: 0.4 Volt-Amps(VA)max. @ 20V max. (AC or DC)
K=Gold over silver, tin-lead		



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

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: 5 ±1 seconds
 (PCB is 1.6mm in thickness)

SOLDERING : Vapor phase

Temperature Profile

Zone	Room temperature	Time (Sec)
Pre-heat (A)	150°C	Min 120s
Soak (B)	180°C~200°C	Min 150s
Peak (C)	200°C~235°C	Min 30s
Peak (D)	235°C~260°C	Min 40s
Peak (E)	260°C	Max 10s

