





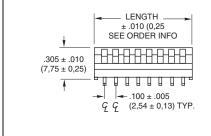
## **FEATURES**

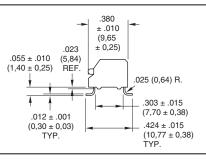
- Compatible with SMT Assembly Including Infrared Reflow and Vapor-Phase
- Easily Accessed when PC Boards are Racked
- Reliable Spring and Ball Contact



**Recommended PC Pad Dimensions** 

DIMENSIONS In inches (and millimeters)





# Materials and Finishes

Shorting Member: Brass, gold-plated over nickel barrier.

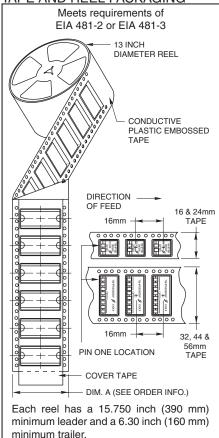
Base Contacts: Copper alloy, gold-plated, over nickel barrier.

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

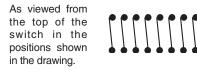
Non-Conductive Parts: Cover is natural color thermoplastic, actuators are white thermoplastic (U| 94V-O)

Tape Seal: Not available with Tape Seal.

#### TAPE AND REEL PACKAGING



# CIRCUITRY



#### **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.

Resistanceto 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.

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

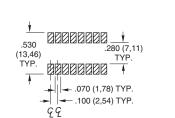
| No. of<br>Positions* | Length<br>(inches) | Length<br>(metric) | Carrier Width<br>Dim. A | Part<br>Number |
|----------------------|--------------------|--------------------|-------------------------|----------------|
| 2                    | 0.280"             | 7,1 mm             | 24 mm                   | 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 Gravhill.

**DIP Switches** 



# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Grayhill:

76HPSB02GWRT 76HPSB04GWRT 76HPSB06GWRT 76HPSB08GWRT 76HPSB10GWRT 76HPSB10GWRT