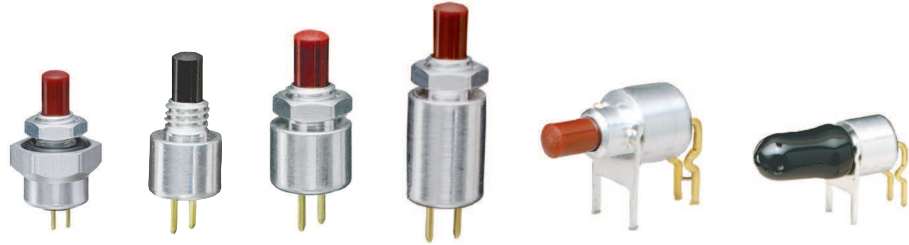


## SERIES 39 SPST, 150 mA

### FEATURES

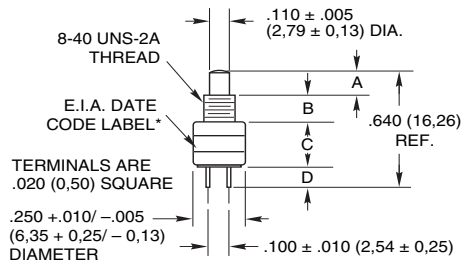
- 1/4" Diameter
- Up to 1,000,000 Cycles of Operation
- PC Mount



### DIMENSIONS in Inches (and millimeters)

#### SPST–Normally Open, without Nut

39-405\*



\*Label increases nominal diameter to .255 (6,48)

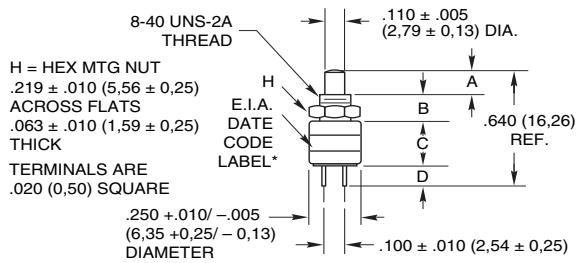
A = .175 + .025 / -.020 (4,45 + 0,64 / - 0,51)  
 B = .125 ± .010 (3,18 ± 0,25)  
 C = .215 ± .015 (5,46 ± 0,38)  
 D = .125 ± .010 (3,18 ± 0,25)

| Rating at 28 Vdc Resistive | Operations at Rated Load | *Complete Part Number    | Button Color |
|----------------------------|--------------------------|--------------------------|--------------|
| 150 mA                     | 1,000,000                | 39-405 RED<br>39-405 BLK | Red<br>Black |

| Action    | Total Travel                 | Actuating Force (oz.) |
|-----------|------------------------------|-----------------------|
| Momentary | .035 ± .015<br>(0,89 ± 0,38) | 4 + 4<br>- 2          |

#### SPST–Normally Open, with Nut

39-401\*



\*Label increases nominal diameter to .255 (6,48)

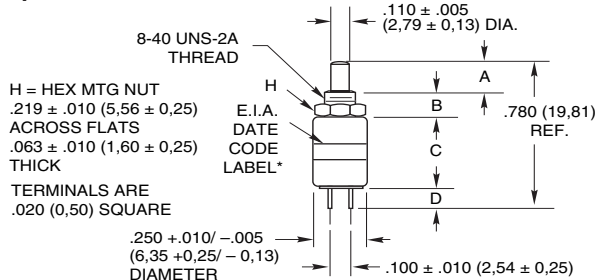
A = .175 + .025 / -.020 (4,45 + 0,64 / - 0,51)  
 B = .125 ± .010 (3,18 ± 0,25)  
 C = .215 ± .015 (5,46 ± 0,38)  
 D = .125 ± .010 (3,18 ± 0,25)

| Rating at 28 Vdc Resistive | Operations at Rated Load | *Complete Part Number    | Button Color |
|----------------------------|--------------------------|--------------------------|--------------|
| 150 mA                     | 1,000,000                | 39-401 RED<br>39-401 BLK | Red<br>Black |

| Action    | Total Travel                 | Actuating Force (oz.) |
|-----------|------------------------------|-----------------------|
| Momentary | .035 ± .015<br>(0,89 ± 0,38) | 4 + 4<br>- 2          |

#### SPST–Normally Open, with Overtravel

39-424\*



\*Label increases nominal diameter to .255 (6,48)

A = .175 + .025 / -.020 (4,45 + 0,64 / - 0,51)  
 B = .125 ± .010 (3,18 ± 0,25)  
 C = .355 ± .015 (9,02 ± 0,38)  
 D = .125 ± .010 (3,18 ± 0,25)

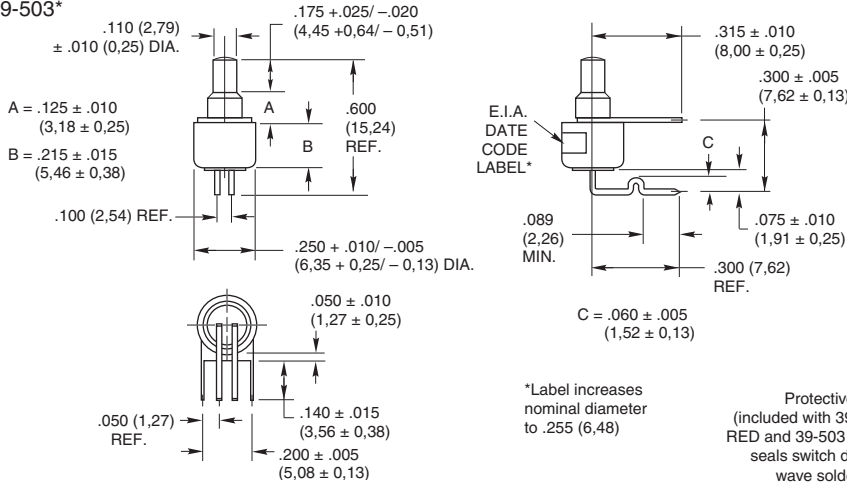
| Rating at 28 Vdc Resistive | Operations at Rated Load | *Complete Part Number    | Button Color |
|----------------------------|--------------------------|--------------------------|--------------|
| 150 mA                     | 100,000                  | 39-424 RED<br>39-424 BLK | Red<br>Black |

| Action    | Total Travel                 | Over Travel         | Actuating Force (oz.) |
|-----------|------------------------------|---------------------|-----------------------|
| Momentary | .130 ± .025<br>(3,30 ± 0,64) | .015 (0,38)<br>Min. | 5 ± 3                 |

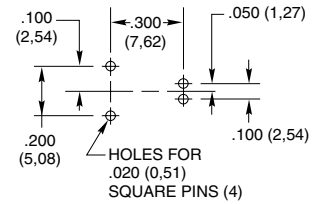
**DIMENSIONS** in Inches (and millimeters)

**Right Angle, SPST-Normally Open**

39-501\*  
39-503\*



**Mounting Footprint**



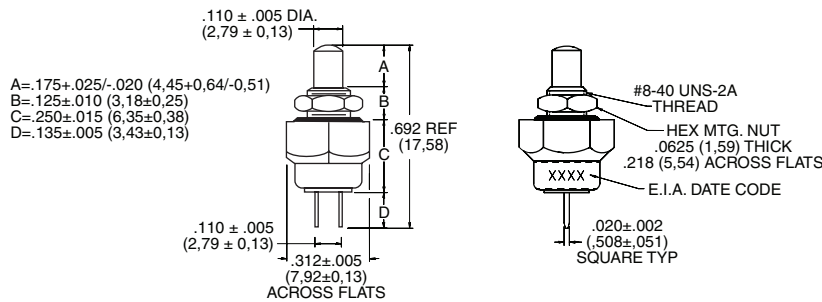
| Rating at 28 Vdc Resistive | Operations at Rated Load | *Complete Part Number                                | Button Color                 |
|----------------------------|--------------------------|--|------------------------------|
| 150 mA                     | 1,000,000                | 39-501 RED<br>39-501 BLK<br>39-503 RED<br>39-503 BLK | Red<br>Black<br>Red<br>Black |

| Action    | Total Travel              | Actuating Force (oz.) |
|-----------|---------------------------|-----------------------|
| Momentary | .035 ± .015 (0,89 ± 0,38) | 4 + 4<br>- 2          |

Protective cap (included with 39-503 RED and 39-503 BLK) seals switch during wave soldering.

**SPST-Normally Open, with Panel and Button Seal**

39-138\*



| Rating at 115 Vac Resistive | Operations at Rated Load | *Complete Part Number    | Button Color |
|-----------------------------|--------------------------|--------------------------|--------------|
| ½ Amp                       | 250,000                  | 39-138 RED<br>39-138 BLK | Red<br>Black |

| Action    | Total Travel              | Actuating Force (oz.) |
|-----------|---------------------------|-----------------------|
| Momentary | .035 ± .015 (0,89 ± 0,38) | 16 ± 8                |

**SPECIFICATIONS**

**Rating Criteria**

**Contact Resistance:** 25 milliohms maximum on a new switch

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

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

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

**Materials and Finishes**

**Bushing/Housing:** Aluminum, clear anodized for 39-138; Brass, tin zinc for all others

**Standoff:** (39-501 and 39-503) Brass, tin plated over nickel

**Base and Button:** Thermoplastic

**Shorting Bar:** Brass, gold-plated over nickel plate for 39-501 and 39-503; fine silver, gold-plated for others

**Terminals:** Fine silver, gold-plated for 39-138; Brass, gold-plated over nickel for all others

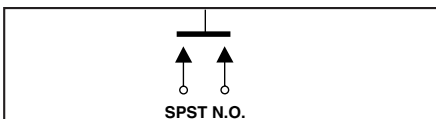
**Spring:** Tinned music wire

**Mounting Nut:** (39-401 and 39-424) Brass, zinc trivalent chromate-plated

**ORDERING INFORMATION**

| Part No.   | Type & Button Color      |
|------------|--------------------------|
| 39-401 RED | N.O., Red                |
| 39-401 BLK | N.O., Black              |
| 39-405 RED | N.O., No Nut, Red        |
| 39-405 BLK | N.O., No Nut, Black      |
| 39-424 RED | N.O., Overtravel, Red    |
| 39-424 BLK | N.O., Overtravel, Black  |
| 39-501 RED | N.O., Right Angle, Red   |
| 39-501 BLK | N.O., Right Angle, Black |
| 39-503 RED | 39-501 Red & Cap Seal    |
| 39-503 BLK | 39-501 Blk & Cap Seal    |
| 39-138 RED | 39-351 PC Mount & Seal   |
| 39-138 BLK | 39-351 PC Mount & Seal   |

**CIRCUITRY**



**ACCESSORIES**



| Accessory Part Number | Description          |
|-----------------------|----------------------|
| 30B1012-5             | Red Accessory Cap    |
| 30B1012-8             | White Accessory Cap  |
| 30B1012-9             | Black Accessory Cap  |
| SHH1699               | Cap Seal Only, Black |

Available from your local Grayhill Distributor. For prices and discounts, contact a local Sales Office, an authorized Distributor or Grayhill.