

## SERIES 46 SPST and DPDT, 1/4 Amp

### FEATURES

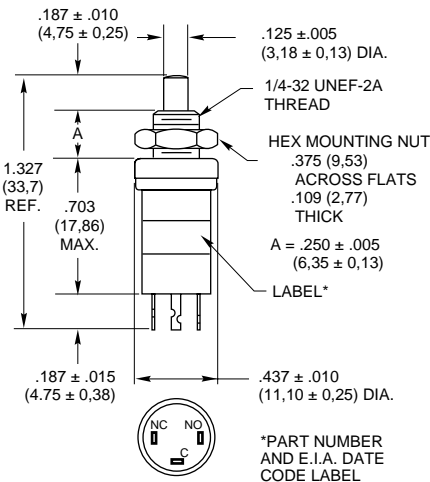
- Long Wipe Contact Assures High Reliability
- 250,000 Cycles of Operation



### DIMENSIONS In Inches (and millimeters)

#### Single Pole/Double Throw

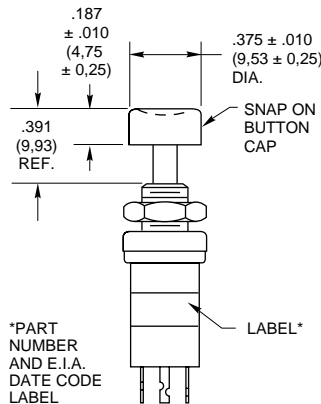
46-101\* (BBM)  
46-110\* (MBB)



Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Button or Cap Color
1/4 Amp	1/8 Amp	250,000	46-101 RED	Red
			46-101 BLK	Black
			46-102 RED	Red
			46-102 BLK	Black
			46-110 RED	Red
			46-110 BLK	Black
46-111 RED	Red			
46-111 BLK	Black			

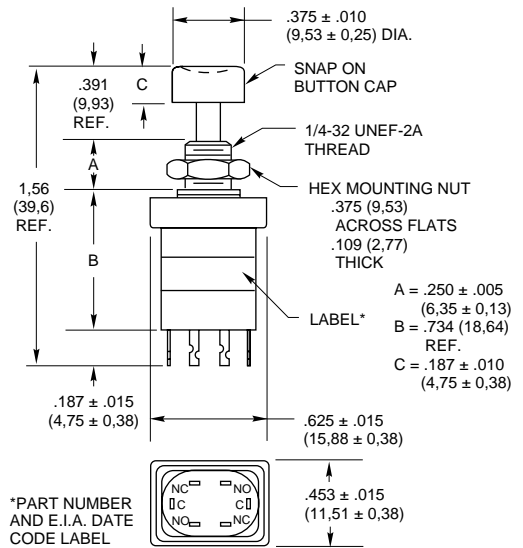
Action	Total Travel	Bottoming Force (oz.)	Mtg. Hole
Momentary	.180 (4,57) Min.	17 ± 5	17/64" (6,75)

46-102\* (BBM)  
46-111\* (MBB)



#### Double Pole/Double Throw

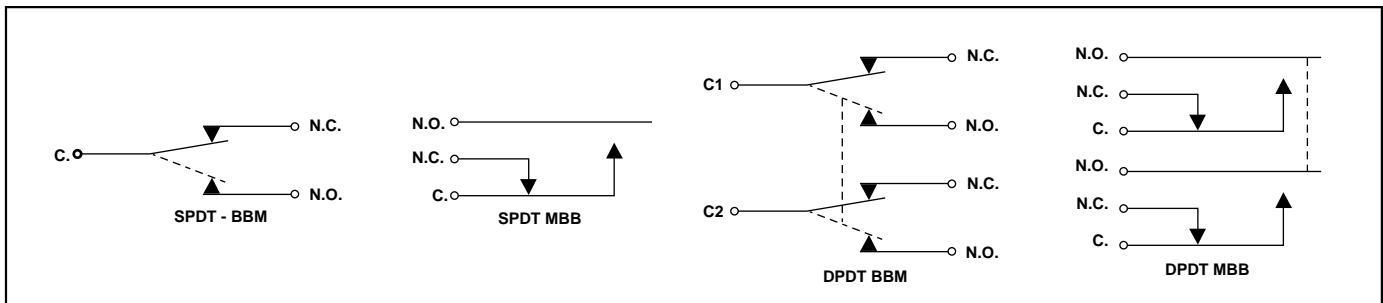
46-200\* (BBM)  
46-201\* (MBB)



Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Cap Color
1/4 Amp	1/8 Amp	250,000	46-200 RED	Red
			46-200 BLK	Black
			46-201 RED	Red
			46-201 BLK	Black

Action	Total Travel	Bottoming Force (oz.)	Mtg. Hole
Momentary	.180 (4,57) Min.	35 ± 9	17/64" (6,75)

### CIRCUITRY



**SERIES 46**  
SPST and DPDT, 1/4 Amp

**FEATURES**

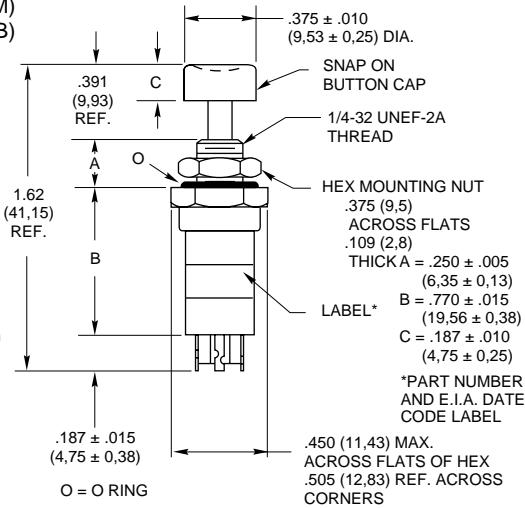
- Bushing and Button Seal
- Environmentally Sealed



**DIMENSIONS** In Inches (and millimeters)

**Sealed Bushing and Button Single Pole/Double Throw**

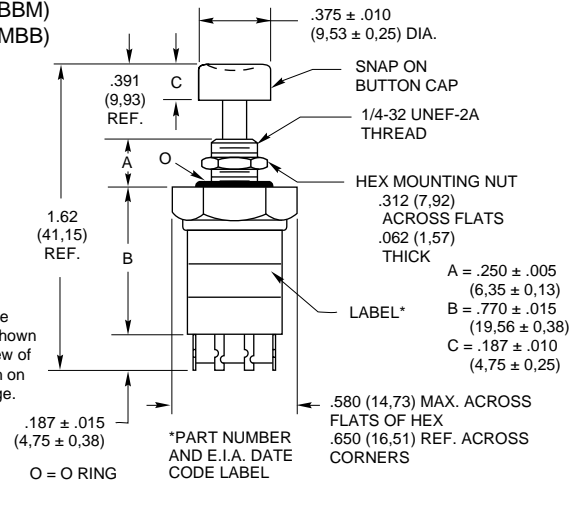
46-150\* (BBM)  
46-151\* (MBB)



Terminals are marked as shown in bottom view of SPDT switch on previous page.

**Sealed Bushing and Button Double Pole/Double Throw**

46-270\* (BBM)  
46-271\* (MBB)



Terminals are marked as shown in bottom view of DPDT switch on previous page.

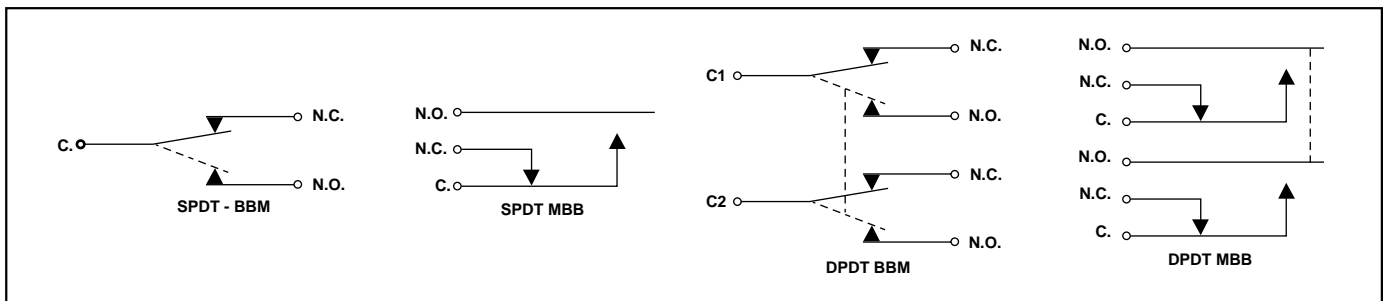
Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Cap Color
1/4 Amp	1/8 Amp	100,000	46-150 RED 46-150 BLK 46-151 RED 46-151 BLK	Red Black Red Black

Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Cap Color
1/4 Amp	1/8 Amp	100,000	46-270 RED 46-270 BLK 46-271 RED 46-271 BLK	Red Black Red Black

Action	Total Travel	Bottoming Force (oz.)	Mtg. Hole
Momentary	.180 (4,57) Min.	24 ± 4	17/64" (6,75)

Action	Total Travel	Bottoming Force (oz.)	Mtg. Hole
Momentary	.180 (4,57) Min.	48 ± 4	17/64" (6,75)

**CIRCUITRY**



Pushbutton Switches

## DIMENSIONS In Inches (and millimeters)

**Environmentally Sealed Double Pole/Double Throw**  
46-260\* (BBM)

Dimensions:  
 A = 1.14 (29,0) MAX.  
 B = 22.00 (558,8) MAX.  
 C = .390 ± .010 (9,90 ± 0,25)  
 D = .281 ± .010 (7,14 ± 0,25)  
 .250 ± .010 (6,35 ± 0,25)

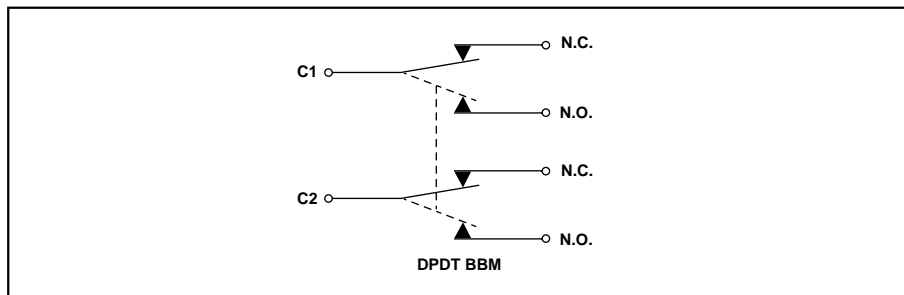
Component Labels:  
 SNAP ON BUTTON CAP  
 O-RING SEALED  
 3/8-32 UNEF-2A THREAD TO .060 (15,24) MAX. FROM SHOULDER  
 HEX MOUNTING NUT .562 (14,2) ACROSS FLATS .094 (2,40) THICK  
 SWITCH AND WIRE LEADS ENCAPSULATED

Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Cap Color
1/4 Amp	1/8 Amp	250,000	46-260 RED 46-260 BLK	Red Black

Action	Total Travel	Bottoming Force (oz.)	Mtg. Hole
Momentary	.180 (4,57) Min.	Approx. 45	25/64" (9,92)

Pushbutton Switches

## CIRCUITRY



## SPECIFICATIONS

### Rating Criteria

**Contact Resistance:** Less than 25 milliohms at the switch initially. Less than 4 milliohms/inch of wire.

**Voltage Breakdown:** 1,000 Vac between mutually insulated parts

**Insulation Resistance:** 1,000 megohms minimum

### Materials and Finishes

**Cover, Bushing, Mounting Nut:** Brass, cadmium-plated

**Shorting Bar:** Phosphor bronze, silver-plated.

**Terminals:** Phosphor bronze, silver contact surface. Terminal ends are solder clad

**Base or Potting Shell:** Phenolic per MIL-M-14, type CFG

**Spring:** Tinned music wire

**Button Cap:** Polyethylene

**Button:** Polyphenylene sulfide (PPS) for 46-200 and 46-201. Polycarbonate for all other unsealed versions. Aluminum for all sealed versions.

**O-Ring Seal:** Nitrile per MIL-P-5516, class B

**Seal Adapter and Hex Nut (46-260):** Brass, cadmium-plated

**Wire Leads (46-260):** Per MIL-W-16878 type E. #26 AWG, insulated teflon, copper stranded wire

### Operating Features

**Break-Before-Make:** Rest position to N.C. break .020" (0,51) minimum. Rest position to N.O. Make .240" (6,10) maximum.

**Make-Before-Break:** Rest position to N.O. make .065" ± .015 (1,65 ± 0,38). Rest position to N.C. break .130" ± .015 (3,30 ± 0,38).

**Operating Temperature:** -40°C to +85°C

## STANDARD OPTIONS

Epoxy sealed terminals and wire leads, see page E-34 and E-35.

Decorative mountings, see pages E-24 to E-26.

## ACCESSORY

**Decorative Mounting Nut**  
Part No. 30C1023-1  
Fits .250" (6,35) Bushing  
For dimensions, materials and finishes, see page E-36.

## ORDERING INFORMATION

Description	Part No.
SPDT, BBM, Red Button	46-101 RED
SPDT, BBM, Black Button	46-101 BLK
SPDT, BBM, Red Cap	46-102 RED
SPDT, BBM, Black Cap	46-102 BLK
SPDT, MBB, Red Button	46-110 RED
SPDT, MBB, Black Button	46-110 BLK
SPDT, MBB, Red Cap	46-111 RED
SPDT, MBB, Black Cap	46-111 BLK
SPDT, BBM, Red Cap	46-150 RED
SPDT, BBM, Black Cap	46-150 BLK
SPDT, MBB, Red Cap	46-151 RED
SPDT, MBB, Black Cap	46-151 BLK
DPDT, BBM, Red Cap	46-200 RED
DPDT, BBM, Black Cap	46-200 BLK
DPDT, MBB, Red Cap	46-201 RED
DPDT, MBB, Black Cap	46-201 BLK
DPDT, BBM, Red Cap	46-270 RED
DPDT, BBM, Black Cap	46-270 BLK
DPDT, MBB, Red Cap	46-271 RED
DPDT, MBB, Black Cap	46-271 BLK
DPDT, BBM, Sealed, Red	46-260 RED
DPDT, BBM, Sealed, Black	46-260 BLK

### ACCESSORY

Decorative Nut	30C1023-1
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Available from your local Grayhill Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.