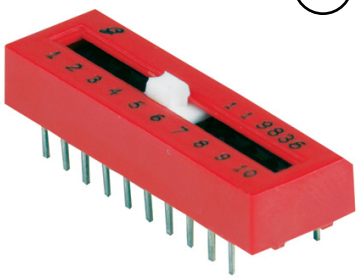
SERIES 79A

Linear Action Circuit Selector



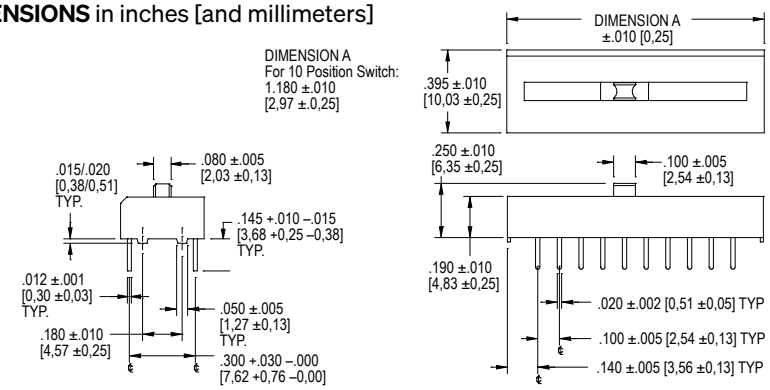
FEATURES

- Single-setting programming
- Isolated or bussed circuits
- 10 positions
- 125 mA, 6 Vdc, 2000 cycles
- RoHS compliant

CIRCUIT SELECTOR

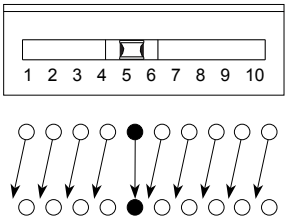
Each position is a single isolated circuit, which connects the two terminals across the switch package. The movable contact is non-shorting.

DIMENSIONS in inches [and millimeters]



CIRCUITRY

Circuit Selector



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 mΩ maximum initially. Other Switches: 50 mΩ maximum initially. After LIfe: 100 mΩ maximum
Insulation Resistance (at 100 Vdc)	Between adjacent isolated contacts: Initial: 5,000 MΩ; 1,000 MΩ minimum after life. Across open contacts: Initial: 5,000 MΩ; 1,000 MΩ 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 Ratings

Operating Temperature	-40 °C to +85 °C
Storage Temperature	-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

ORDERING INFORMATION

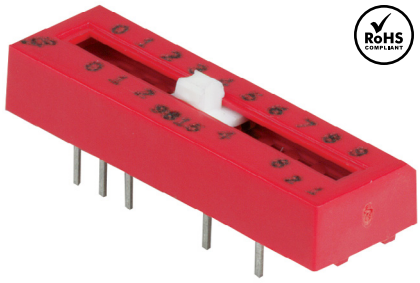
Available from your local Grayhill Distributor.
For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

Number of Positions	Type of Circuit Code	Number per Tube	Part Number*
10	Circuit Selector	9	**79A10T**

*A top tape seal is required for switches that are machine soldered or heavily cleaned after hand soldering. To order top seal versions, add "S" before the "T" in the Grayhill part number.

SERIES 79B

Linear Action, Coded Output

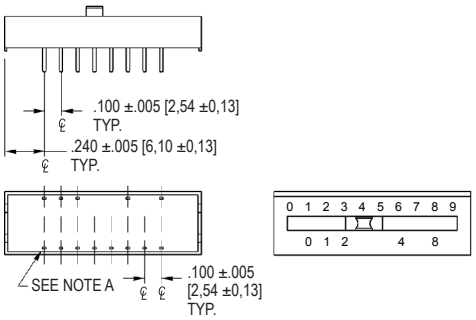


FEATURES

- Reliable switching, positive detent
- Codes in BCD and hexadecimal
- True zero output
- 10 positions
- 2000 cycle life
- Up to 60,000 detent operations
- RoHs compliant

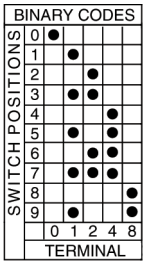
DIMENSIONS in inches [and millimeters]

All dimensions not shown here are the same as those on the previous page.



NOTE A: All terminals on this side of the switch are bussed internally.Any one of them may be used as the common terminal.

CIRCUITRY



Dot indicates contact made between contact and output terminal.

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	100 mΩ maximum after life, measured at 10 mA dc and 50 mV (open circuit). Initial values are 60 mΩ maximum for coded switches
Insulation Resistance (at 100 Vdc)	Between adjacent isolated contacts: Initial: 5,000 MΩ; 1,000 MΩ minimum after life Across open contacts: Initial: 5,000 MΩ; 1,000 MΩ 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 Ratings Refer to MIL-STD-202F per MIL-S-83504

Operating Temperature	-40 °C to +85 °C
Storage Temperature	-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

Tape Seal	Polyester film

ORDERING INFORMATION

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

Number of Positions	Type of Circuit Code	Number per Tube	Part Number*
10	Binary Code Decimal	9	**79B10T**

*A top tape seal is required for switches that are machine soldered or heavily cleaned after hand soldering. To order top seal versions, add "S" before the "T" in the Grayhill part number.

OPTIONS

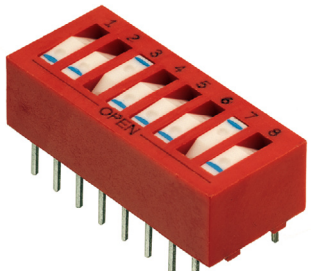
Position Identification Line Option

For Series 76RSB, 76RSC, 76RSD, & 90B
A line can be added to the recessed rocker or Series 90 slide actuator to provide positive identification of the actuator position. To order, add L as a final suffix to the part number. For example, 76RSB08 becomes 76RSB08L; and, 90B08S becomes 90B08SL.

Available from a local Grayhill Distributor.

Other Switch Markings

For Series 76, 78, & 90
We can mark your part number or other wording on the switch, often at no charge. For some markings there will be a nominal charge for tooling plus a set-up charge. In addition, there is a marking charge per side per switch. Add it to the unit price and discount it accordingly.
To order, contact Grayhill.



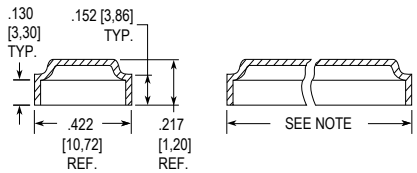
ACCESSORIES

Protective Cover Accessory

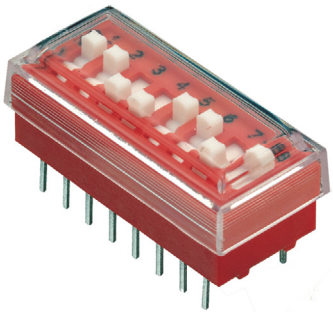
For Series 76 & 78
Rigid, clear plastic cover fits all but toggle actuated switches. It provides a top cover for less strenuous cleaning, serves as a dust cover in dirty environments, and provides protection against accidental actuation.

Material: 76, 78, only-Polycarbonate.
Purchase as a separate item. Check length of the desired DIP Switch, and then select from the ordering information on this page.

Available from a local Grayhill Distributor.



Note: For length, add .042" [1,07 MM] to length of DIP switch.



DIPSTICK Accessory

For All Series
Pen-sized plastic DIPSTICK has a tapered end for actuating DIP Switches.

Part Number..... **90-DIPSTICK**

Available from a local Grayhill Distributor



Ordering Information

Length Inches	Protective Cover Part Number
0.280	**76P02**
0.380	**76P03**
0.480	**76P04**
0.580	**76P05**
0.680	**76P06**
0.780	**76P07**
0.880	**76P08**
1.080	**76P10**
1.180	**79P10**

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