Grayhill Surface Wount DIP Switches



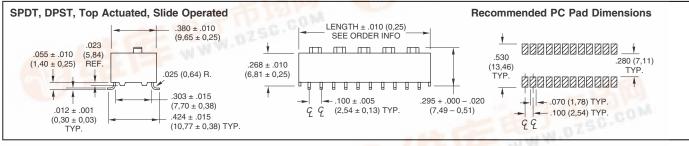
SERIES 78H SPDT and DPST



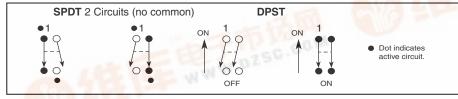
- Compatible with SMT Assembly Including Infrared Reflow and Vapor-Phase
- Reliable Spring and Ball Contact



DIMENSIONS In inches (and millimeters)



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 max. After Life: 100 mohms max. (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; After Life: 1,000 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

Current Carry Rating: 4 amps, maximum rise of 20°C

Switch Capacitance: 2 pF at 1megahertz

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) Terminal Strength: Per specification

Thermal Aging: 1,000 hours at 85°C; no failures Thermal Shock: Per specification; no failures; passes contact resistance

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 +

Storage Temperature Range: -55° C to $+85^{\circ}$ C Moisture Resistance: Per MIL-STD-202, Method 106

Soldering Information

Solderability: Per MIL-STD-202, Method 208 Soldering Heat Resistance: 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: Tube Packaging

No. of Positions		Length (inches)	Length (metric)	Carrier Width Dim. A	Part Number* SPDT DPST	
找	1 2 3PDF	0.280" 0.480" 0.680" 0.880" 1.080"	7,1 mm 12,2 mm 17,3 mm 22,4 mm 27,4 mm	24 mm 24 mm 32 mm 44 mm 44 mm	78HJ01GWT 78HJ02GWT 78HJ03GWT 78HJ04GWT 78HJ05GWT	78HF01GWT 78HF02GWT 78HF03GWT 78HF04GWT 78HF05GWT

Materials and Finishes

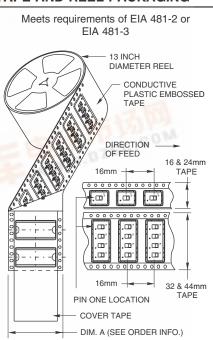
Shorting Member: Brass, gold-plated over nickel barrier.

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 AND REEL PACKAGING



Each reel has a 15.750 inch (390 mm) minimum leader and a 6.30 inch (160 mm) minimum trailer.

"Insert" R" before the "T" in the Grayhill part number for tape and reel packaging (500 switches/reel).