

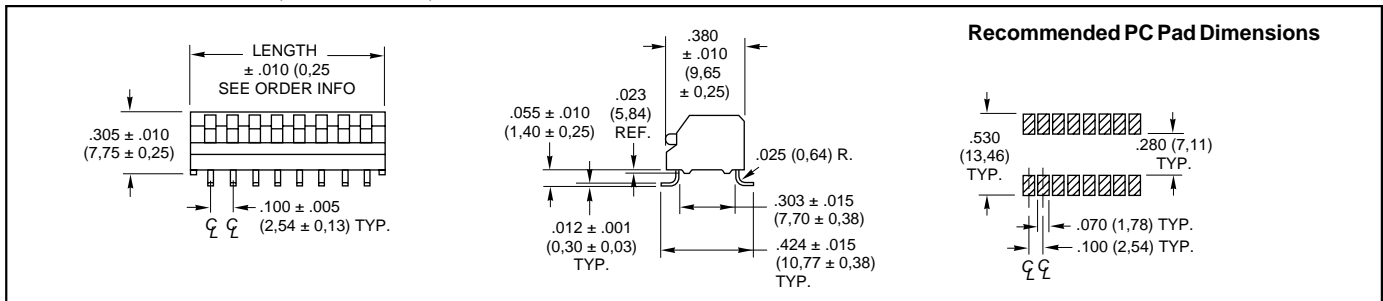
**SERIES 76HP**  
Side Actuated PIANO-DIP®

**FEATURES**

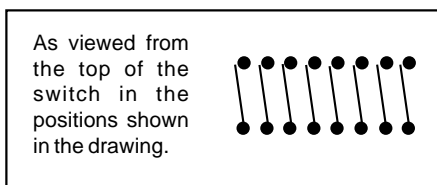
- Compatible with SMT Assembly Including Infrared Reflow and Vapor-Phase
- Easily Accessed when PC Boards are Racked
- Reliable Spring and Ball Contact



**DIMENSIONS** In inches (and millimeters)



**CIRCUITRY**



**SPECIFICATIONS**

**Electrical Ratings**

**Make-and-break Current Rating:** 10,000 operations per switch position at 1 mA, 5 Vdc; 50 mA, 30 Vdc; or 150 mA, 30 Vdc  
**Contact Resistance:** Initial: 30 mohms maximum; After Life: 100 mohms maximum (10 mA at 50 Vdc, open circuit)  
**Insulation Resistance:** Minimum, at 100 Vdc between adjacent closed contacts and also across open switch contacts. Initial: 2,000 Mohms  
**Dielectric Strength:** Minimum voltage (AC RMS) measured between adjacent closed contacts and also across open switch contacts. Initial: 750 volts; After Life: 500 volts  
**Carry Rating:** 5 amps, maximum rise of 20°C  
**Switch Capacitance:** 2 pF at 1 megahertz

**Mechanical Ratings**

**Mechanical Life:** 20,000 operations per switch position  
**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.

**Operating Temperature Range:** -40°C to +85°C  
**Storage Temperature Range:** -55°C to +85°C  
**Moisture Resistance:** Per specification, Method 106

**Soldering Information**

**Solderability:** Per MIL-STD-202, Method 208 Tested to EIA Standard RS-448-2.  
**Resistance to Soldering Heat:** Per MIL-S-83504, six second test  
**Recommended Processing Temperature:** 220°C–230°C (1 pass—260°C maximum)  
**Processing Position:** Switch is to be processed with all actuators in the closed (on) position as shipped.

**Materials and Finishes**

**Shorting Member:** Brass, gold-plated over nickel barrier.  
**Base Contacts:** Copper alloy, gold-plated,

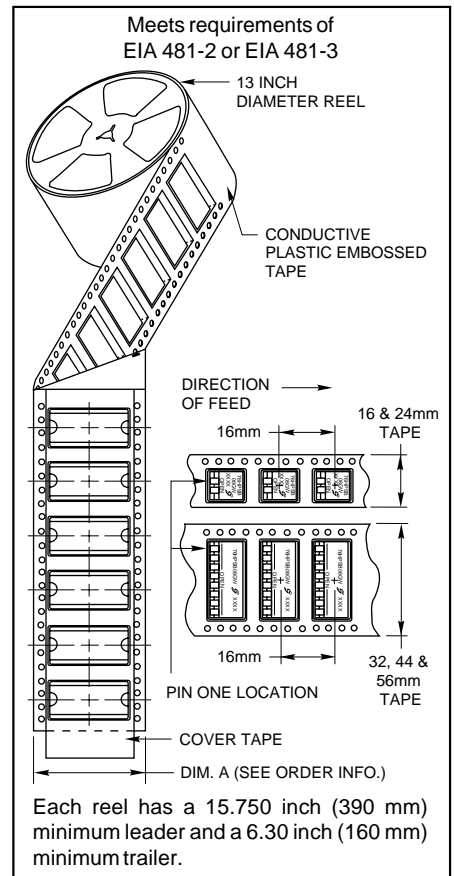
over nickel barrier.

**Terminals:** Copper alloy, solder plated over nickel barrier.

**Non-Conductive Parts:** Cover is natural color thermoplastic, actuators are white thermoplastic (UL94V-O)

**Tape Seal:** Provided without tape seal. Contact Grayhill if tape seal is required.

**TAPE AND REEL PACKAGING**



**ORDERING INFORMATION: Tape and Reel Packaging** (500 switches per reel)

No. of Positions*	Length (inches)	Length (metric)	Carrier Width Dim. A	Part Number
2	0.280"	7,1 mm	24 mm	76HPSB02GWR
4	0.480"	12,2 mm	24 mm	76HPSB04GWR
6	0.680"	17,3 mm	32 mm	76HPSB06GWR
8	0.880"	22,4 mm	44 mm	76HPSB08GWR
10	1.080"	27,4 mm	44 mm	76HPSB10GWR

\* For other lengths, contact Grayhill, Inc.

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