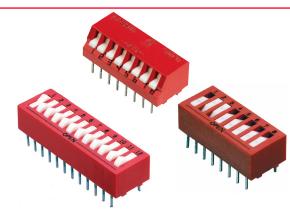


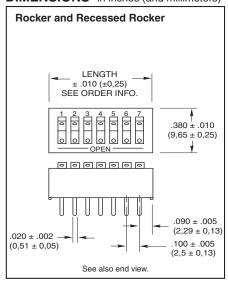
# SERIES 76 SPST Rocker

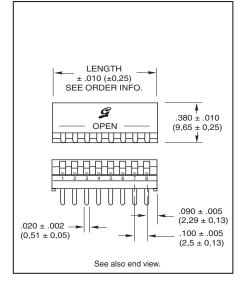
### **FEATURES**

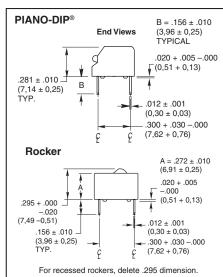
- Raised and Recessed, Rocker and PIANO-DIP® Styles
- Sealed Base Standard
- Spring and Ball Contact
- Top Tape Seal Option



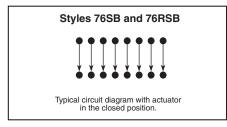
# **DIMENSIONS** in inches (and millimeters)

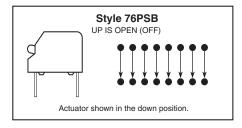


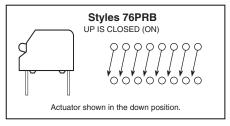




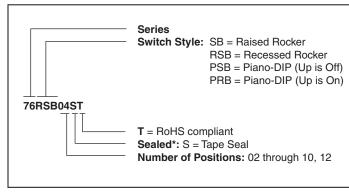
## **CIRCUITRY**







## **ORDERING INFORMATION**



| No. of Pos. | Length (Inches) | Length (Metric) | No./Tube |
|-------------|-----------------|-----------------|----------|
| 2           | 0.280"          | 7,1 mm          | 35       |
| 3           | 0.380"          | 9,7 mm          | 27       |
| 4           | 0.480"          | 12,2 mm         | 21       |
| 5           | 0.580"          | 14,7 mm         | 18       |
| 6           | 0.680"          | 17,3 mm         | 15       |
| 7           | 0.780"          | 19,8 mm         | 13       |
| 8           | 0.880"          | 22,4 mm         | 12       |
| 9           | 0.980"          | 24,9 mm         | 10       |
| 10          | 1.080"          | 27,4 mm         | 9        |
| 12          | 1.280"          | 32,5 mm         | 8        |

### Available from your local Grayhill Distributor.

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

<sup>\*</sup>A top tape seal is required for switches that are machine soldered or heavily cleaned after hand soldering. To order top seal versions, add "S" to the Grayhill part number.



## SPECIFICATIONS: Standard Styles

| Ratings Mechanical Life: Operations per switch position   | 76<br>2,000   | 78<br>2,000   | 90B<br>2,000                                  |  |
|---|---|---|---|--|
| Make-and-break Current Rating: Operations per switch position at these resistive loads 1 mA, 5 Vdc; 50 mA, 30 Vdc; or 150 mA, 30 Vdc: 10 mA, 30 Vdc; or 10 mA, 50 mVdc: 10 mA, 50 mVdc; or 25 mA, 24 Vdc; or 100 mA, 6 Vdc: | 2,000<br>—<br>—                                     | 2,000<br>—<br>—                                     | <br>2,000<br>2,000                            |  |
| Contact Resistance: Initially: After life, at 10 mA, 50 mVdc, open circuit:   | $\leq 30~\text{m}\Omega \\ \leq 100~\text{m}\Omega$ | $\leq 30~\text{m}\Omega \\ \leq 100~\text{m}\Omega$ | $\leq$ 20 m $\Omega$<br>$\leq$ 100 m $\Omega$ |  |
| Insulation Resistance: Minimum, at 100 Vdc between adjacent closed contacts and also across open switch contacts Initially (Mohms): After life (Mohms):   | 5,000<br>1,000                                      | 5,000<br>1,000                                      | 5,000<br>1,000                                |  |
| Dielectric Strength: Minimum voltage (AC, RMS) measured between adjacent closed contacts and also across open switch contacts. Initially: After life:   | 750 V<br>500 V                                      | 750 V<br>500 V                                      | 500 V<br>500 V                                |  |
| Current Carry Rating: Maximum rise of 20°C  | 5 A   | 4 A   | 3 A   |  |
| Switch Capacitance: At 1 megahertz  | 2 pF  | 2 pF  | 2 pF  |  |
| Operating Temperature Range:  | -40°C to + 85°C                                     | -40°C to + 85°C                                     | -40°C to + 85°C                               |  |
| Storage Temperature Range:  | -55°C to + 85°C                                     | -55°C to + 85°C                                     | -55°C to + 85°C                               |  |

## **Mechanical Ratings**

Vibration Resistance: Per Method 204, Test Condition B, 1 mS opening (10 mS allowed)

Mechanical Shock: Per Method 213, Test Condition A. 1 mS opening (10 mS allowed)

Thermal Shock Resistance: Per specification; no failures; passes contact resistance.

Terminal Strength: Per specification

Thermal Aging: 1,000 hours at 85°C; no failures.

### **Environmental Ratings**

Meets all requirements of MIL- S-83504.\*\* Where Grayhill performance is superior, the MIL spec is listed in parentheses.

Moisture Resistance: Per MIL-STD-202, Method 106.

## **Soldering Information**

Series 90 MIDIP and Series 76 recessed rocker (76RSB style) sealed switches have been tested to EIA Standard RS-448-2. Similar performance can be expected from other sealed Series 76 and 78 DIP switches.

Solderability: Per MIL-STD-202, Method 208 Resistance to Soldering Heat: 76RSB: Passes EIA Standard using two, four, and six second soldering time. 90: Per MIL-S-83504, six second test.

**Fluxing:** Per EIA RS-448-2 with flux touching switch body.

Cleaning: 76, 78 and 90 series tape sealed products: Passes immersion test using water/detergent. Acceptable solutions include 1-1-1 trichlorethane, freon, (TF, TE, or TMS), isopropyl alcohol, detergent (140°F maximum). Terpene acceptable for Series 90 only. Solutions which are not recommended include acetone, methylene chloride, freon TMC.

### **Materials and Finishes**

**Shorting Member (Ball):** Brass, gold-plated over nickel barrier.

**Base Contacts:** Copper alloy, gold-plated over nickel barrier.

**Terminals:** Copper alloy, matte tin plated over nickel barrier.

**Non-Conductive Parts:** Thermoplastic (UL94V-O)

Potting Material: Epoxy, 76,78 only.

**Protective Cover:** 76,78, only-Polycarbonate. **Tape Seal:** 

76, 78: Polyester film 90: Polyimide film

**Tape Seal Integrity:** Passes gross leak test using 125°C flourinert for 20 seconds minimum. Reference MIL-STD-202, Method 112.