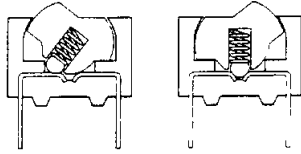
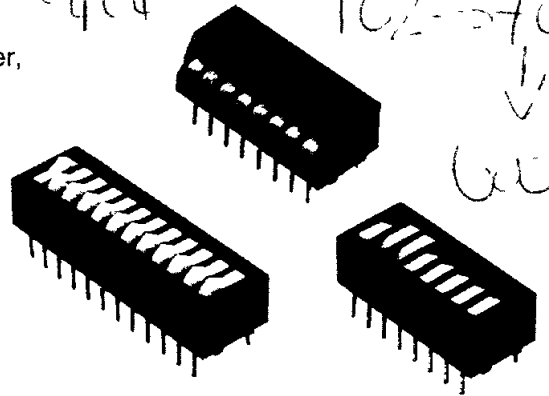


**SERIES 76**

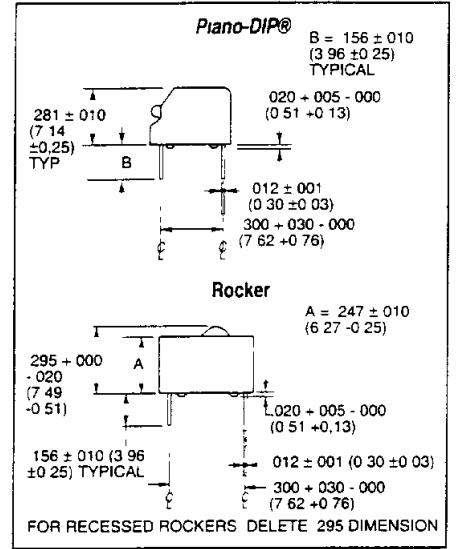
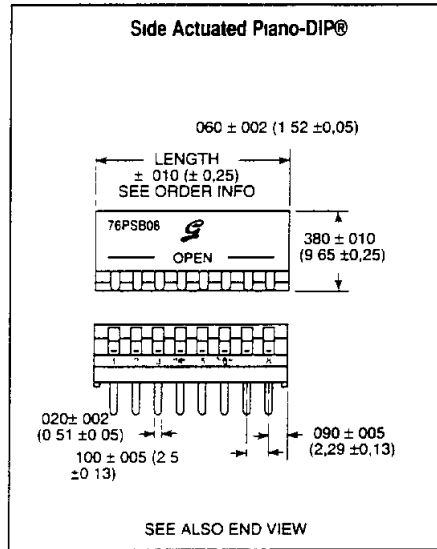
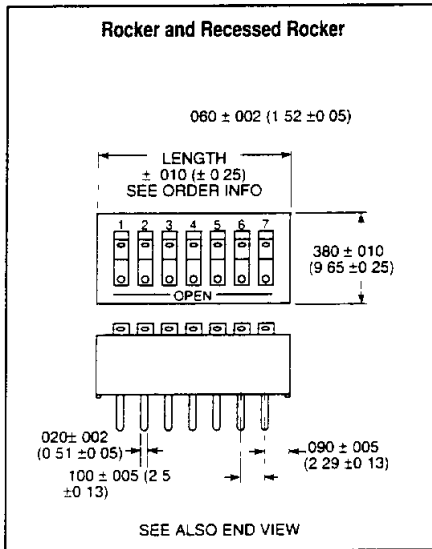


**FEATURES**

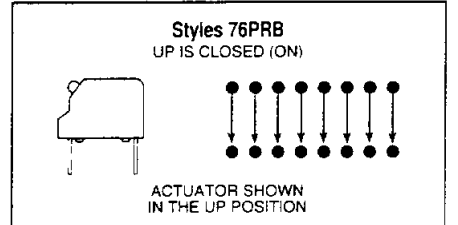
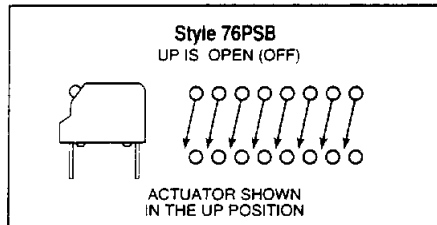
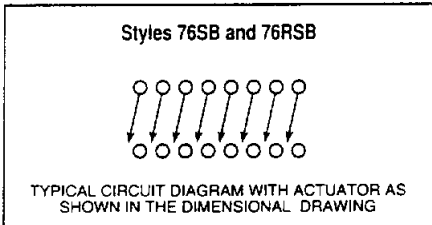
- Raised and Recessed Rocker, And PIANO-DIP® Styles
- Sealed Base Standard
- Spring and Ball Contact
- Top Tape Seal Option



**DIMENSIONS** In inches (and millimeters)



**CIRCUITRY**



**ORDERING INFORMATION\***

No Of Positions	Length Inches	Length Metric	No / Tube	Raised Rocker	Recessed Rocker	PIANO-DIP® Up is Off	PIANO-DIP® Up is On
2	0 280"	7,1mm	35	76SB02	76RSB02	76PSB02	76PRB02
3	0 380"	9,7mm	27	76SB03	76RSB03	76PSB03	76PRB03
4	0 480"	12,2mm	21	76SB04	76RSB04	76PSB04	76PRB04
5	0 580"	14,7mm	18	76SB05	76RSB05	76PSB05	76PRB05
6	0 680"	17,3mm	15	76SB06	76RSB06	76PSB06	76PRB06
7	0 780"	19,8mm	13	76SB07	76RSB07	76PSB07	76PRB07
8	0 880"	22,4mm	12	76SB08	76RSB08	76PSB08	76PRB08
9	0 980"	24,9mm	10	76SB09	76RSB09	76PSB09	76PRB09
10	1 080"	27,4mm	9	76SB10	76RSB10	76PSB10	76PRB10
12	1 280"	32,5mm	8	76SB12	76RSB12	76PSB12	76PRB12

\* 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**  
See page 16

Available From Local Grayhill Distributors  
Priced competitively. For prices and discounts, contact a local Sales Office, an authorized local Distributor, or Grayhill. See inside front cover.

**SPECIFICATIONS—Standard and Military Qualified Styles**

Ratings	76	78	90B
<b>Mechanical Life:</b> Operations per switch position	20,000	20,000	5,000
<b>Make and Break Current Rating</b> Operations per switch position at these resistive loads			
1 mA, 5 Vdc, 50 mA, 30 Vdc, or 150 mA, 30 Vdc	10,000	10,000	—
10 mA, 30 Vdc, or 10 mA, 50 mVdc	—	—	2,000
10 mA, 50 mVdc, or 25 mA, 24 Vdc, or 100 mA 6 Vdc	—	—	—
<b>Contact Resistance:</b> Initially	≤ 30 mΩ	≤ 30 mΩ	≤ 20 mΩ
After life, at 10 mA, 50 Vdc, open circuit	≤ 100 mΩ	≤ 100 mΩ	≤ 100 mΩ
<b>Insulation Resistance:</b>			
Minimum, at 100 Vdc between adjacent closed contacts and also across open switch contacts			
Initially (megohms)	5,000	5,000	1,000
After life (megohms)	1,000	1,000	1,000
<b>Dielectric Strength:</b> Minimum voltage (AC, RMS) measured between adjacent closed contacts and also across open switch contacts			
Initially	750 V	750 V	500 V
After life	500 V	500 V	500 V
<b>Current Carry Rating:</b> Maximum rise of 20°C	5 A	4 A	3 A
<b>Switch Capacitance:</b> At 1 megahertz	2 pF	2 pF	2 pF
<b>Operating Temperature:</b>	-40°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C
<b>Storage Temperature:</b>	-55°C to + 85°C	-55°C to + 85°C	-40°C to + 85°C
<b>Processing Position.</b> Switch is to be processed with all actuators in the closed (on) position as shipped			

**Environmental**

Meets or surpasses all requirements of MIL-S-83504

**Vibration:** Per method 204, Test Condition B 1 microsecond opening

**Mechanical Shock:** Per Method 213, Test Condition A 1 microsecond opening

**Moisture Resistance:** Per specification, Method 106

**Thermal Shock:** Per specification, no failures, passes contact resistance

**Terminal Strength:** Per specification

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

**Machine Soldering**

Series 90 and Series 76 recessed rocker 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

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

**Resistance to Soldering Heat:** 76RSB—Passes EIA Standard using two, four, and six second soldering time 90—Per MIL-S-83504, six second test

**Cleaning:** 76RSB, 90—Passes immersion test using freon (TF or TE), and water/detergent

**Cleaning Solutions:** 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

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

**Materials and Finishes**

**Shorting Member (Ball)** Brass gold plated 10 microinches minimum over nickel barrier

**Base Contacts.** Copper alloy, gold plated 10 microinches minimum over nickel barrier

**Terminals:** Copper alloy, solder (90/10) plated 100 microinches minimum over nickel barrier Gold plate is also available

**Non-Conductive Parts** Thermoplastic, UL94V-O rating

**Potting Material.** 76,78 only—Epoxy

**Tape Seal** Series 76 and 78 polyester film Series 90 polyamide film