



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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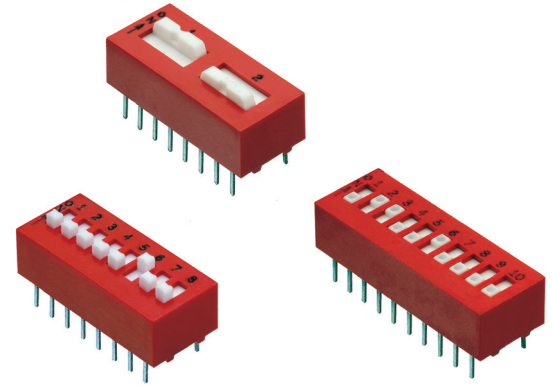
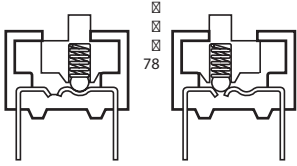
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

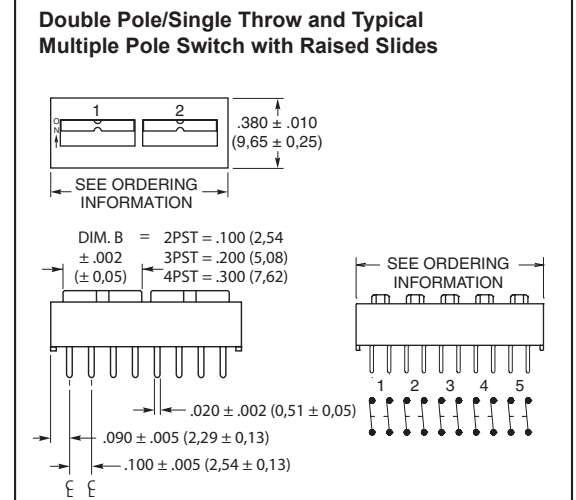
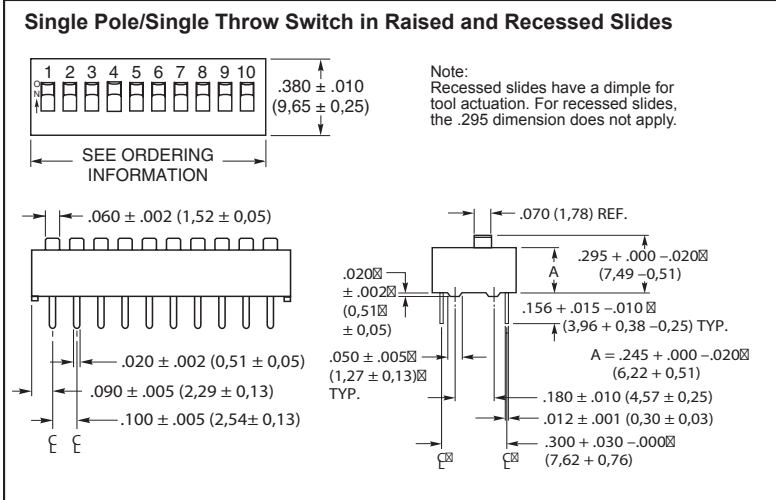


## SERIES 78 SPST To 4PST Slide

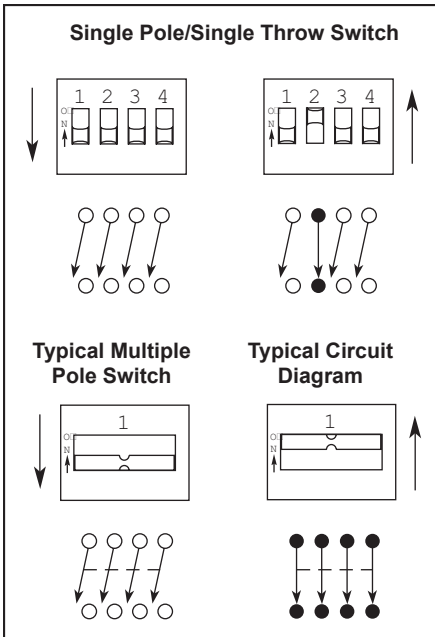
- ### FEATURES
- Raised and Recessed Slides
  - SPST, 2PST, 3PST, 4PST
  - Sealed Base Standard
  - Spring and Ball Contact
  - Top Tape Seal Option



### DIMENSIONS In inches (and millimeters)



### CIRCUITRY



For switches with 5, 6, 7, 8, or 10PST circuitry, contact Grayhill.

### ORDERING INFORMATION

Circuitry	No. of Positions	Length Inches	Length Metric	No./ Tube	Raised Slides*	Recessed Slides*	
SPST	2	0.280"	7,1mm	35	<b>78B02T</b>	<b>78RB02T</b>	
	3	0.380"	9,7mm	27	<b>78B03T</b>	<b>78RB03T</b>	
	4	0.480"	12,2mm	21	<b>78B04T</b>	<b>78RB04T</b>	
	5	0.580"	14,7mm	18	<b>78B05T</b>	<b>78RB05T</b>	
	6	0.680"	17,3mm	15	<b>78B06T</b>	<b>78RB06T</b>	
	7	0.780"	19,8mm	13	<b>78B07T</b>	<b>78RB07T</b>	
	8	0.880"	22,4mm	12	<b>78B08T</b>	<b>78RB08T</b>	
	9	0.980"	24,9mm	10	<b>78B09T</b>	<b>78RB09T</b>	
	10	1.080"	27,4mm	9	<b>78B10T</b>	<b>78RB10T</b>	
	12	1.280"	32,5mm	8	<b>78B12T</b>	<b>78RB12T</b>	
	2PST	1	0.280"	7,1mm	35	<b>78F01T</b>	Recessed Slides Not Available
		2	0.480"	12,2mm	21	<b>78F02T</b>	
3		0.680"	17,3mm	15	<b>78F03T</b>		
4		0.880"	22,4mm	12	<b>78F04T</b>		
5		1.080"	27,4mm	9	<b>78F05T</b>		
6		1.280"	32,5mm	8	<b>78F06T</b>		
3PST	1	0.380"	9,7mm	27	<b>78G01T</b>	Recessed Slides Not Available	
	2	0.680"	17,3mm	15	<b>78G02T</b>		
	3	0.980"	24,9mm	10	<b>78G03T</b>		
4PST	1	0.480"	12,2mm	21	<b>78H01T</b>	Recessed Slides Not Available	
	2	0.880"	22,4mm	12	<b>78H02T</b>		

\*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.

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

**SPECIFICATIONS: Standard Styles**

Ratings	76	78	90B
<b>Mechanical Life:</b> Operations per switch position	2,000	2,000	2,000
<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:	2,000	2,000	—
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

**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:** 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 10 microinches minimum 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 and Reel Packaging**

**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.