



RoHS Compliant

E222871

Sub-Miniature Toggle

Specifications

Electrical Ratings	3A @ 120VAC, 28VDC 1A @ 250VAC See Contact Options
Electrical Life	30,000 cycles typical
Contact Resistance	<20mΩ initial @ 2-4VDC, 100mA

Dielectric Resistance	1500Vrms min
Insulation Resistance	>100MΩ min
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C

Materials

Actuator	Brass, Chrome Plated
Housing	Dially Phthalate (DAP)
Cover	Stainless Steel
Bushing	Brass, Nickel Plated
Contacts	Copper Alloy, Silver or Gold Plated
Terminals	Brass, Silver or Gold Plated

Ordering Information

1. Series	BNT	2	1	U	E1	C	Q	E
BNT								
2. Number of Poles								
1 = SPDT								
2 = DPDT								
3. Switch Function								
1 = ON-NONE-ON								
2 = ON-NONE-(ON)								
3 = ON-OFF-ON								
4 = (ON)-OFF-(ON) Only in SPDT models								
5 = ON-OFF-(ON) Only in SPDT models								
4. Actuator								
T = 5.33mm, standard on E, E1, F, F1 bushings								
U = 7.37mm, standard on E, E1, F, F1 bushings								
S = 9.40mm, standard on E, E1, F, F1 bushings								
X = 5.59mm, standard on G, G1, J, J1 bushings								
V = 10.41mm, standard on G, G1, J, J1 bushings								
5. Bushing								
E / E1 = 5.59mm, 10-48UNS / non-threaded, flat								
F / F1 = 5.59mm, 10-48UNS / non-threaded, keyway								
J / J1 = 6.60mm, 1/4-40NS / non-threaded, keyway								
G / G1 = 7.87mm, 1/4-40NS / non-threaded, flat								
6. Terminals								
B = Solder lug								
C = PC pin								
D = Quick Connect								
H = Horizontal mount, right angle PC pin; HS = Snap-in								
V = Vertical mount, right angle PC pin; VS = Snap-in								
A5 = PC pin with support bracket, A5S = Snap-in support bracket								
7. Contacts								
Q = Silver plated								
R = Gold plated								
G = Gold over Silver plated								
8. Epoxy Seal								
E = Epoxy seal								

BNT

Sub-Miniature Toggle

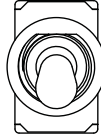
Switch Function



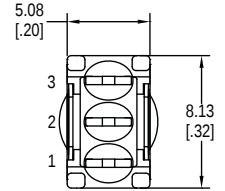
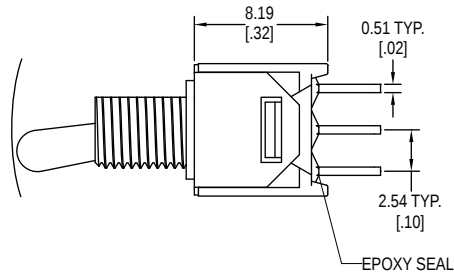
SPDT



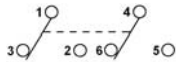
Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3	-	2-1



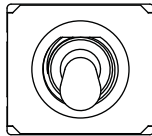
POS. 3
POS. 2
POS. 1



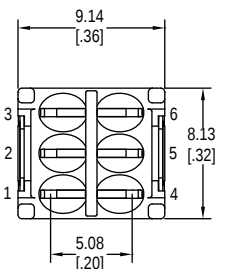
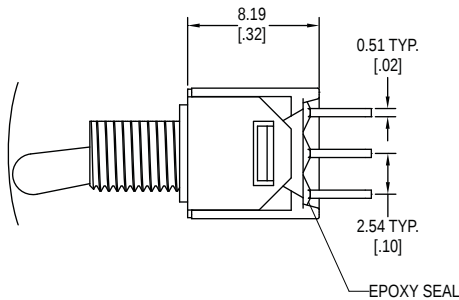
DPDT



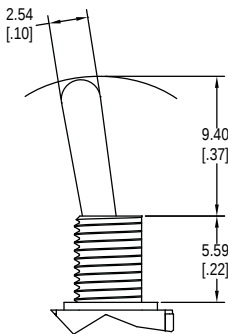
Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3	-	2-1



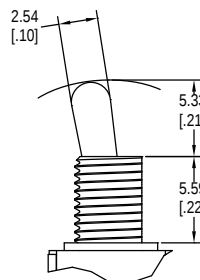
POS. 3
POS. 2
POS. 1



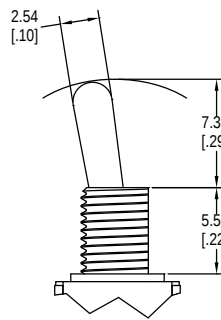
Actuator Options



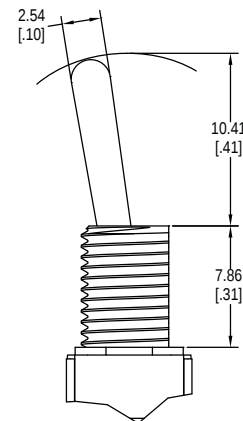
S



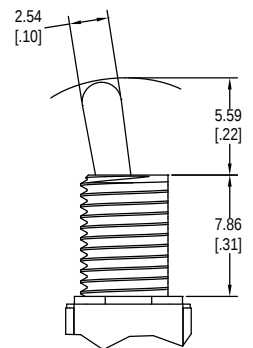
T



U

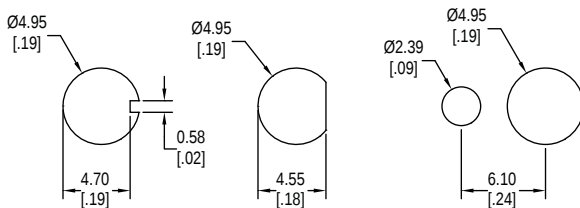


V

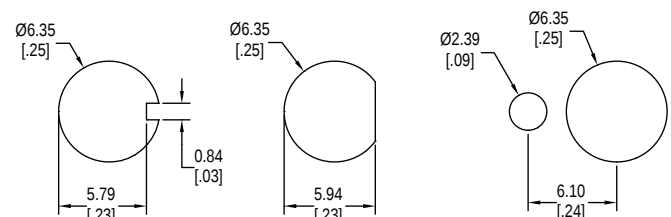


X

Panel Mounting

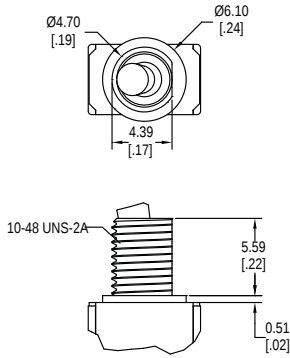


Used with E, E1, F & F1

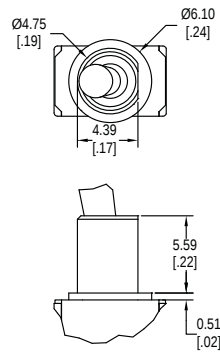


Used with G, G1, J & J1

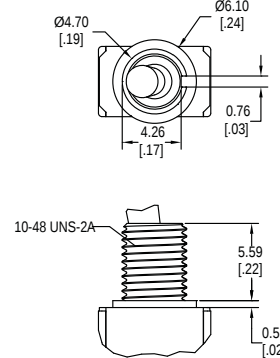
Bushing Options



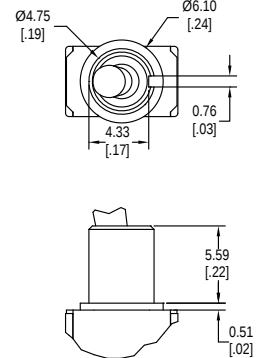
E



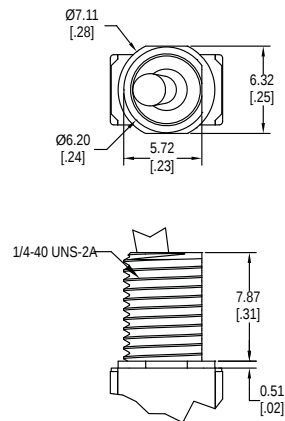
E1



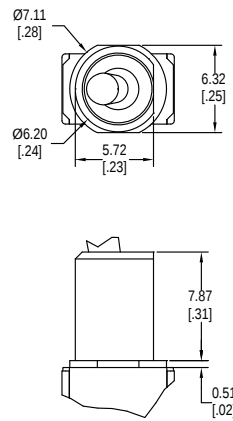
F



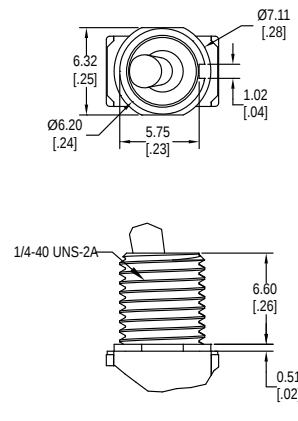
F1



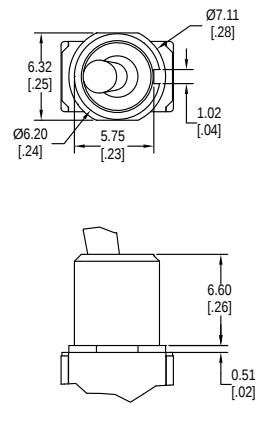
G



G1

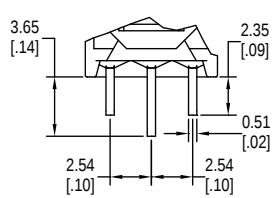


J

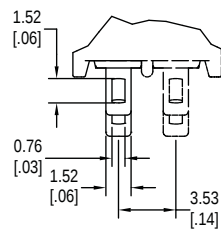


J1

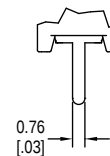
Terminal Options



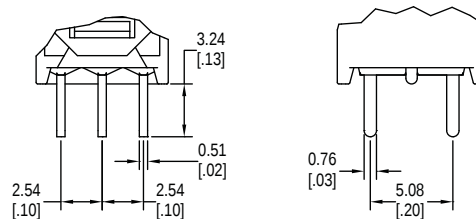
B - SPDT



C - SPDT

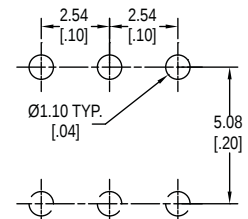


PC Cut Out



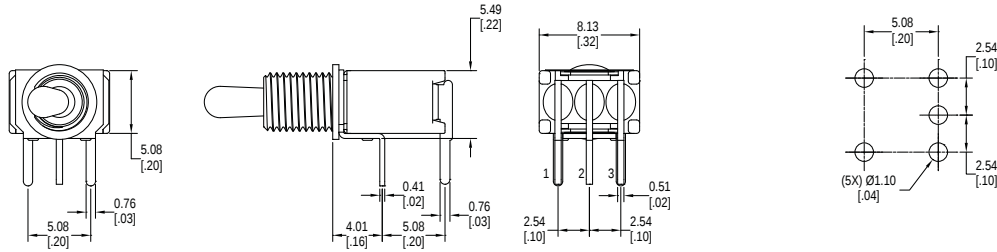
B - DPDT

C - DPDT

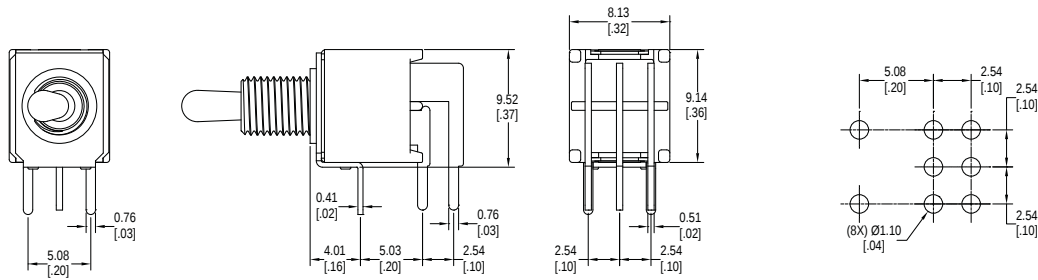


PC Cut Out

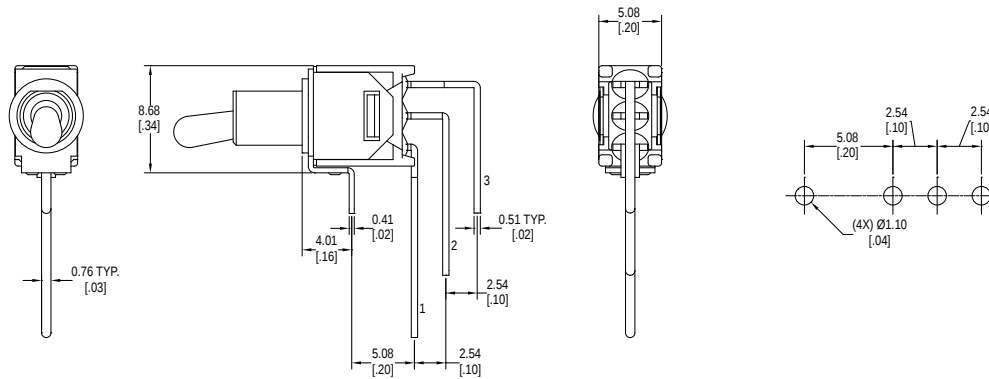
Terminal Options



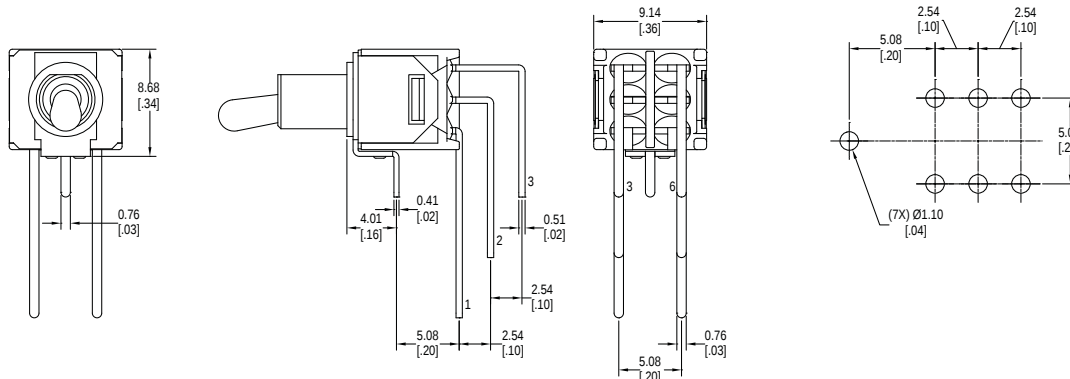
H = Horizontal mount, right angle PC pins, single pole, single throw



H = Horizontal mount, right angle PC pins, double pole, double throw

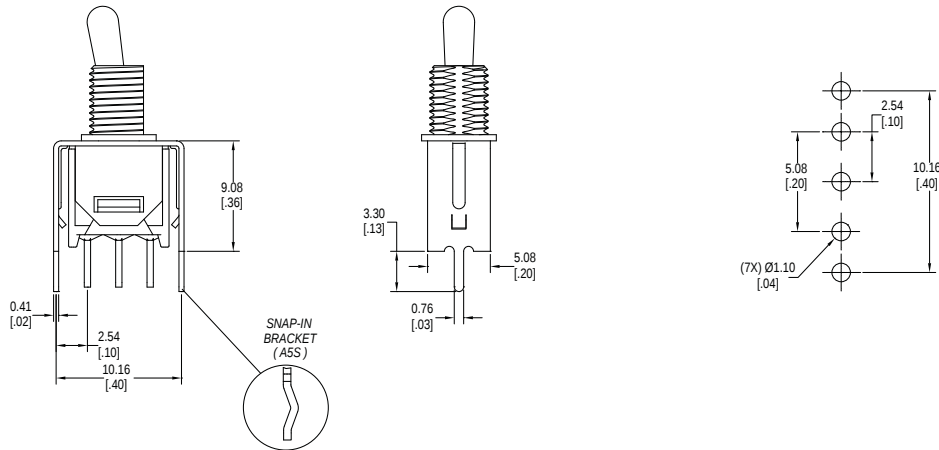


V = Vertical mount, right angle PC pins, single pole, single throw

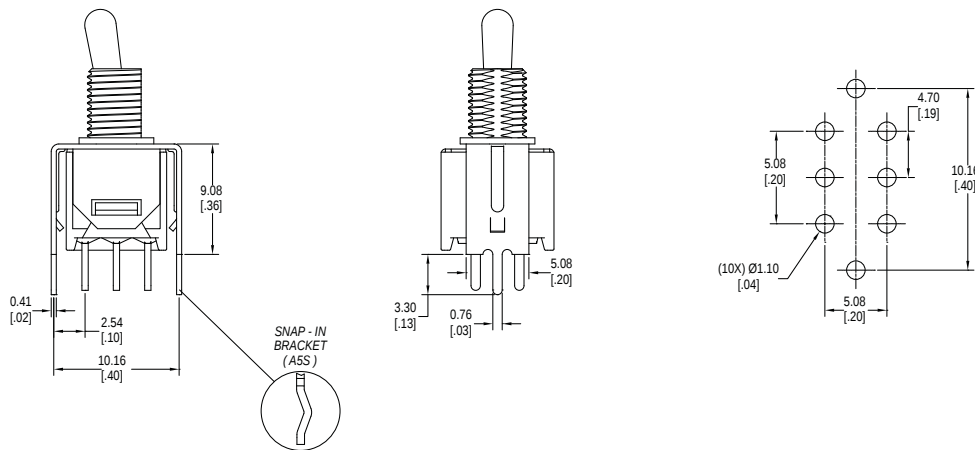


V = Vertical mount, right angle PC pins, double pole, double throw

Terminal Options



A5 (A5S - Snap in bracket) = PC pins with support bracket, single pole single throw



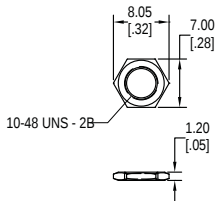
A5 (A5S - Snap in bracket) = PC pins with support bracket, double pole double throw

Contact Options

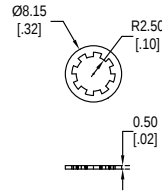
Designator	Contact Material	Terminal Material	Electrical Ratings
Q	Silver Plating	Silver Plating	3A @ 120VAC, 28VDC; 1A @ 250VAC
R	Gold over Nickel Plating	Gold over Nickel Plating	0.4VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plating	0.4VA max @ 20VAC or VDC max or 3A @ 120VAC, 28VDC; 1A @ 250VAC

Hardware

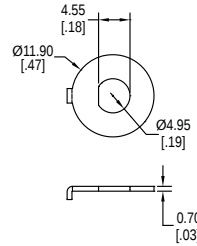
Two hex nuts, one lock washer & one locking ring supplied standard with threaded bushings



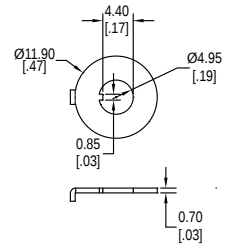
10 - 48 Hex Nut



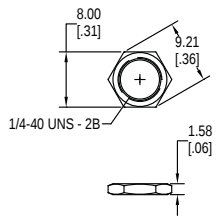
Lock Washer



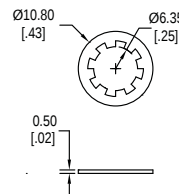
Locking Ring (Flat)



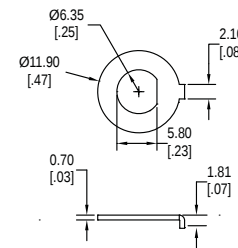
Locking Ring (Keyway)



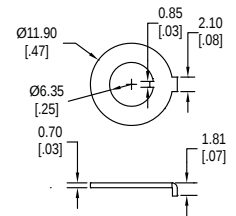
1/4 - 40 Hex Nut



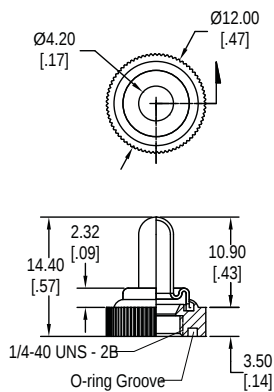
Lock Washer



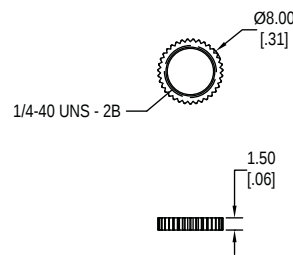
Locking Ring (Flat)



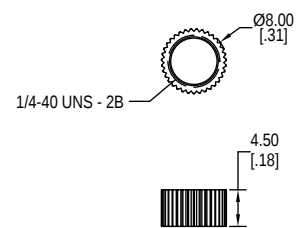
Locking Ring (Keyway)



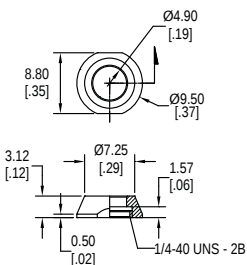
**Sealed Boot - E
Knurled Nut**



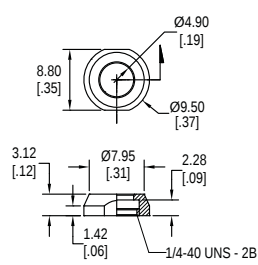
Knurled Nuts



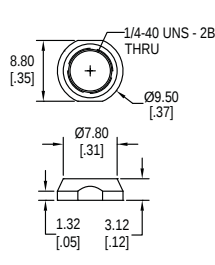
Hardware - Dress Nut



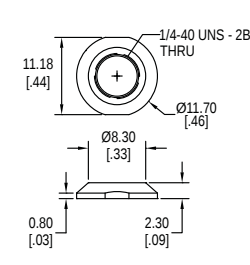
A



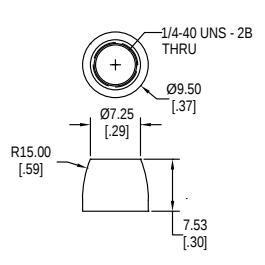
B



C



D



E