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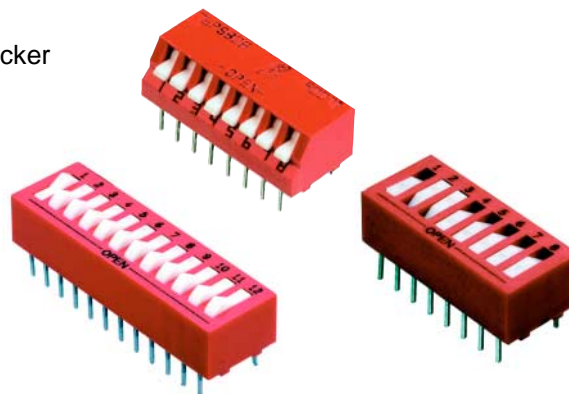
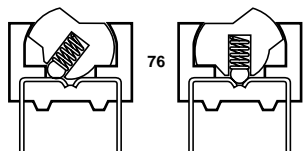
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Jameco Part Number 696790

**SERIES 76**  
**SPST Rocker**

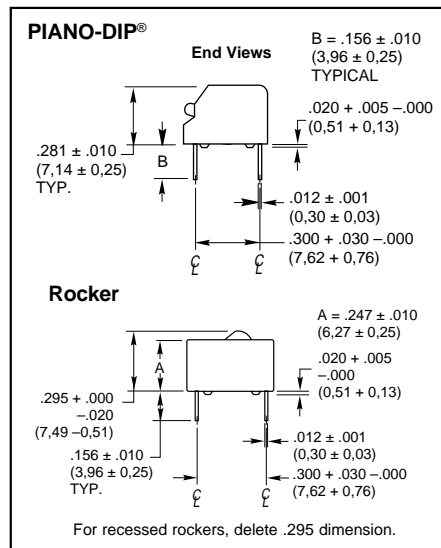
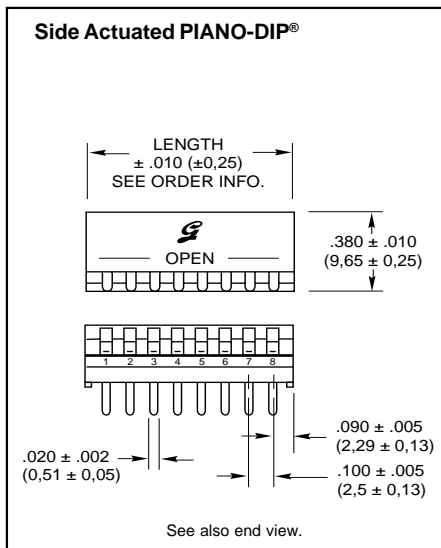
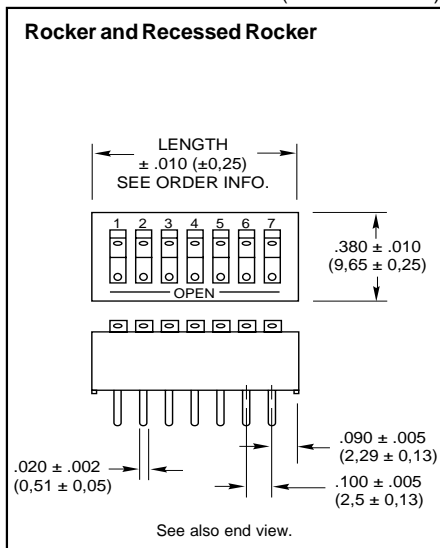
**FEATURES**

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

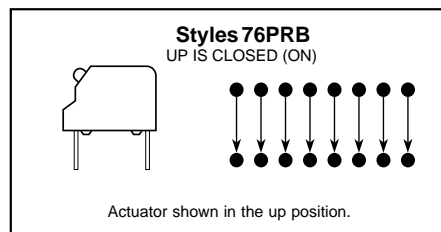
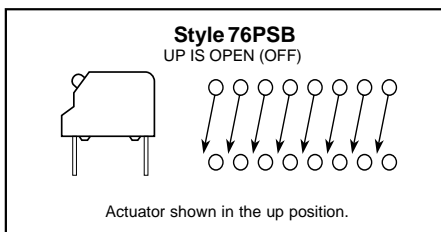
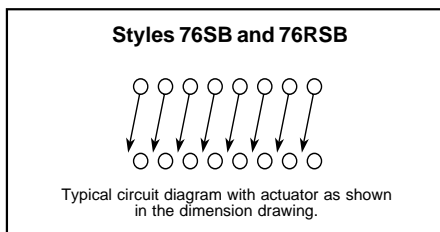


DIP Switches

**DIMENSIONS** In inches (and millimeters)



**CIRCUITRY**



**ORDERING INFORMATION**

**Series**

**Switch Style:** SB = Raised Rocker  
RSB = Recessed Rocker  
PSB = Piano-DIP (Up is Off)  
PRB = Piano-DIP (Up is On)

**Seal\*:** S = Tape Seal  
Blank = No Seal

**Number of Positions:** 02 through 10, 12

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

\*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.

For Specifications, see page B-16.  
For Options and Accessories, see page B-20.

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

**SPECIFICATIONS: Standard and Military Qualified Styles**

<b>Ratings</b>	<b>76</b>	<b>78</b>	<b>90B</b>
<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:	—	—	2,000
<b>Contact Resistance:</b> Initially:	≤ 30 mΩ	≤ 30 mΩ	≤ 20 mΩ
After life, at 10 mA, 50 mVdc, 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 (Mohms):	5,000	5,000	5,000
After life (Mohms):	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 Range:</b>	-40°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C
<b>Storage Temperature Range:</b>	-55°C to + 85°C	-55°C to + 85°C	-55°C to + 85°C

DIP Switches

**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 specification, 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:** 76RSB, 90: 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 10 microinches minimum over nickel barrier.  
**Base Contacts:** Copper alloy, gold-plated 10 microinches minimum over nickel barrier.  
**Terminals:** Copper alloy, solder-plated over nickel barrier.  
**Non-Conductive Parts:** Thermoplastic (UL94V-O)  
**Potting Material:** Epoxy, 76,78 only.  
**Protective Cover:** 76,78, only-Polycarbonate.

**Tape and Reel Packaging**

**Tape Seal:**  
 76, 78: Polyester film  
 90: Polyimide film or foil  
**Tape Seal Integrity:** Passes gross leak test using 125°C flourinert for 20 seconds minimum. Reference MIL-STD-202, Method 112.