

SERIES 46
SPST and DPDT, 1/4 Amp

FEATURES

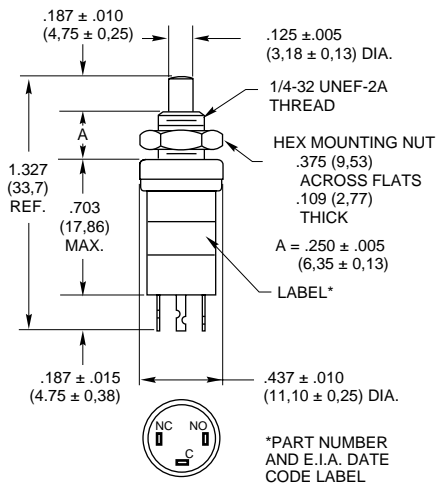
- Long Wipe Contact Assures High Reliability
- 250,000 Cycles of Operation



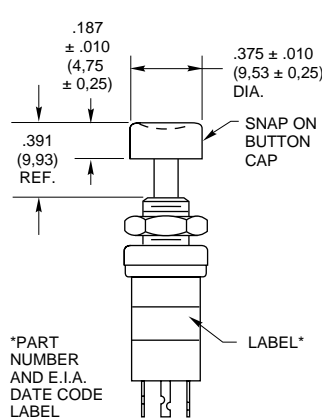
DIMENSIONS In Inches (and millimeters)

Single Pole/Double Throw

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



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

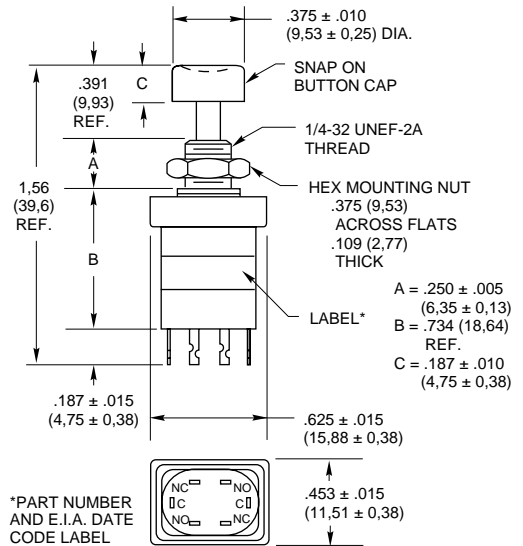


Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Button or Cap Color
1/4 Amp	1/8 Amp	250,000	46-101 RED	Red
			46-101 BLK	Black
			46-102 RED	Red
			46-102 BLK	Black
			46-110 RED	Red
			46-110 BLK	Black
46-111 RED	Red			
46-111 BLK	Black			

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

Double Pole/Double Throw

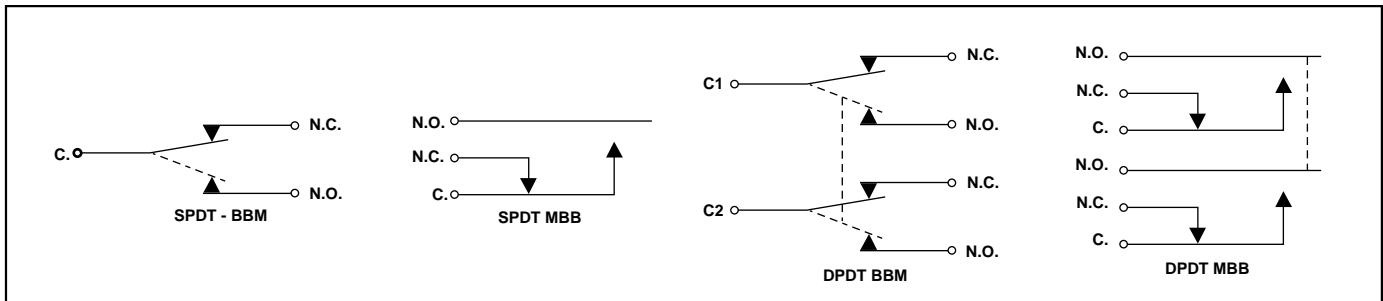
46-200* (BBM)
46-201* (MBB)



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



Pushbutton Switches

SERIES 46 SPST and DPDT, 1/4 Amp

FEATURES

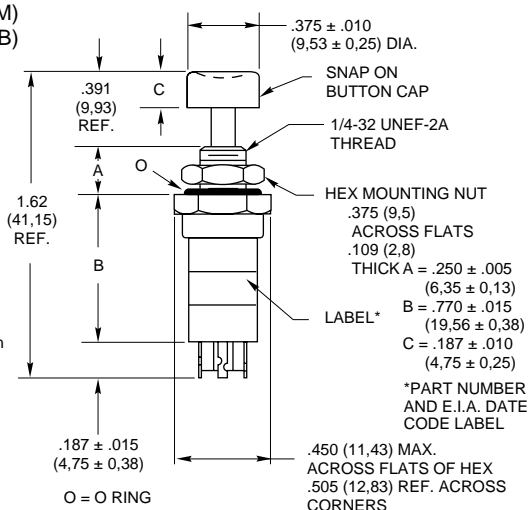
- Bushing and Button Seal
- Environmentally Sealed



DIMENSIONS In Inches (and millimeters)

Sealed Bushing and Button Single Pole/Double Throw

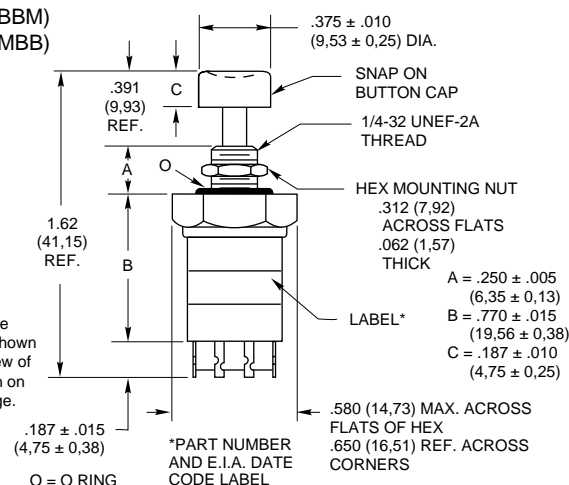
46-150* (BBM)
46-151* (MBB)



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.

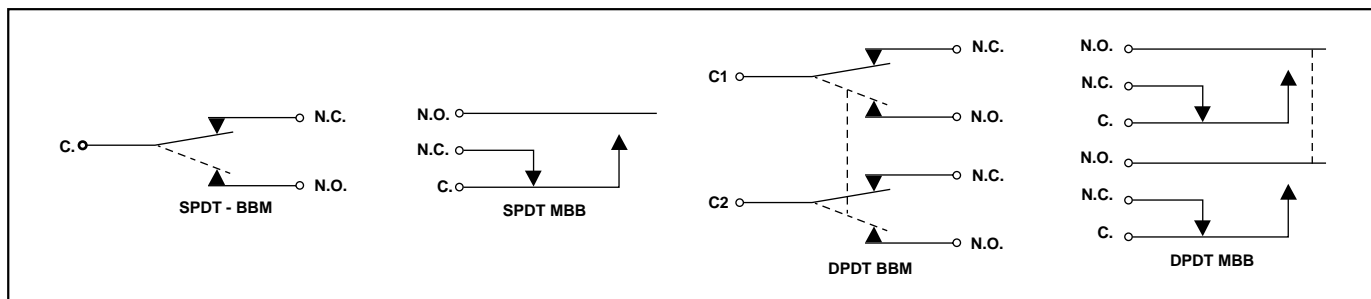
Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Cap Color
1/4 Amp	1/8 Amp	100,000	46-150 RED 46-150 BLK 46-151 RED 46-151 BLK	Red Black Red Black

Action	Total Travel	Bottoming Force (oz.)	Mtg. Hole
Momentary	.180 (4.57) Min.	24 ± 4	17/64" (6.75)

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.	48 ± 4	17/64" (6.75)

CIRCUITRY



DIMENSIONS In Inches (and millimeters)

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

Dimensions:
 .375 ± .010 (9,53 ± 0,25) DIA.
 .390 ± .010 (9,90 ± 0,25)
 .281 ± .010 (7,14 ± 0,25)
 .641 ± .005 (16,28 ± 0,13)
 .812 ± .005 (20,62 ± 0,13) DIAMETER
 .250 ± .010 (6,35 ± 0,25)

Components:
 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

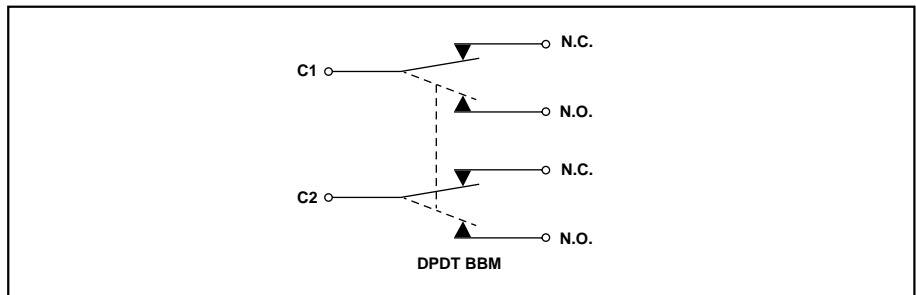
Dimensions A, B, C, D:
 A = 1.14 (29,0) MAX.
 B = 22.00 (558,8) MAX.
 C = .187 ± .010 (4,75 ± 0,25)
 D = .125 ± .005 (3,18 ± 0,13)

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 D-32.

Decorative mountings, see pages D-23 to D-25.

ACCESSORY

Decorative Mounting Nut
 Part No. 30C1023-1
 Fits .250" (6,35) Bushing
 For dimensions, materials and finishes, see page D-34.

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

Available from your local Grayhill Distributor. For prices and discounts, contact a local Sales Office In CHINA(Beijing): Fax: (010)6851-5578