

### SERIES 78H SPDT and DPST

#### **FEATURES**

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.268 ± .010

(6,81 ± 0,25)

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

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LENGTH + .010 (0.25)

SEE ORDER INFO

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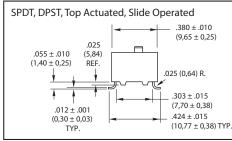
-100 + 005

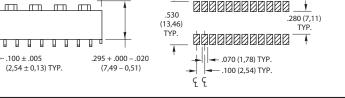
(2,54 ± 0,13) TYP.



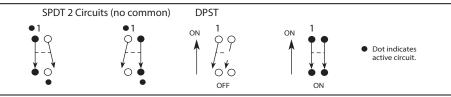
**Recommended PC Pad Dimensions** 

#### **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 + 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.

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#### Materials and Finishes

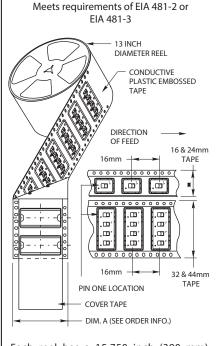
Shorting Member: Brass, gold-plated over nickel barrier.

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.

**ORDERING INFORMATION: Tube Packaging** 

No. of	Length	Length	Carrier Width	Part Number*	
		5			
Positions	(inches)	(metric)	Dim. A	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

\* 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:

 78HF03GWT
 78HJ01GWT
 78HJ02GWRT
 78HJ02GWT
 78HJ03GWT
 78HJ04GWT
 78HJ05GWT
 78HF03GWRT

 78HJ03GWRT
 78HJ05GWRT
 78HF04GWT
 78HJ01GWRT
 78HF05GWRT
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 78HJ04GWRT

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 78HF02GWRT
 78HF04GWRT
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