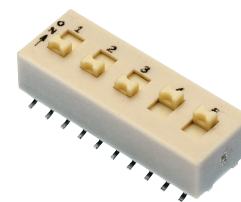


SERIES 78H SPDT and DPST

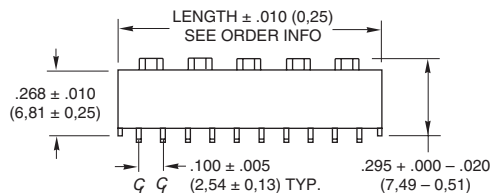
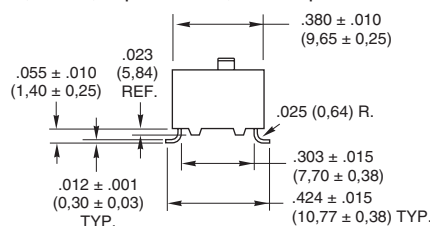
FEATURES

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

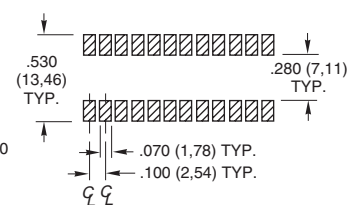


DIMENSIONS In inches (and millimeters)

SPDT, DPST, Top Actuated, Slide Operated



Recommended PC Pad Dimensions

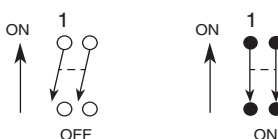


CIRCUITRY

SPDT 2 Circuits (no common)



DPST



• Dot indicates active circuit.

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 +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
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.

Materials and Finishes

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

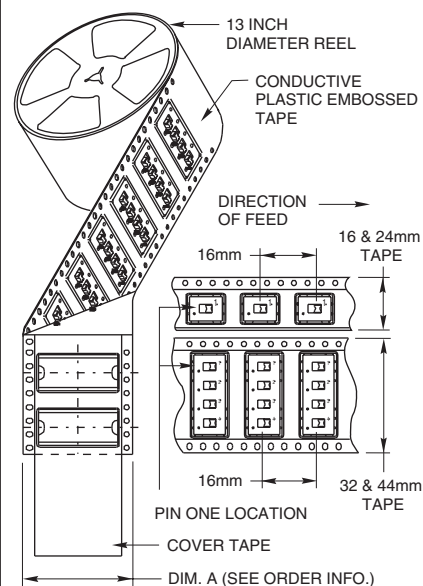
Base Contacts: Copper alloy, gold-plated over nickel barrier.

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

Non-Conductive Parts: Cover is natural color thermoplastic, actuators are white thermoplastic (UL94V-0)

TAPE AND REEL PACKAGING

Meets requirements of EIA 481-2 or EIA 481-3



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

ORDERING INFORMATION: Tube Packaging

| No. of Positions | Length (inches) | Length (metric) | Carrier Width Dim. A | Part Number* | |
|------------------|-----------------|-----------------|----------------------|--------------|-----------|
| | | | | SPDT | DPST |
| 1 | 0.280" | 7,1 mm | 24 mm | 78HJ01GWT | 78HF01GWT |
| 2 | 0.480" | 12,2 mm | 24 mm | 78HJ02GWT | 78HF02GWT |
| 3 | 0.680" | 17,3 mm | 32 mm | 78HJ03GWT | 78HF03GWT |
| 4 | 0.880" | 22,4 mm | 44 mm | 78HJ04GWT | 78HF04GWT |
| 5 | 1.080" | 27,4 mm | 44 mm | 78HJ05GWT | 78HF05GWT |

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

** 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.

Mouser Electronics

Authorized Distributor

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

Grayhill:

[78HJ02GWRT](#) [78HF03GWRT](#) [78HJ03GWRT](#) [78HJ01GWRT](#) [78HF05GWRT](#) [78HJ04GWRT](#) [78HF02GWRT](#)
[78HF04GWRT](#) [78HF05GWT](#) [78HF01GWRT](#)