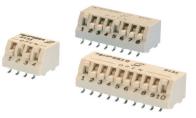




# **FEATURES**

- 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** 

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.280 (7.11)

TYF

4

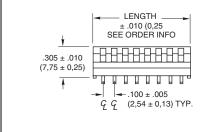
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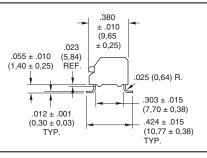
BBBBBBBBB

⊢ .070 (1,78) TYP.

.100 (2,54) TYP.

# DIMENSIONS In inches (and millimeters)





#### over nickel barrier.

99

¥

530

(13, 46)

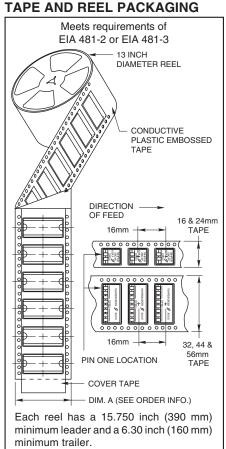
TYP.

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.



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



# **SPECIFICATIONS**

#### **Electrical Ratings**

CIRCUITRY

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

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

No. of	Length	Length	Carrier Width	Part
Positions*	(inches)	(metric)	Dim. A	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.

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

DIP 8