

SPECIFICATIONS

- CONTACT RATING:** Dependent upon contact material see page 107.
- MECHANICAL LIFE:** 50,000 make-and-break cycles.
- CONTACT RESISTANCE:** 20 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.

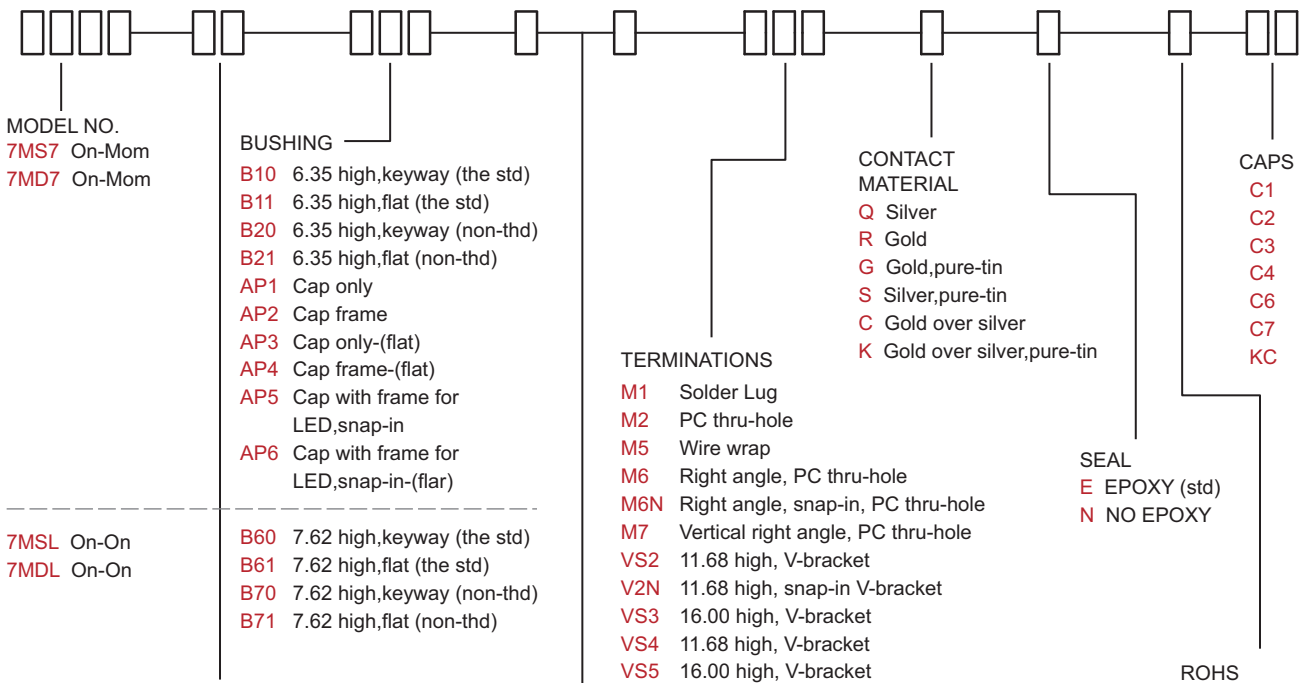
MATERIALS

- CASE:** Diallyl phthalate(DAP) (UL94V-0).
- PLUNGER:** Glass filled Nylon or Glass filled polyester.
- BUSHING:** Brass,nickel plated.
- HOUSING:** Stainless Steel.
- CONTACT:** Copper alloy, silver or gold plated. (See Page 107)

HOW TO ORDER

MODEL NO. ACTUATOR BUSHING FRAME COLOR CAP COLOR TERMINATIONS CONTACT MATERIAL SEAL ROHS SOLDERING CAPS

See below



MODEL NO.
7MS7 On-Mom
7MD7 On-Mom

BUSHING
B10 6.35 high,keyway (the std)
B11 6.35 high,flat (the std)
B20 6.35 high,keyway (non-thd)
B21 6.35 high,flat (non-thd)
AP1 Cap only
AP2 Cap frame
AP3 Cap only-(flat)
AP4 Cap frame-(flat)
AP5 Cap with frame for LED,snap-in
AP6 Cap with frame for LED,snap-in-(flar)

7MSL On-On
7MDL On-On

B60 7.62 high,keyway (the std)
B61 7.62 high,flat (the std)
B70 7.62 high,keyway (non-thd)
B71 7.62 high,flat (non-thd)

TERMINATIONS
M1 Solder Lug
M2 PC thru-hole
M5 Wire wrap
M6 Right angle, PC thru-hole
M6N Right angle, snap-in, PC thru-hole
M7 Vertical right angle, PC thru-hole
VS2 11.68 high, V-bracket
V2N 11.68 high, snap-in V-bracket
VS3 16.00 high, V-bracket
VS4 11.68 high, V-bracket
VS5 16.00 high, V-bracket

CONTACT MATERIAL
Q Silver
R Gold
G Gold,pure-tin
S Silver,pure-tin
C Gold over silver
K Gold over silver,pure-tin

SEAL
E EPOXY (std)
N NO EPOXY

CAPS
C1
C2
C3
C4
C6
C7
C8
KC

ACTUATOR
P1 5.54 high
PA 5.54 high (Metal material)
PB 7.00 high,15/32 bushing
PC 8.75 high (1/4-40 UNS-2A)

FRAME COLOR CAP COLOR





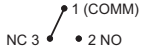
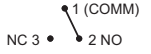
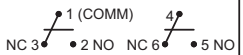
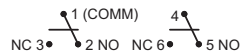
See below

ITEM NO	COLOR
1	White
2	Black (Std)
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Brown
9	Gray

ROHS SOLDERING
□ RoHS Compliant
S RoHS & Lead Free
F Halogen Free+RoHS

7M Pushbutton Switches

SWITCH FUNCTION

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS / SCHEMATIC	
			POS.1	POS.2	POS.1	POS.2
						
SP	Q2717	7MS7	ON	MOM	1-3 	1-2 
DP	Q2727	7MD7	ON	MOM	1-3,4-6 	1-2,4-5 

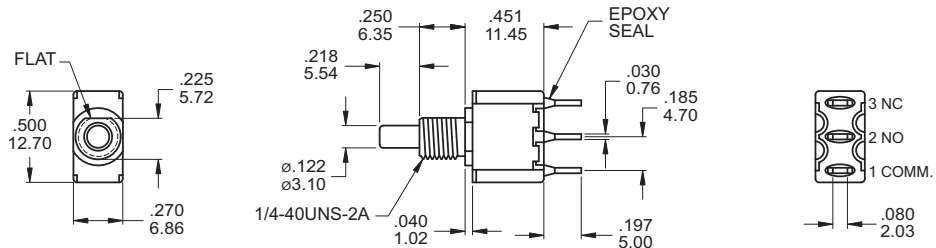
MOM=MOMENTARY

POLE OPTIONS



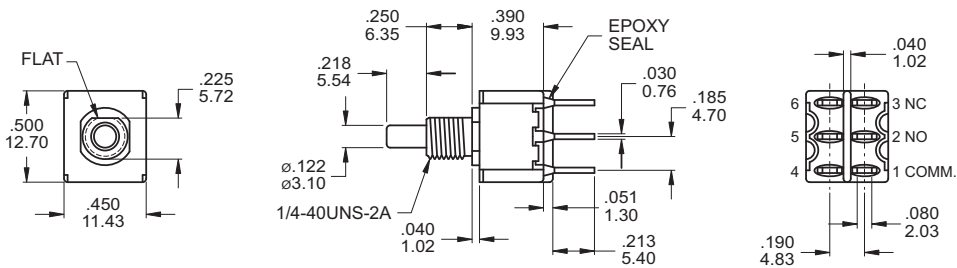
SPDT

Part No. Shown : 7MS7P1B11M1QE



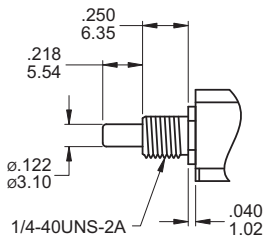
DPDT

Part No. Shown : 7MD7P1B11M1QE

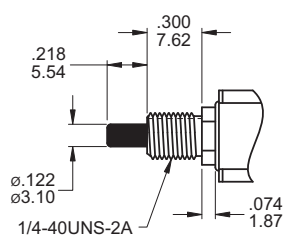


ACTUATOR OPTIONS

P1

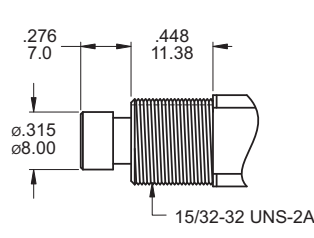


PA



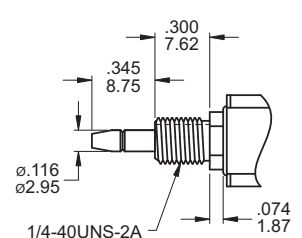
handle, metal material

PBB13



handle, metal material

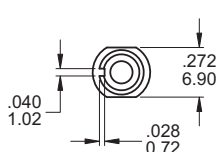
PCB60



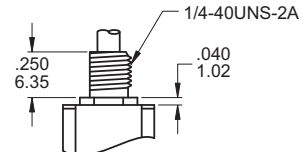
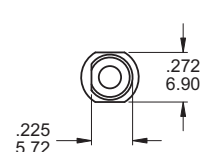
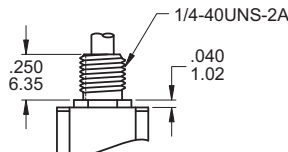
handle, metal material
* PC Actuator only for KC Cap

BUSHING OPTIONS

**B10 THD STD
B20 NON-THD**

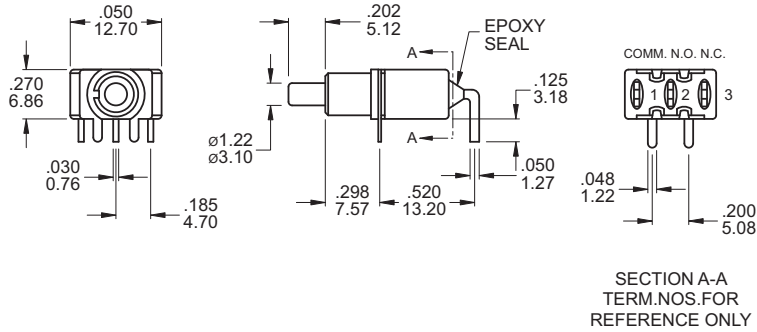


**B11 THD STD
B21 NON-THD**

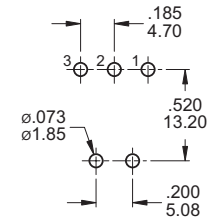


7M Pushbutton Switches

M6



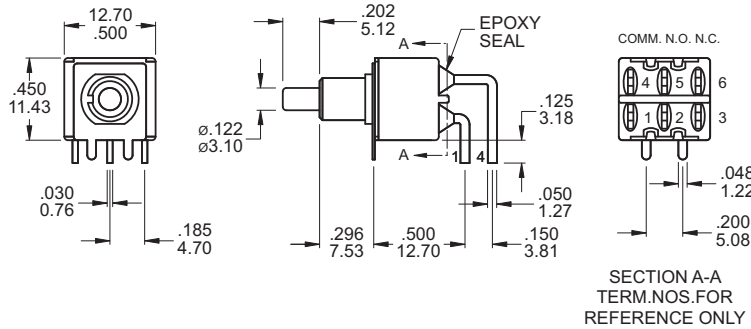
P.C. MOUNTING



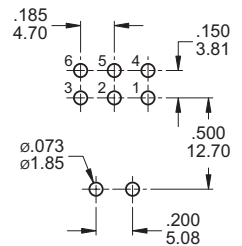
SPDT

Part No. Shown : 7MS7P1B20M6QE

M6



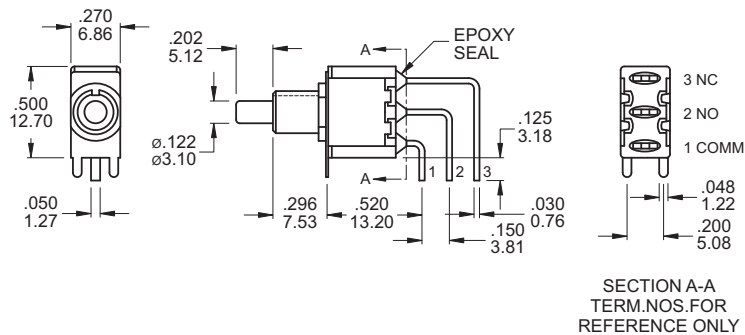
P.C. MOUNTING



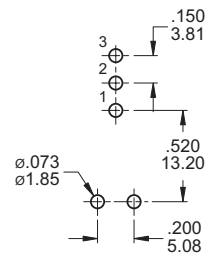
DPDT

Part No. Shown : 7MD7P1B20M6QE

M7



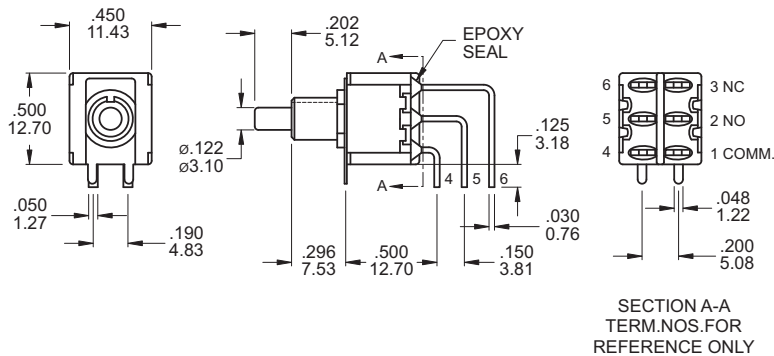
P.C. MOUNTING



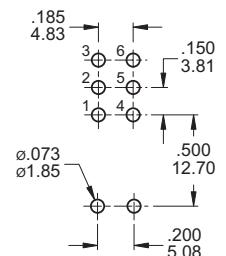
SPDT

Part No. Shown : 7MS7P1B20M7QE

M7



P.C. MOUNTING



DPDT

Part No. Shown : 7MD7P1B20M7QE

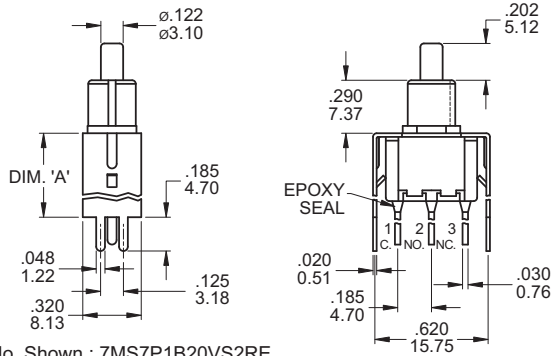


7M
Pushbutton Switches

VS2 - VS3

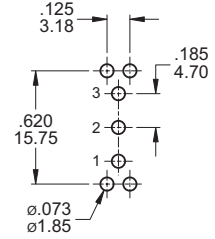


SPDT



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

P.C. MOUNTING

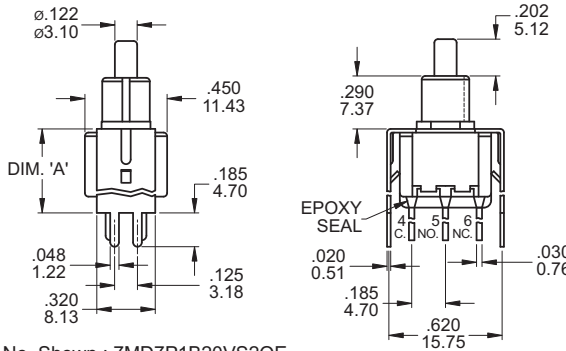


Part No. Shown : 7MS7P1B20VS2RE

VS2 - VS3

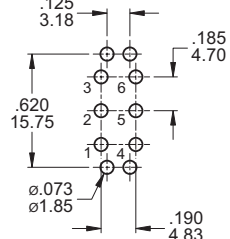


DPDT



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

P.C. MOUNTING

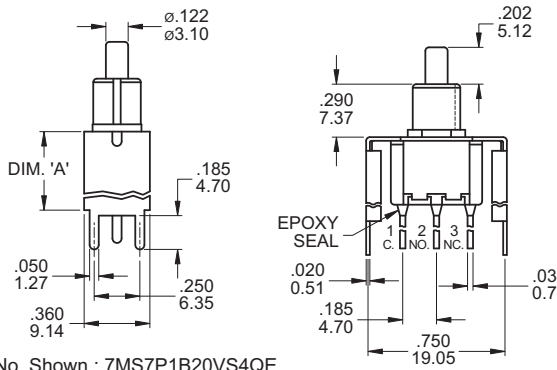


Part No. Shown : 7MD7P1B20VS2QE

VS4 - VS5

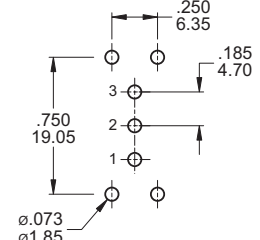


SPDT



OPTION CODE	DIM. 'A'
VS4	.460 11.68
VS5	.630 16.00

P.C. MOUNTING

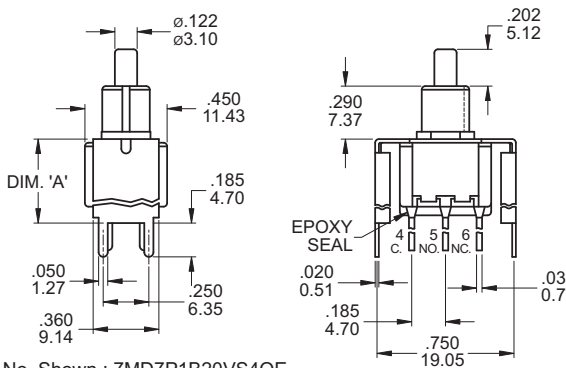


Part No. Shown : 7MS7P1B20VS4QE

VS4 - VS5

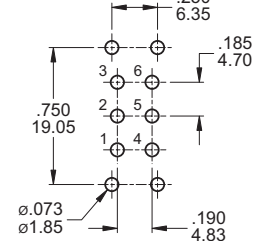


DPDT



OPTION CODE	DIM. 'A'
VS4	.460 11.68
VS5	.630 16.00

P.C. MOUNTING

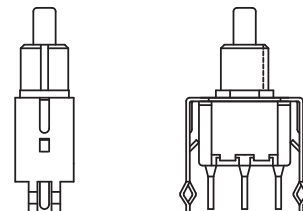
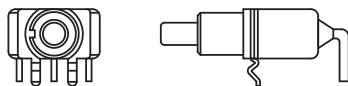


Part No. Shown : 7MD7P1B20VS4QE

SNAP-IN TERMINATION OPTIONS

M6N

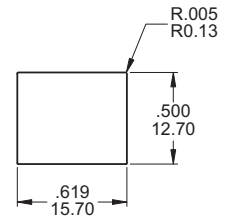
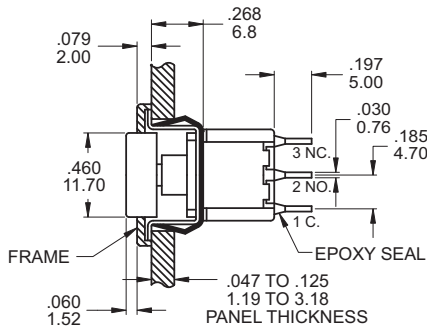
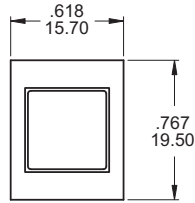
V2N



7M Pushbutton Switches

PANEL MOUNT

AP2 CAP & FRAME / AP1 CAP ONLY



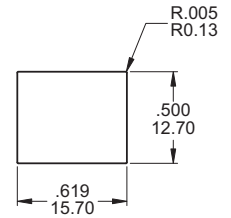
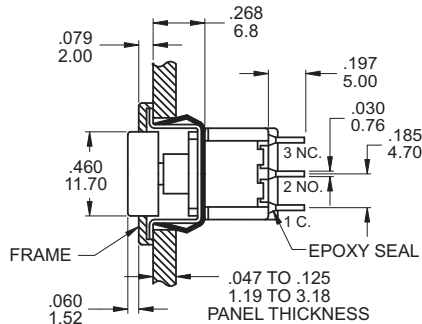
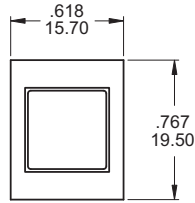
INCREASE TO .620/.625 15.75/15.88
FOR .091/.125 2.31/3.18 THK PANEL

PANEL LAYOUT

SPDT

Part No. Shown : 7MS7AP223M1QE

AP2 CAP & FRAME / AP1 CAP ONLY



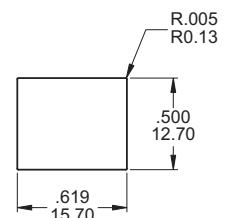
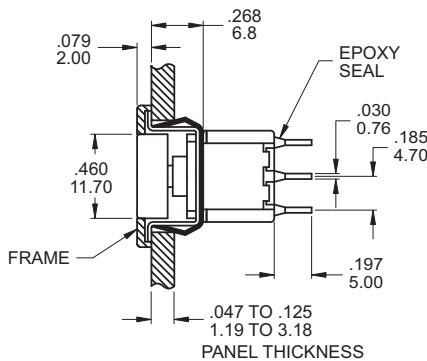
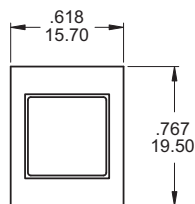
INCREASE TO .620/.625 15.75/15.88
FOR .091/.125 2.31/3.18 THK PANEL

PANEL LAYOUT

DPDT

Part No. Shown : 7MD7AP223M1QE

AP4 CAP & FRAME / AP3 CAP ONLY



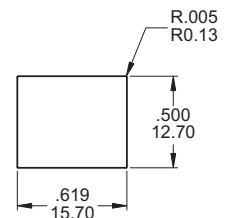
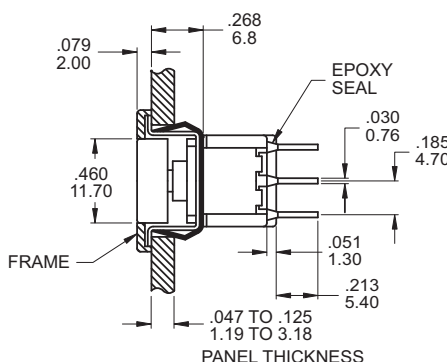
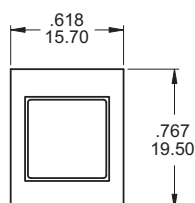
INCREASE TO .620/.625 15.75/15.88
FOR .091/.125 2.31/3.18 THK PANEL

PANEL LAYOUT

SPDT

Part No. Shown : 7MS7AP429M1RE

AP4 CAP & FRAME / AP3 CAP ONLY



INCREASE TO .620/.625 15.75/15.88
FOR .091/.125 2.31/3.18 THK PANEL

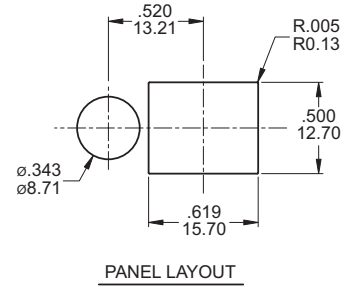
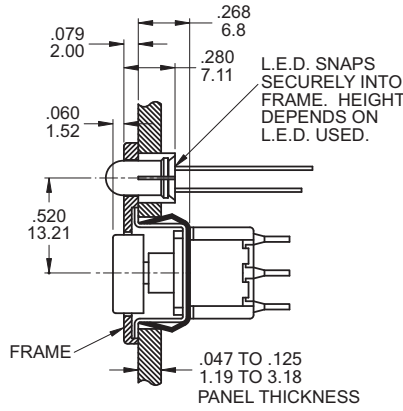
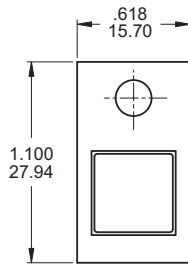
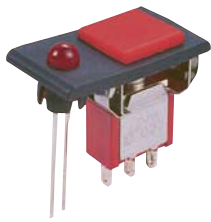
PANEL LAYOUT

DPDT

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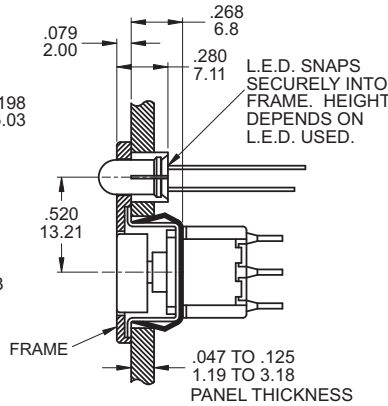
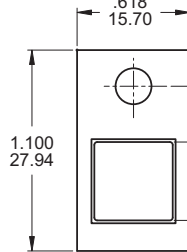
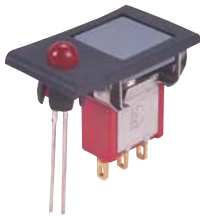
AP5 CAP & FRAME



SPDT

Part No. Shown : 7MS7AP523M1QE

AP6 CAP & FRAME



CAP AND FRAME COLORS

OPTION CODE	COLOR
1	WHITE
2	BLACK(std)
3	RED

LED COLORS

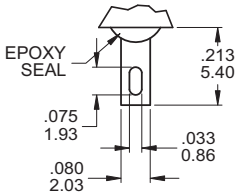
OPTION CODE	COLOR
3	RED(std)
4	ORANGE
6	GREEN

SPDT

Part No. Shown : 7MS7AP629M1RE

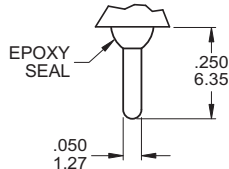
TERMINATION OPTIONS

M1 SOLDER LUG



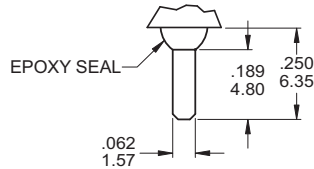
.030(0.76) THK.

M2 PC THRU-HOLE



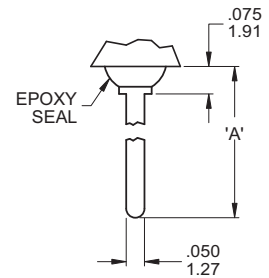
.030(0.76) THK.

M3 QUICK CONNECT



.030(0.76) THK.

M5 WIRE WRAP



.030(0.76) THK.

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
- VS4 VERTICAL BRACKET P.C. MOUNT
- VS5 VERTICAL BRACKET P.C. MOUNT

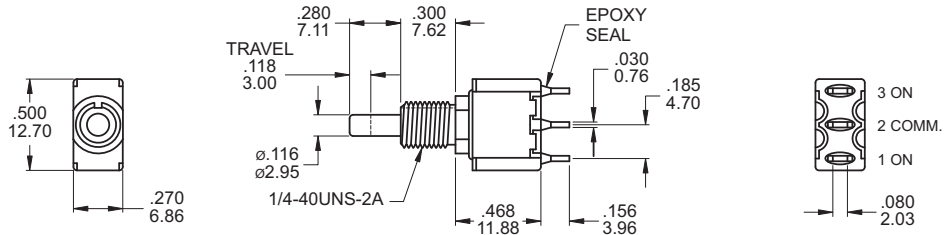
OPTION CODE	DIM. 'A'
M5-1	.750 (19.50)
M5-2	.964 (24.48)
M5-3	.426 (10.80)
M5-4	.650 (16.50)

SWITCH FUNCTION

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION		CONNECTED TERMINALS / SCHEMATIC	
			POS.1	POS.2	POS.1	POS.2
SP	Q27	7MSL	ON	ON	1-2 ON 1 → 2 (COMM) → 3 ON	2-3 ON 1 → 2 (COMM) → 3 ON
DP	Q27	7MDL	ON	ON	1-2,4-5 ON 1 → 2 (COMM) → 3 ON ON 4 → 5 → 6 ON	2-3,5-6 ON 1 → 2 (COMM) → 3 ON ON 4 → 5 → 6 ON

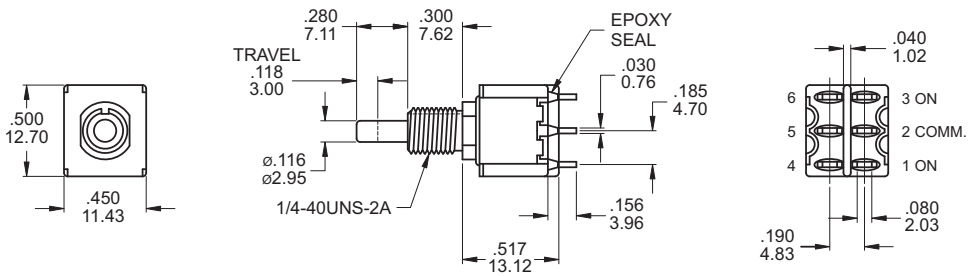
MOM=MOVEMENTARY

POLE OPTIONS



SPDT

Part No. Shown : 7MSLP1B60M1QE

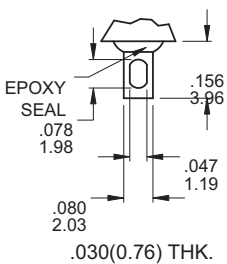


DPDT

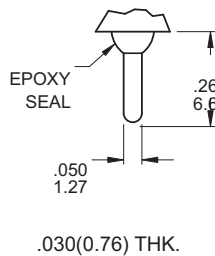
Part No. Shown : 7MDLP1B60M1QE

TERMINATION OPTIONS

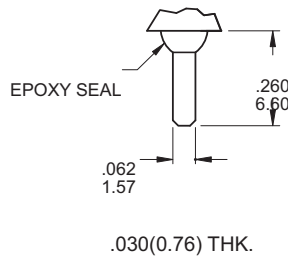
M1 SOLDER LUG



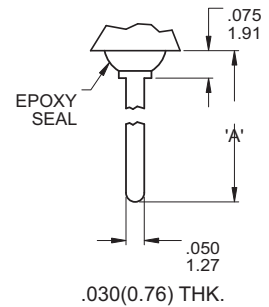
M2 PC THRU-HOLE



M3 QUICK CONNECT



M5 WIRE WRAP



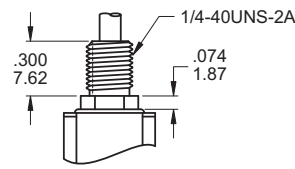
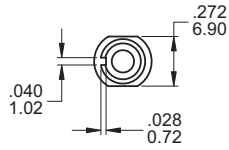
OTHER TERMINATION OPTIONS

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

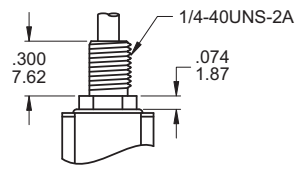
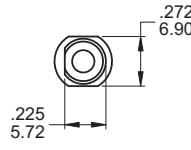
OPTION CODE	DIM. 'A'
M5-1	.750 (19.50)
M5-2	.964 (24.48)
M5-3	.426 (10.80)
M5-4	.650 (16.50)

BUSHING OPTIONS

B60 THD STD
B70 NON-THD

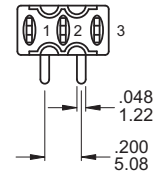
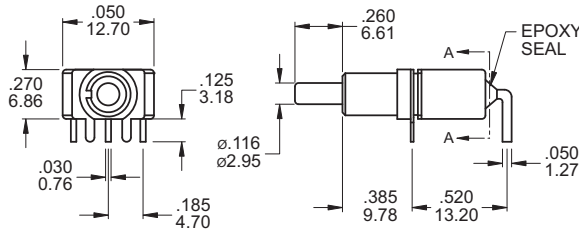
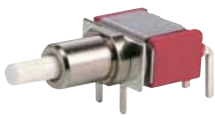


B61 THD STD
B71 NON-THD

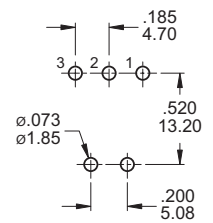


TERMINATION OPTIONS

M6



P.C. MOUNTING

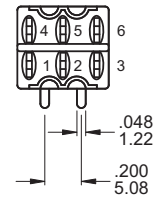
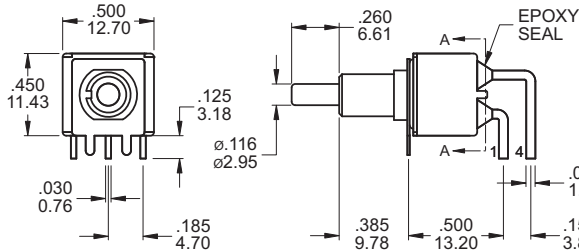
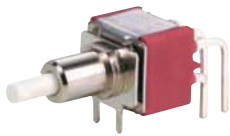


SPDT

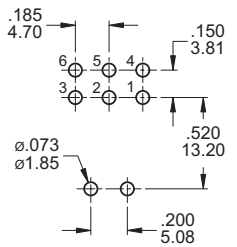
Part No. Shown : 7MS7P1B20M6QE

SECTION A-A
TERM.NOS.FOR
REFERENCE ONLY

M6



P.C. MOUNTING

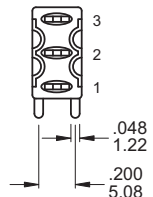
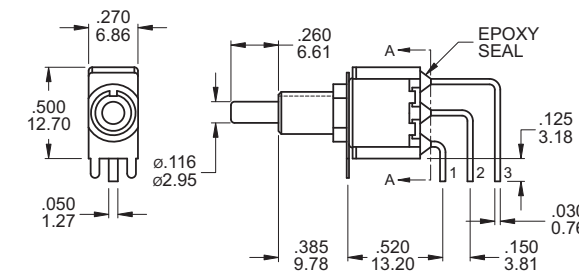
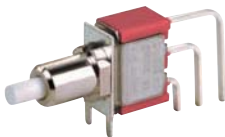


DPDT

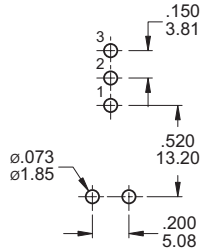
Part No. Shown : 7MD7P1B20M6QE

SECTION A-A
TERM.NOS.FOR
REFERENCE ONLY

M7



P.C. MOUNTING

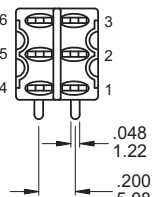
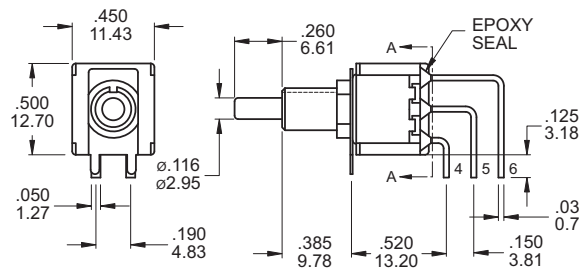
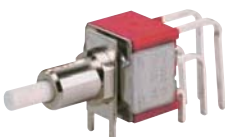


SPDT

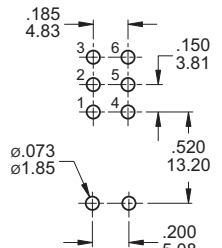
Part No. Shown : 7MS7P1B20M7QE

SECTION A-A
TERM.NOS.FOR
REFERENCE ONLY

M7



P.C. MOUNTING



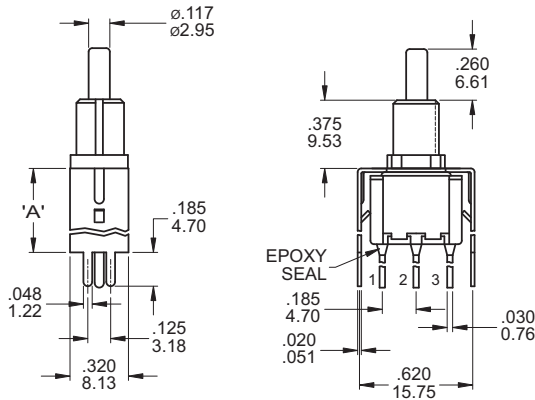
DPDT

Part No. Shown : 7MD7P1B20M7RE

SECTION A-A
TERM.NOS.FOR
REFERENCE ONLY

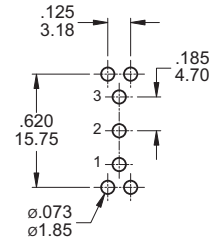
7M (Lock)
Pushbutton
Switches

VS2 - VS3



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

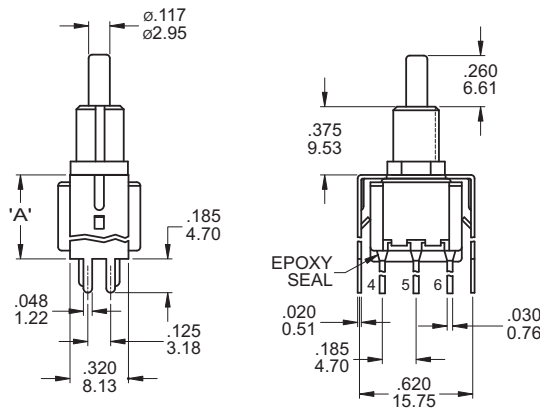
P.C. MOUNTING



SPDT

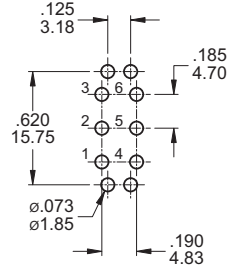
Part No. Shown : 7MSLP1B70V2QE

VS2 - VS3



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

P.C. MOUNTING

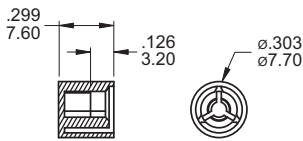


DPDT

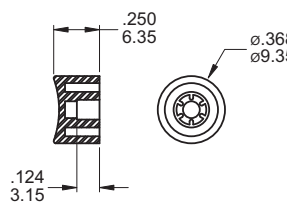
Part No. Shown : 7MDLP1B70V2QE

CAP OPTIONS

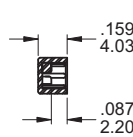
C1



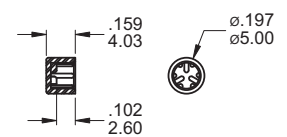
C2



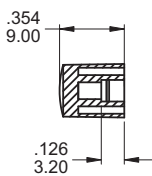
C3



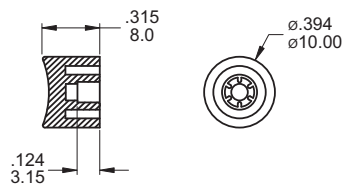
C4



C6



C7



KC

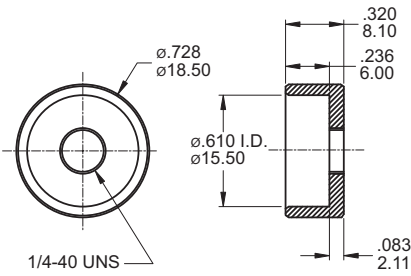


For 7M,7A Series ONLY

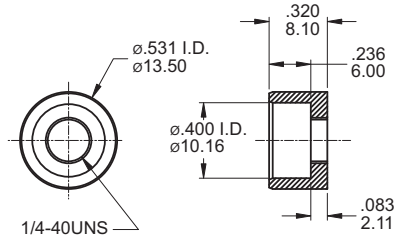
CAP Colors: White, Black, Green, Red

DRESS NUTS

HDW21

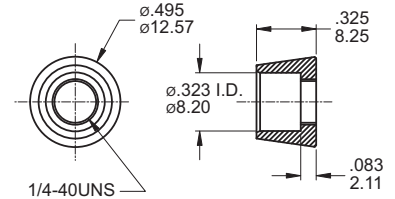


HDW22



FOR CAP:C2

HDW23



FOR CAP:C1

CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Q = Silver	3 Amps with resistant load @ 120VAC or 28VDC 1 Amps with resistant load @ 250VAC
S		S = 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)

SOLDERING : Vapor phase

7M (Lock) Pushbutton Switches