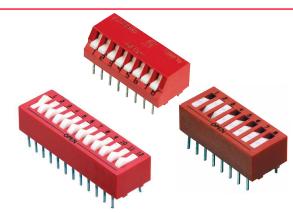


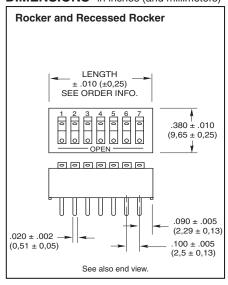
# **SERIES 76 SPST Rocker**

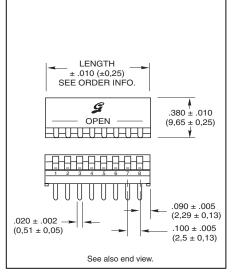
#### **FEATURES**

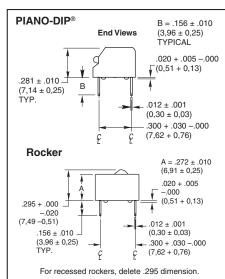
- · Raised and Recessed, Rocker and PIANO-DIP® Styles
- Sealed Base Standard
- Spring and Ball Contact
- Top Tape Seal Option



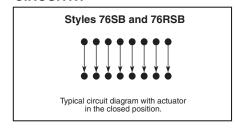
# **DIMENSIONS** in inches (and millimeters)

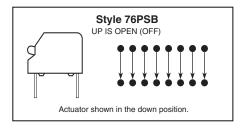


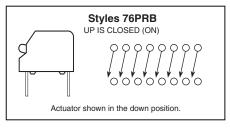




# **CIRCUITRY**



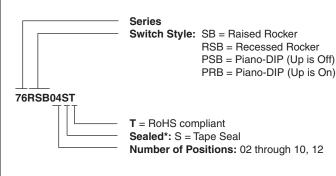




Length (Metric)

No./Tube

### **ORDERING INFORMATION**



	6	0.6
	7	0.7
	8	0.8
	9	0.9
	10	1.0
rough 10, 12	12	1.2

No. of Pos.

## \*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.

#### 2 0.280" 7.1 mm 35 3 0.380" 9,7 mm 27 0.480" 12,2 mm 21 4 5 0.580" 14.7 mm 18 .680" 17,3 mm 15 780" 19,8 mm 13 .880" 22,4 mm 12 .980" 24,9 mm 10 .080" 27,4 mm 9 280" 32,5 mm 8

#### Available from your local Grayhill Distributor.

Length (Inches)

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



## SPECIFICATIONS: Standard Styles

Ratings Mechanical Life: Operations per switch position	76 2,000	78 2,000	90B 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 	2,000 — —	 2,000 2,000	
Contact Resistance: Initially: After life, at 10 mA, 50 mVdc, open circuit:	$\leq$ 30 m $\Omega$ $\leq$ 100 m $\Omega$	$\leq$ 30 m $\Omega$ $\leq$ 100 m $\Omega$	$\leq$ 20 m $\Omega$ $\leq$ 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 1,000	5,000 1,000	5,000 1,000	
Dielectric Strength: Minimum voltage (AC, RMS) measured between adjacent closed contacts and also across open switch contacts. Initially:  After life:	750 V 500 V	750 V 500 V	500 V 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)

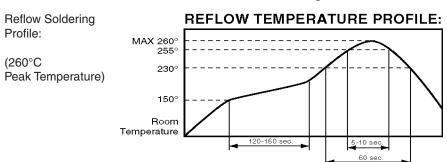
Potting Material: Epoxy, 76,78 only.

**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.

### **Recommended Soldering Conditions:**



WAVE SOLDERING: 260°C maximum solder temperature for 5 seconds max.

<sup>\*\*</sup> Note: 100% matte tin terminal plating does not meet MIL-S-83504 for lead content.