# **Grayhii** Thru-Hole DIP Switches



## **SERIES 79A**

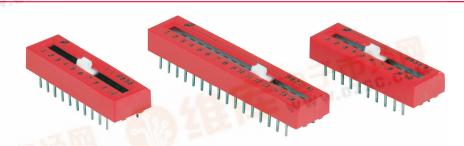
Linear Action Circuit Selector SERIES 79C

**Linear Action Tap** 



#### **FEATURES**

- Single-Setting Programming
- Isolated or Bussed Circuits
- 10 or 16 Positions
- 125 mA, 6 Vdc, 2000 Cycles



#### **Circuit Selector**

#### Isolated Circuits in 10 and 16 Positions

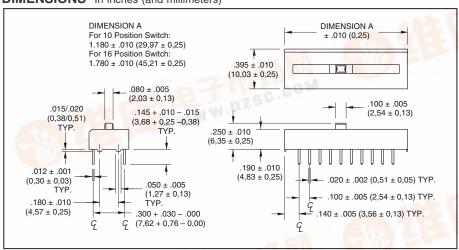
Each position is a single isolated circuit, which connects the two terminals across the switch package. The movable contact is non-shorting.

#### **Tap Switch**

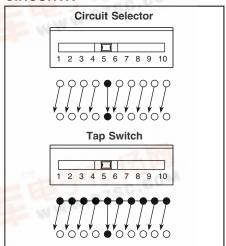
#### SP/10 Positions, and SP/16 Postions

All contacts on one side of the switch are internally bussed for a common pole. Any terminal on that side may be used as a common, the others may be clipped. The movable contact is non-shorting.

# **DIMENSIONS** In inches (and millimeters)



#### CIRCUITRY



#### **SPECIFICATIONS**

#### **Electrical Ratings**

Make-and-break Current Rating: 2,000 cycles at 10 mA, 50 mVdc; 2,000 cycles at 125 mA, 6 Vdc; 2,000 cycles at 50 mA, 30 Vdc.

**Contact Resistance:** (measured at 10 mA, 50 mVdc) Coded Switches: 60 mohms maximum initially. Other Switches: 50 mohms maximum initially. After Llfe: 100 mohms maximum

#### Insulation Resistance (at 100 Vdc):

Between adjacent isolated contacts: Initial:5,000 Mohms; 1,000 Mohms minimum after life. Across open contacts: Initial: 5,000 Mohms; 1,000 Mohms minimum after life.

Dielectric Strength: Between adjacent isolated contacts and also across open contacts. Initially: 750 Vac: 500 Vac after life

Contact Carry Rating: 2 Amps with a maximum contact temperature rise of 20°C

## **Mechanical Ratings**

**Mechanical Life:** 4,000 cycles maximum. Note: a cycle is one complete operation, back and forth through all switch positions.

Vibration Resistance: 10 to 2,000 Hz at 15G or 0.060" double amplitude, per MIL-STD-202F per MIL-5-83504; Method 213, Condition A. No damage and no contact openings exceeding 10 mS (Method 204, Test Condition B).

Shock Resistance: 509, 11 mS, half sine; no damage and no openings exceeding 10 mS (Method 213, Test Condition A).

## **Environmental Rating**

Operating Temperature Range: -40°C to +85°C

Storage Temperature Range: -55°C to +85°C Moisture Resistance: 240 hours with temperature cycling and polarization, per MIL-STD-202F, Method 305

# **Materials and Finishes**

Nonconductive Parts: Plastic UL94V-O Shorting Arm: Phosphor bronze, gold plate over nickel plate

Base Contacts: Copper alloy, gold plate over nickel plate

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

Potting Material: Epoxy

### Tape and Seal Packaging

Seal Strength: Per MIL-STD-202, Method 112. 30 seconds at 125° hot Fluorocarbon Solderability: Per MIL-STD-202, Method 208.

Tape Seal: Polyester film

# $\label{lem:available from your local Grayhill Distributor.} A vailable from your local Grayhill Distributor.$

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

# **ORDERING INFORMATION**

Number of Positions	Type of Circuit Code	Number per Tube	Part Number*
10	Circuit Selector	9	79A10T
找一PDFO	Single Pole	9	79C10T
16	Circuit Selector	6	79A16T
16	Single Pole	6	79C16T

\*A top tape seal is required for switches that are machine soldered or heavily cleaned after hand