

**SERIES 38B AND 38G**  
Sealed Subminiature Pushbutton Switches

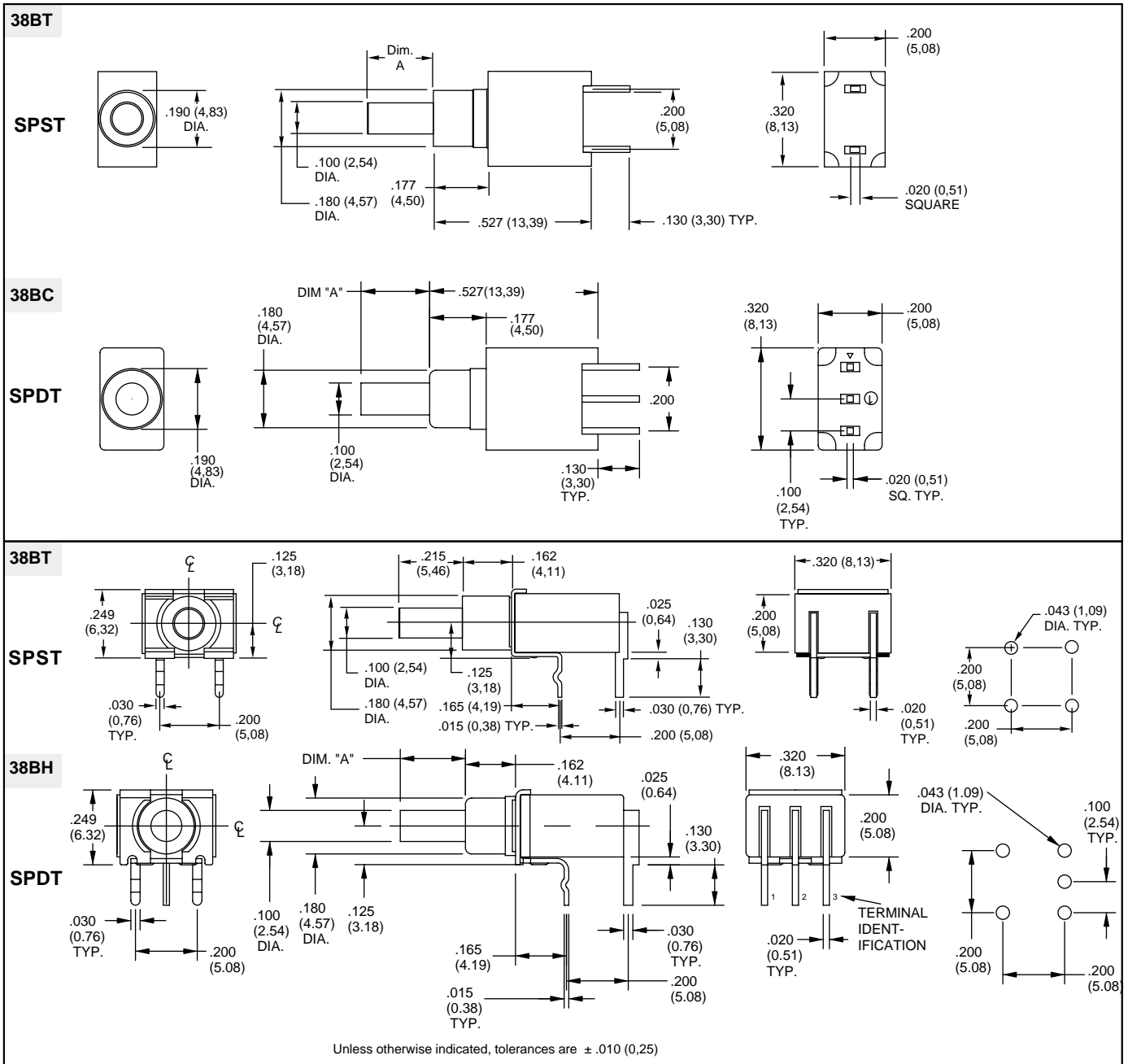
**FEATURES**

- Drop-In Replacement for Industry Standard
- Choice of Terminations
- Printed Circuit Board Mount
- SPST, DPST and SPDT Momentary Contact



**SERIES 38B**

**DIMENSIONS** In inches (and millimeters)



Pushbutton Switches

## SERIES 38B

### SPECIFICATIONS

#### Electrical Ratings

**Operating Life:** 80,000 make-and-break cycles at full load

#### Contact Rating (resistive load):

**Gold Contacts:** 0.4 VA maximum at 20 Vac or Vdc

**Silver Contacts:** 1.0 Amp maximum at 120 Vac or 28 Vdc

**Contact Resistance:** Below 20 milliohms typical initial at 2-4 Vdc, 100 mA, for both silver and gold-plated contacts

**Insulation Resistance:** 1000 megaohms minimum

**Voltage Breakdown:** 1000 Vrms minimum at sea level

**Operating Temperature:** -30°C. to +85°C.

**Solderability:** Per MIL-STD-202F, Method 208D, or EIA RS-186E, Method 9 (1 hour steam aging)

#### Materials and Finishes

**Base and Cover:** Thermoplastic (UL 94V-0)

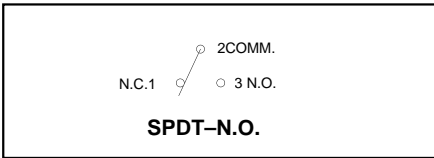
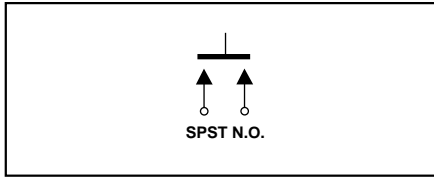
**Plunger:** Thermoplastic (UL 94V-0), (S versions include an internal o-ring seal)

**Terminals:** Copper alloy, solder plate over nickel plate, solder plate

**Spring:** Plated music wire

**Contact System:** Copper alloy, gold or silver plate (as specified) over nickel plate

### CIRCUITRY



### ORDERING INFORMATION

**Series:** 38BT = SPST, Momentary, Thru-Hole  
38BC = SPDT, Momentary, Thru-Hole, Vertical  
38BH = SPDT, Momentary, Thru-Hole, Horizontal

**Dimension A:** 0 = 0.020" 4 = 0.215"

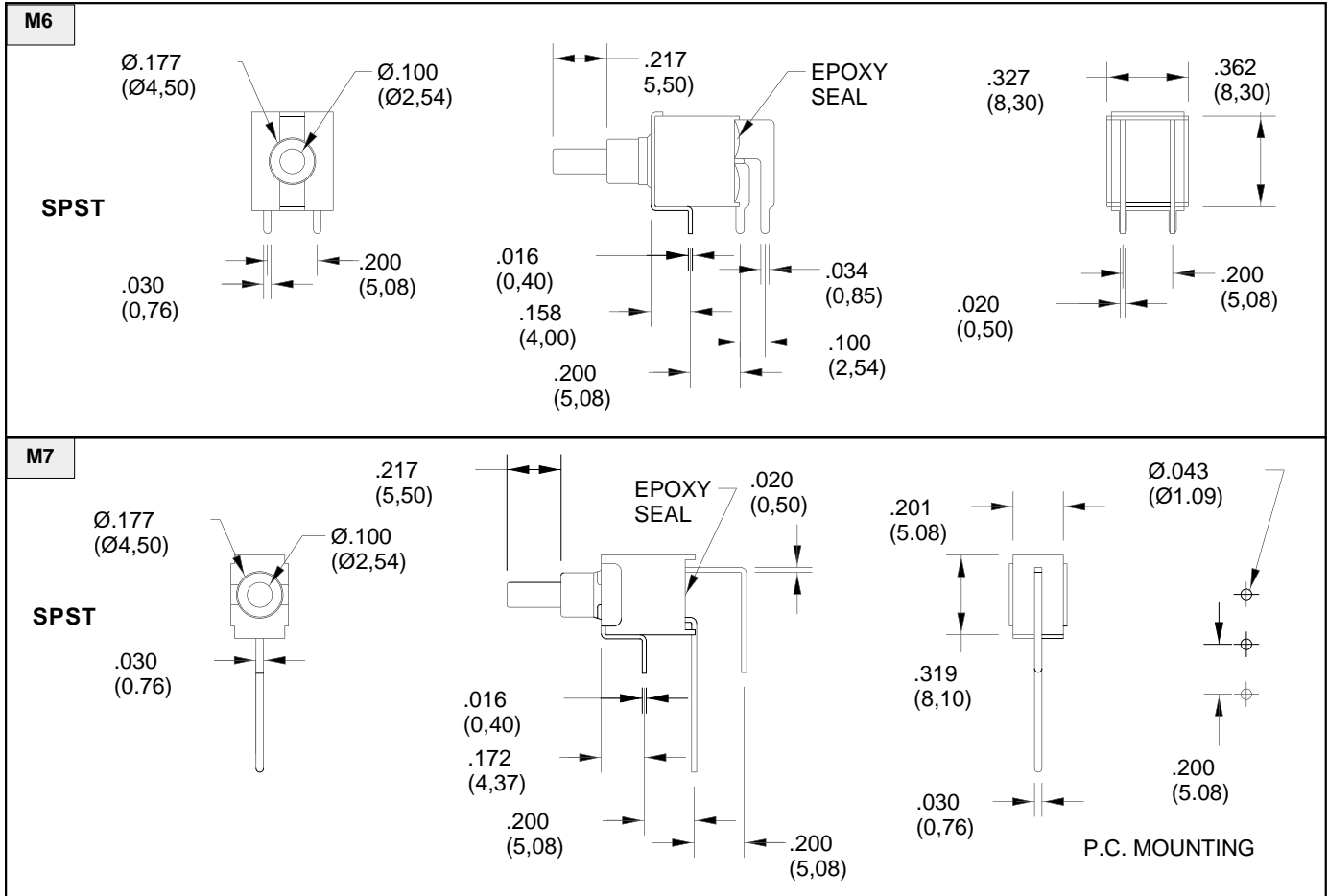
**Seal:** S = O-Ring Seal, N = No Seal

**Plating:** 1 = Gold Contact, Solder Terminals  
2 = Silver Contacts, Solder Terminals  
3 = Gold Contacts and Terminals  
4 = Silver Contacts and Terminals

**Orientation:** V = Vertical to PCB, H = Horizontal to PCB

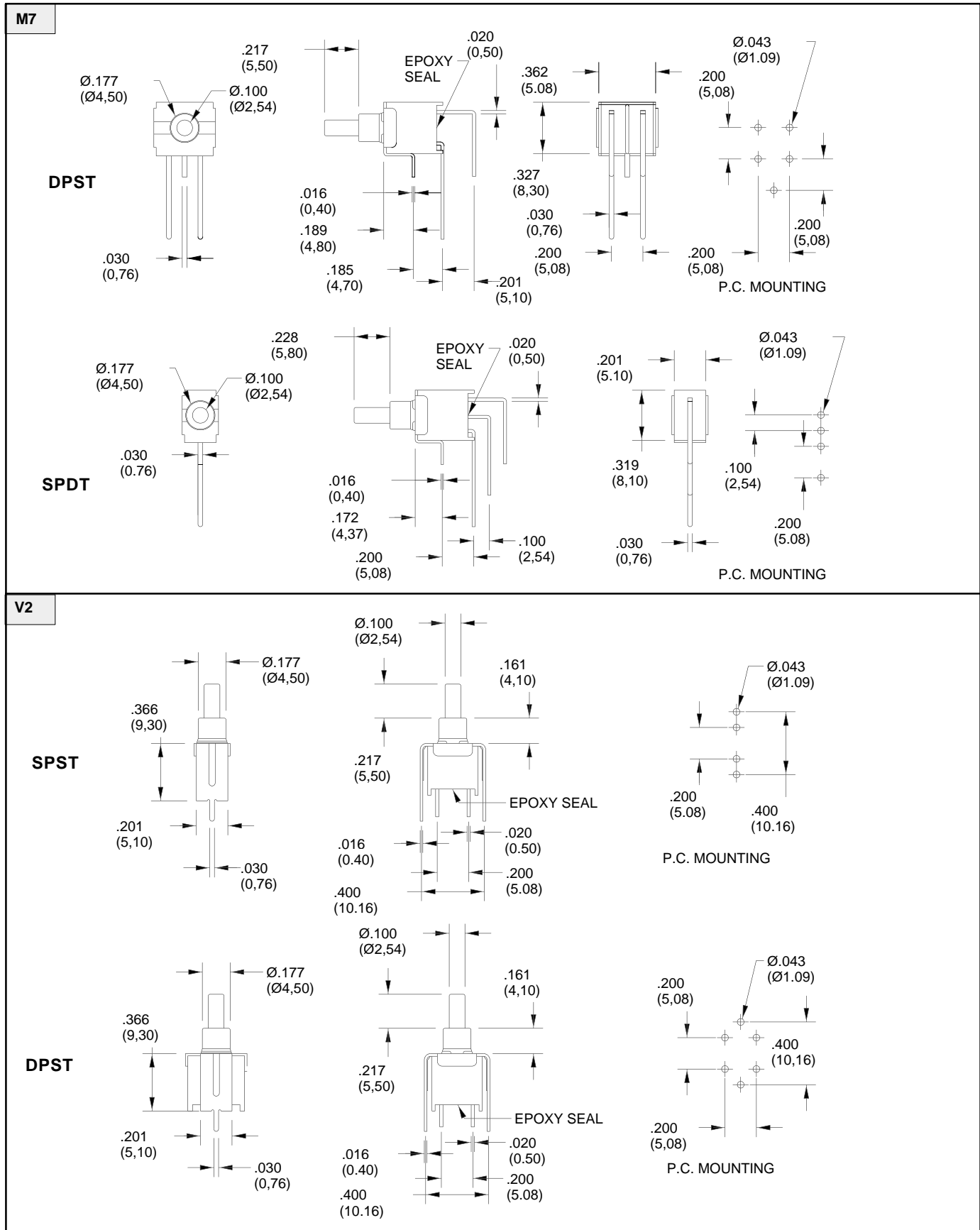
## SERIES 38G

### DIMENSIONS In inches (and millimeters)



**SERIES 38G**

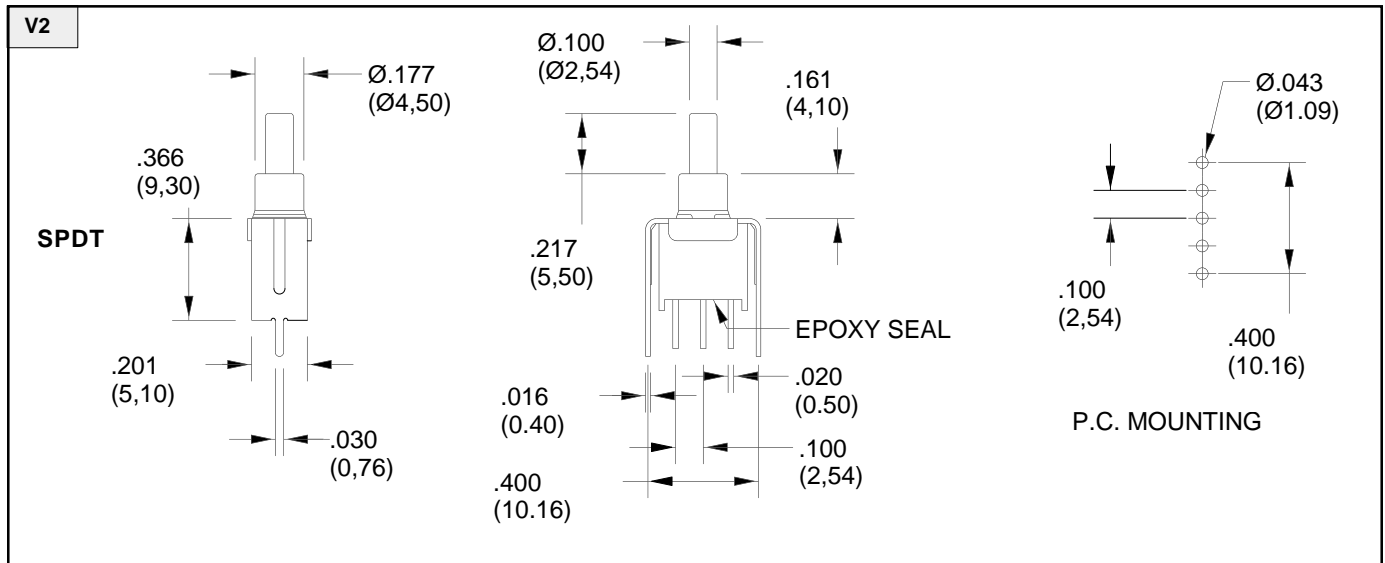
**DIMENSIONS** In inches (and millimeters)



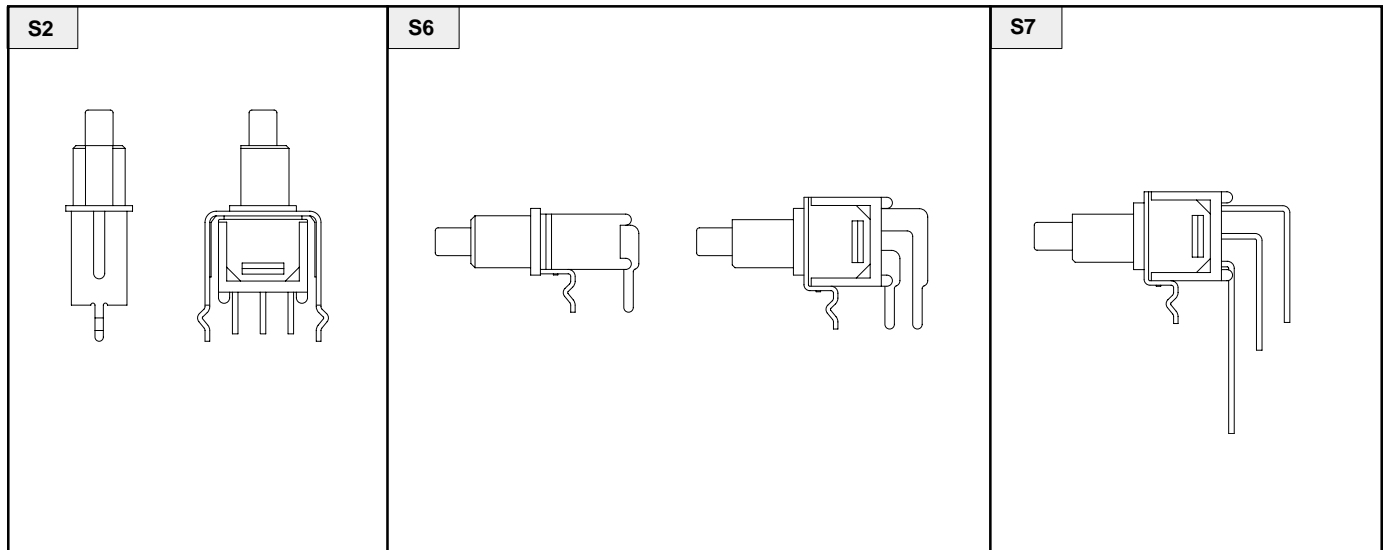
Pushbutton Switches

**SERIES 38G**

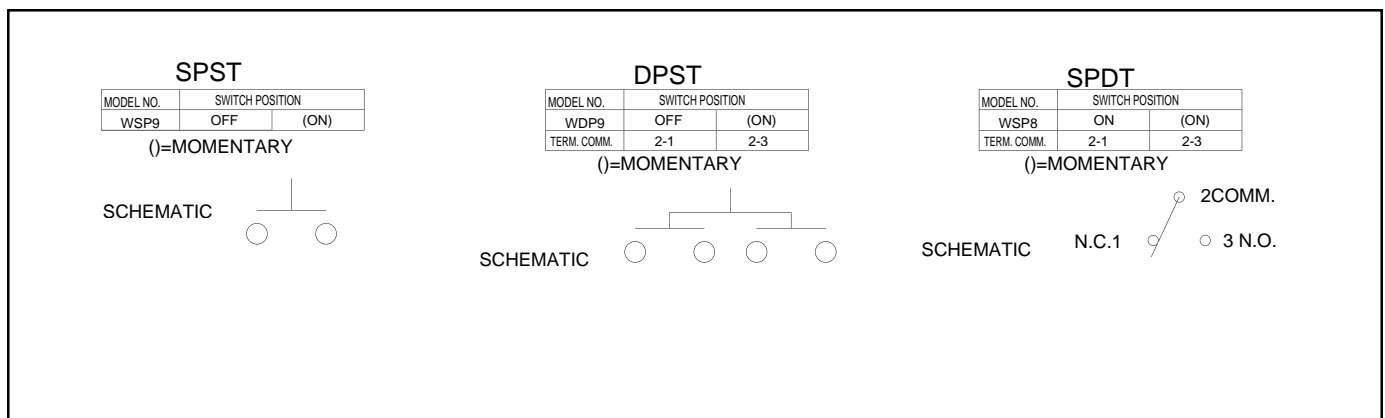
**DIMENSIONS** In inches (and millimeters)



**Snap-in Termination Options** (Same P.C. mounting as V2, M6, M7 but with snap-in bracket)



**Circuitry**



## SERIES 38G

### SPECIFICATIONS

#### Rating Criteria

**Operating Life:** 50,000 make-and-break cycles at full load

#### Contact Rating (resistive load):

R Option: 0.4 VA maximum at 20 Vac or Vdc maximum

G Option: 5A max at 125 Vac or 28 Vdc; 2A max at 250 Vac

**Contact Resistance:** Below 20 milliohms typical initial at 2-4 Vdc, 100 mA

**Insulation Resistance:** 1000 megaohms minimum

**Voltage Breakdown:** 1500 Vrms minimum at sea level

**Operating Temperature:** -30°C. to +85°C.

#### Materials and Finishes

**Case:** Glass filled Nylon 6/6 (UL 94V-0)

**Plunger:** Thermoplastic Polyester(UL 94V-0) (with internal o-ring seal)

**Terminals:** Copper alloy

**Spring:** Plated Music Wire

**Contact System:** Copper alloy

**Switch Support:** Brass, tin-plated

### ORDERING INFORMATION

| SERIES                                  | MODEL NO.  | TERMINATION   | CONTACT   | SEAL           |
|---|--|---|---|----------------|
| <b>38G</b>                              | <b>WSP8</b>  | <b>M7</b>   | <b>R</b>  | <b>E</b>       |
| Subminiature Sealed Pushbutton Switches | Options: WSP8, WSP9, WDP9 (see models for switching positions) | Options: M6, M7, S2, S6, S7, V2 (see termination options) | R = Copper alloy, gold plate over nickel plate.<br><br>G=Gold plate over silver plate | E = Epoxy seal |

Pushbutton Switches