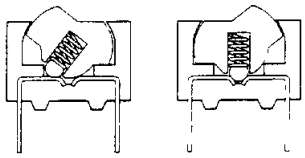
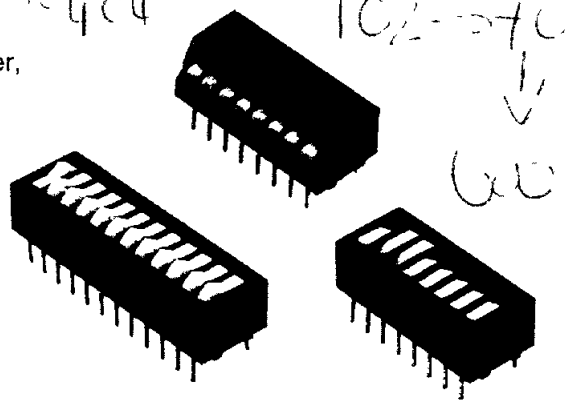
SERIES 76

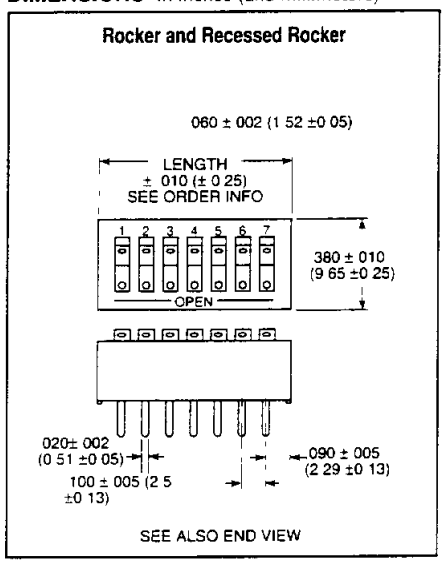


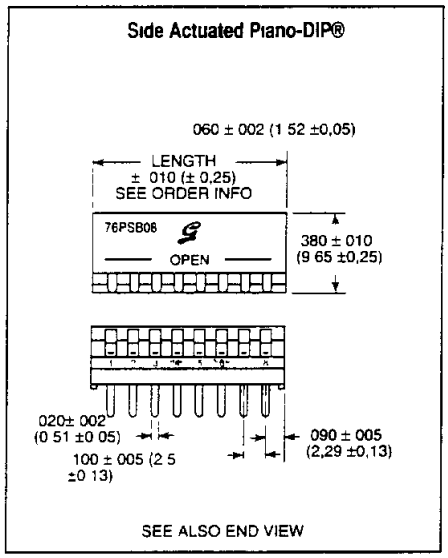
FEATURES

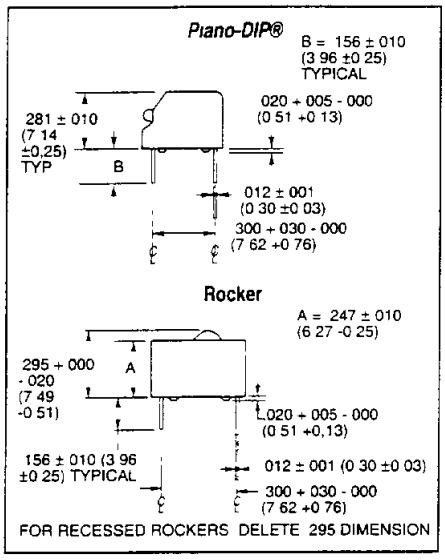
- Raised and Recessed Rocker, And PIANO-DIP® Styles
- Sealed Base Standard
- Spring and Ball Contact
- Top Tape Seal Option



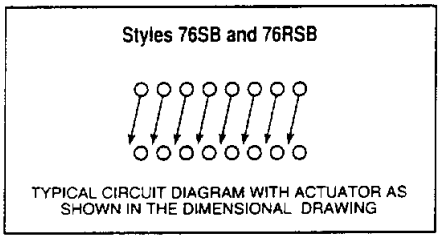
DIMENSIONS In inches (and millimeters)

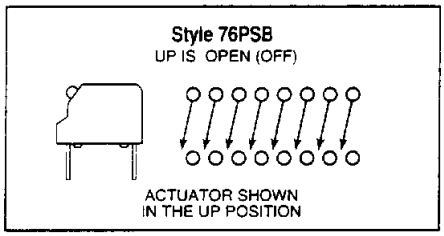


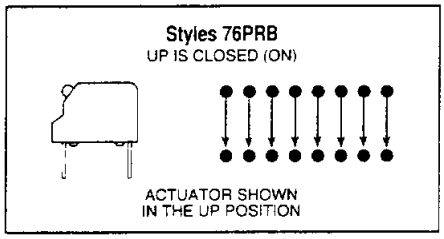




CIRCUITRY







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
Mechanical Life: Operations per switch position	20,000	20,000	5,000
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	10,000	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	—	—	—
Contact Resistance: Initially	≤ 30 mΩ	≤ 30 mΩ	≤ 20 mΩ
After life, at 10 mA, 50 Vdc, open circuit	≤ 100 mΩ	≤ 100 mΩ	≤ 100 mΩ
Insulation Resistance: 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
Dielectric Strength: 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
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:	-40°C to + 85°C	-40°C to + 85°C	-40°C to + 85°C
Storage Temperature:	-55°C to + 85°C	-55°C to + 85°C	-40°C to + 85°C
Processing Position. 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 flourinert 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 polymide film