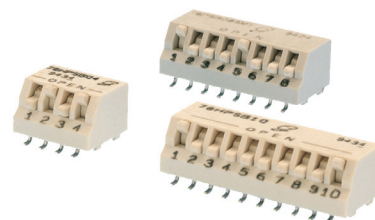


## SERIES 76HP

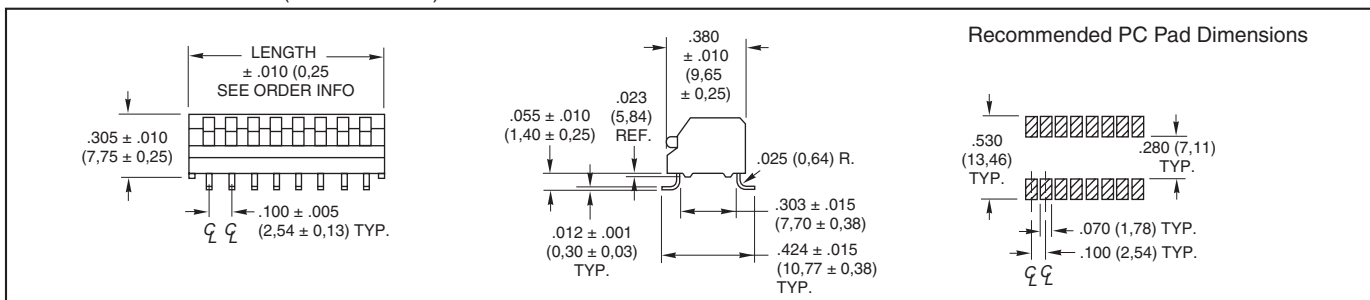
Side Actuated PIANO-DIP®

## 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

As viewed from the top of the switch in the positions shown in the drawing.



## SPECIFICATIONS

### Electrical Ratings

**Make-and-break Current Rating:** 2,000 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:** 2,000 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 MIL-STD-202, 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.

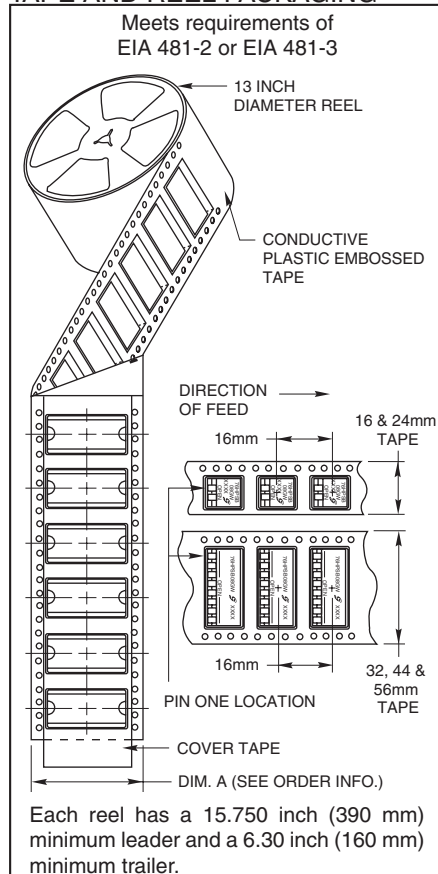
**Base Contacts:** Copper alloy, gold-plated, over nickel barrier.

**Terminals:** Copper alloy, matte tin plated over nickel barrier.

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

**Tape Seal:** Not available with Tape Seal.

## 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                | 76HPSB02GWRT |
| 4                 | 0.480"          | 12,2 mm         | 24 mm                | 76HPSB04GWRT |
| 6                 | 0.680"          | 17,3 mm         | 32 mm                | 76HPSB06GWRT |
| 8                 | 0.880"          | 22,4 mm         | 44 mm                | 76HPSB08GWRT |
| 10                | 1.080"          | 27,4 mm         | 44 mm                | 76HPSB10GWRT |

\* For other lengths, contact Grayhill, Inc.

\*\* Note: 100% matte tin terminal plating does not meet MIL-S-83504 for lead content.

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