

Sub-Miniature Toggle

Specifications

Electrical Ratings	3A @ 120VAC, 28VDC 1A @ 250VAC See Contact Options	Dielectric Resistance	1500Vrms min
Electrical Life	30,000 cycles typical	Insulation Resistance	>100MΩ min
Contact Resistance	<20mΩ initial @ 2-4VDC, 100mA	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 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								

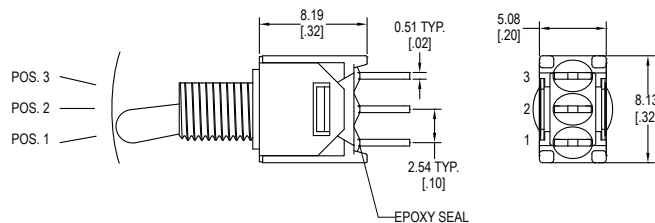
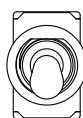
Switch Function



SPDT



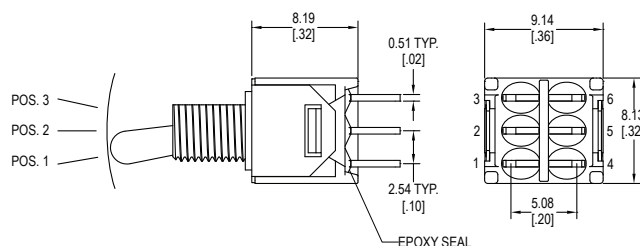
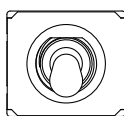
Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3	-	2-1



DPDT

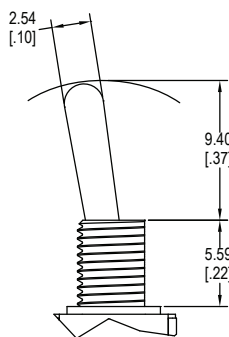


Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
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Terminals	2-3	-	2-1

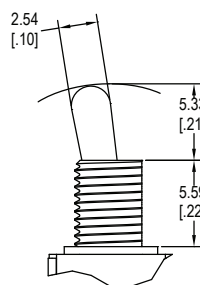


Actuator Options

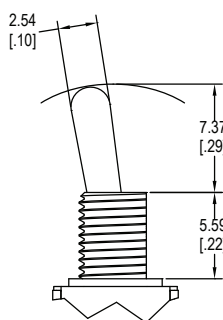
S



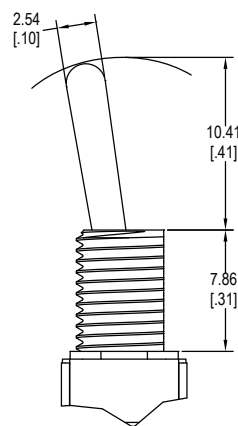
T



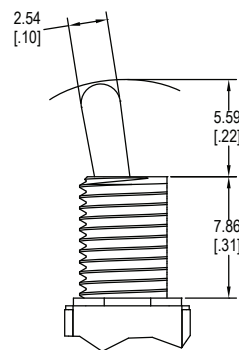
U



V

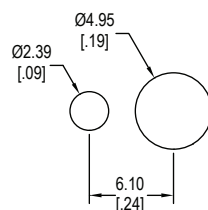
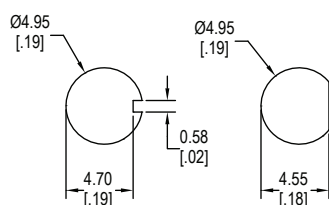


X

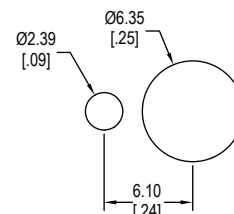
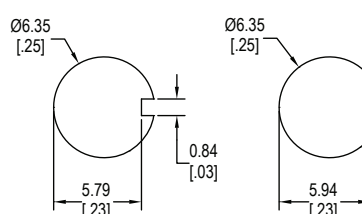


Panel Mounting

Used with E, E1, F & F1 Bushings

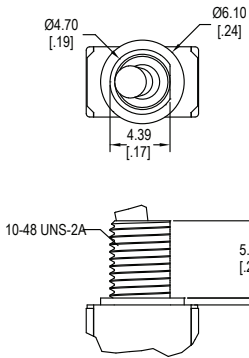


Used with G, G1, J & J1 Bushings

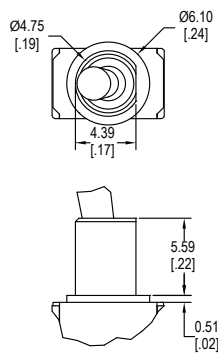


Bushing Options

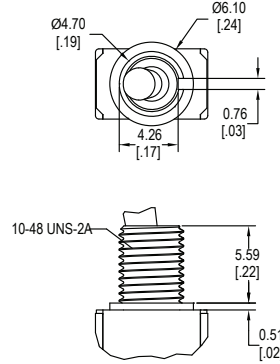
E



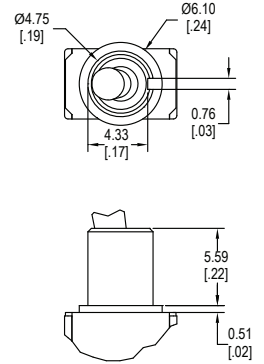
E1



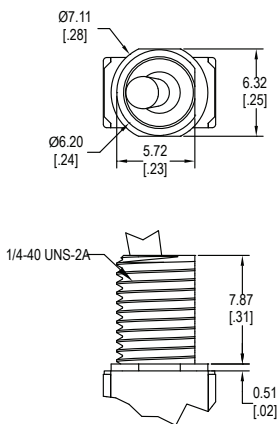
F



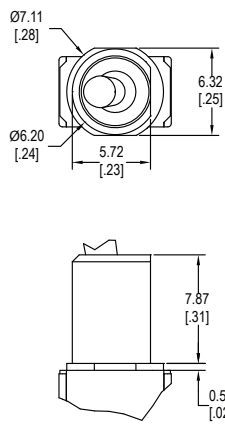
F1



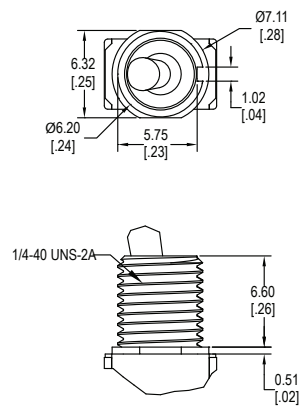
G



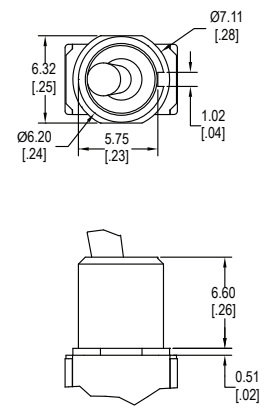
G1



J



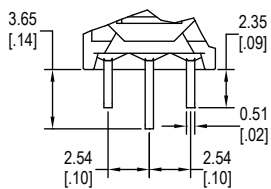
J1



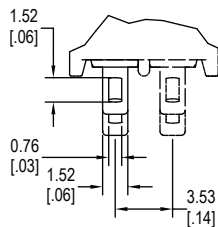
Terminal Options

B, Solder Lug

Single Pole Double Throw

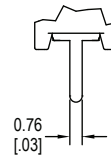
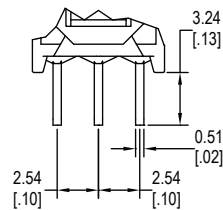


Double Pole Double Throw

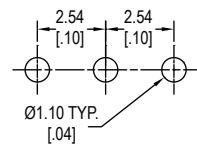


C, PC Pin

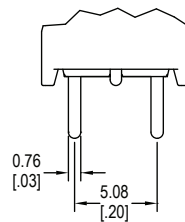
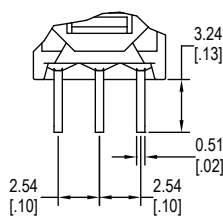
Single Pole Double Throw



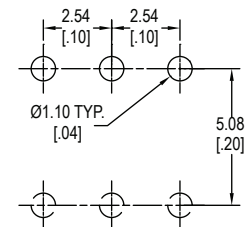
PC Layout



Double Pole Double Throw



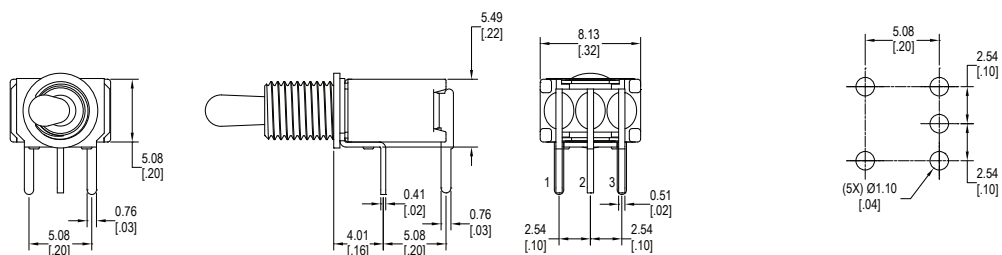
PC Layout



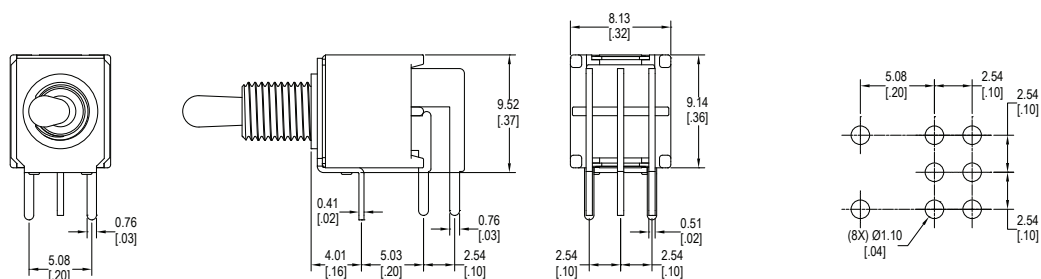
Terminal Options

H, horizontal mount, right angle PC pins

Single Pole Double Throw

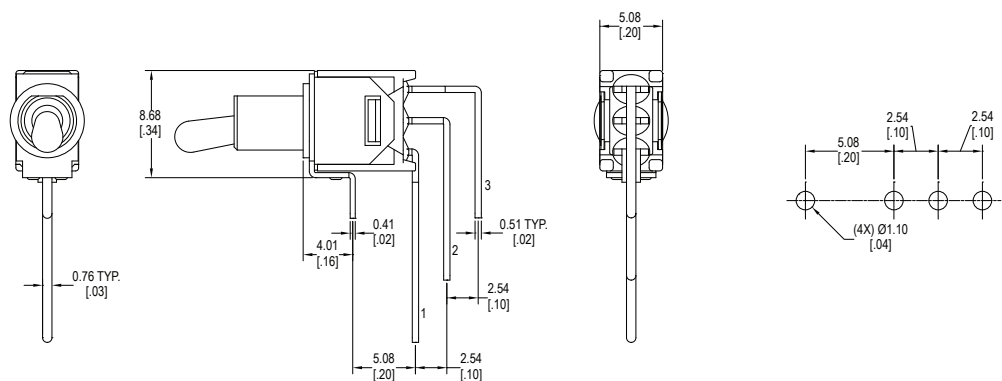


Double Pole Double Throw

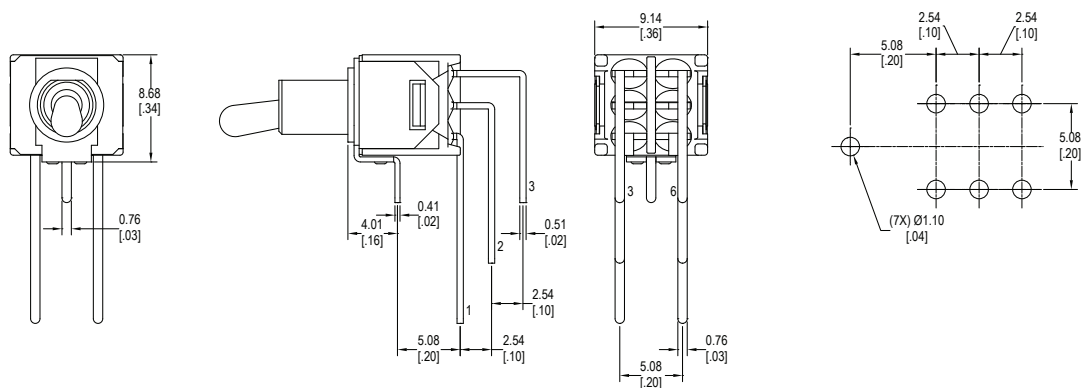


V, vertical mount, right angle PC pins

Single Pole Double Throw



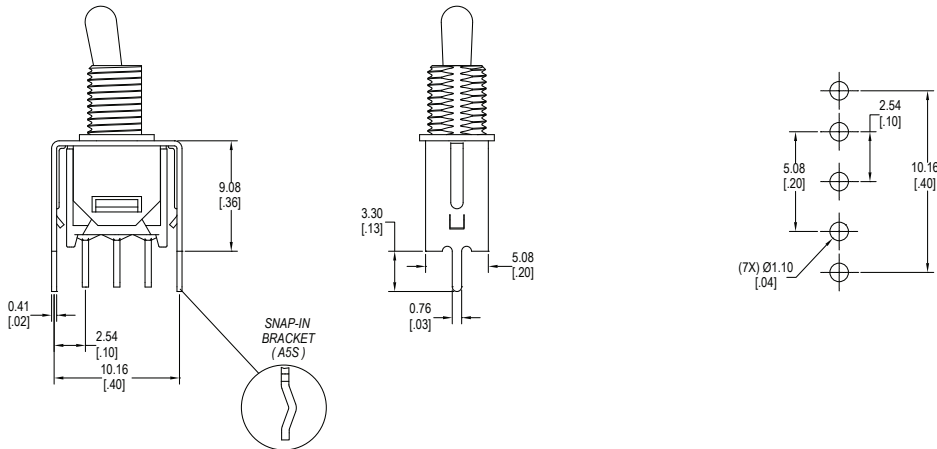
Double Pole Double Throw



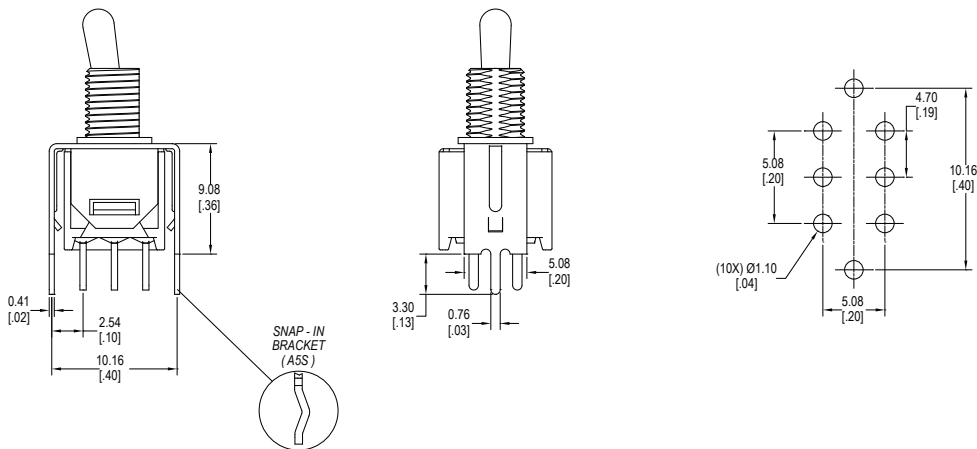
Terminal Options

A5, (A5S, snap-in bracket) PC pins with support bracket

Single Pole Double Throw



Double Pole Double Throw

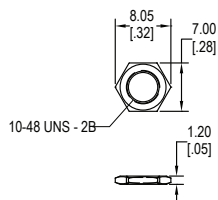


Contact Options

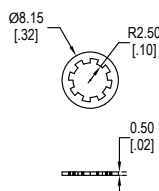
Designator	Contact Material	Terminal Material	Electrical Ratings
Q	Silver Plating	Silver Plating	3A @ 120VAC, 28VDC; 1A @ 250VAC
R	Gold over Nickel Plating	Gold over Nickel Plating	0.4VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plating	0.4VA max @ 20VAC or VDC max or 3A @ 120VAC,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

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

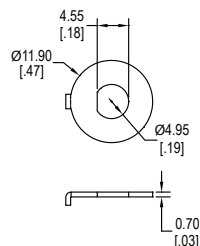
10-48 Hex Nut



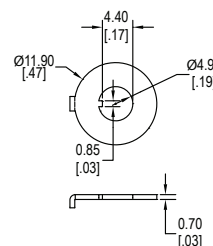
Lock Washer



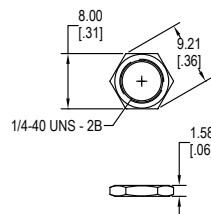
Flat Locking Ring



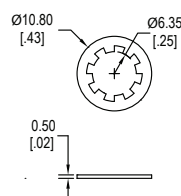
Keyway Locking Ring



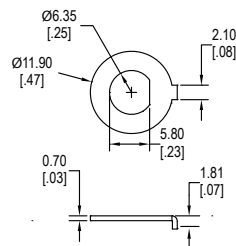
1/4-40 Hex Nut



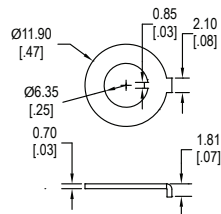
Lock Washer



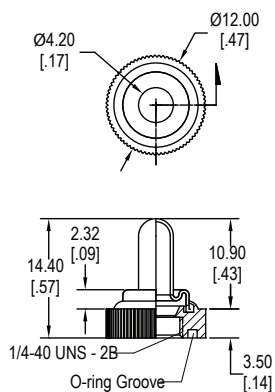
Flat Locking Ring



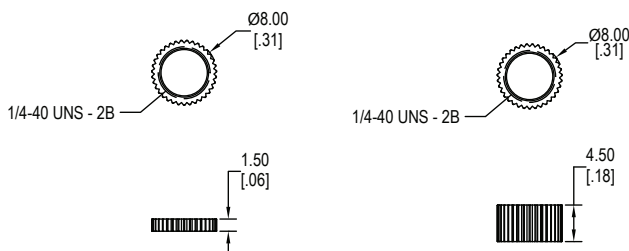
Keyway Locking Ring



E - Sealed Boot, Knurled Nut

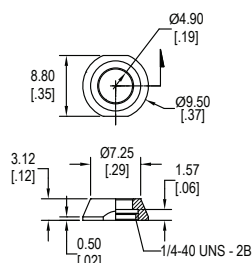


Knurled Nuts

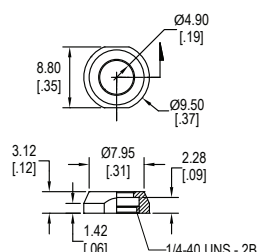


Hardware - Dress Nut

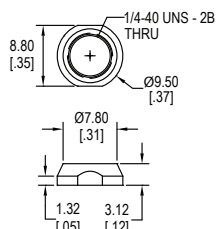
A



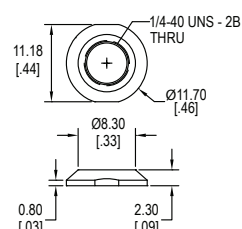
B



C



D



E

