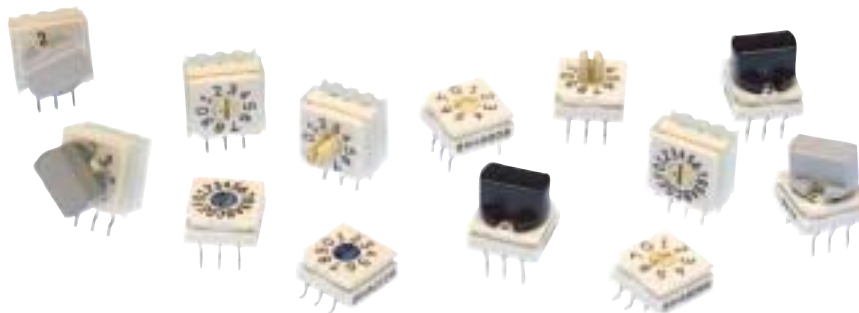


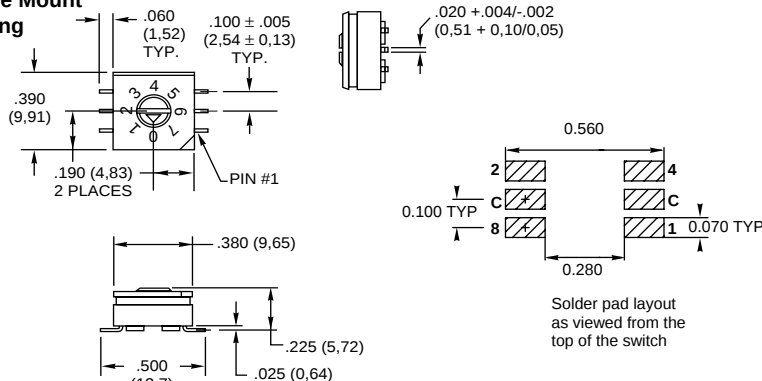
SERIES 94H Binary Coded



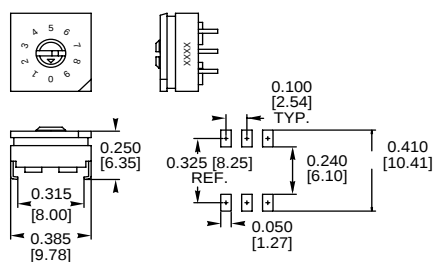
DIMENSIONS In inches (and millimeters)

Tolerances are $\pm .010$ inches unless specified otherwise.

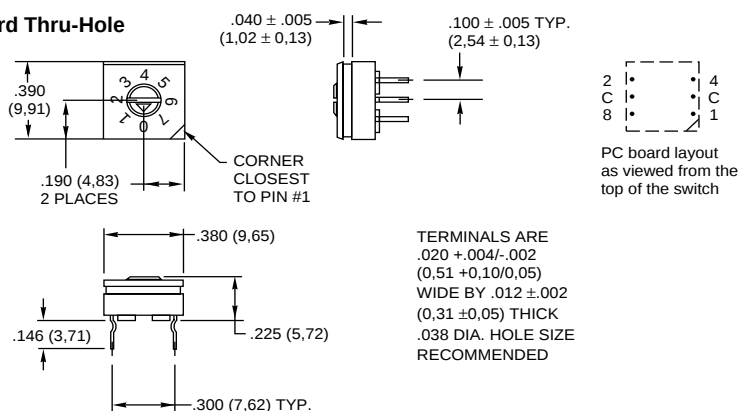
Surface Mount Gullwing



Surface Mount J-Lead



Standard Thru-Hole



FEATURES

- Sealed Construction; No Tape Seal Required
- Surface Mount or Thru-Hole Style
- Tube or Tape and Reel Packaging
- Octal, BCD, and Hexadecimal Code
- In Standard or Complement
- Standard and Right Angle Mount
- Flush or Extended Actuators
- Gold-Plated Contacts

ACTUATOR STYLES



Octal-8 position



BCD-10 position



Hex-16 position



Figure 2
"F" style rotor

Figure 1
"A" style rotor

All actuation types are available in octal (8), binary coded decimal (10), or hexadecimal (16) codes; with either standard or complement output. Standard code outputs have natural color rotors; complements in a contrasting color.

EXTENDED ACTUATOR TYPES

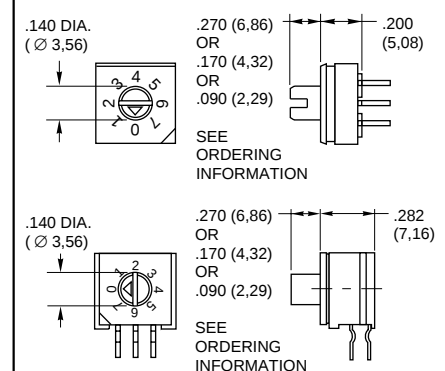


Figure 3

SERIES 94R

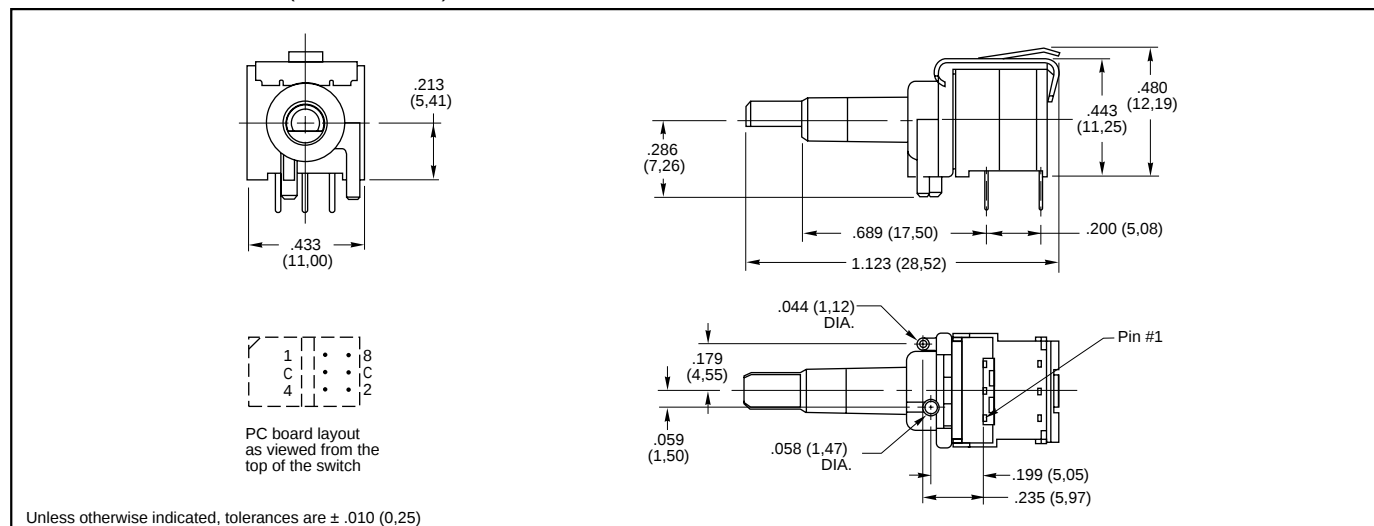
Economical, Binary Coded

FEATURES

- 10,000 Cycles of Operation
- Gold-Plated Contacts
- Sealed Contact System
- Right Angle Mount
- Octal, BCD & Hexadecimal Codes
- Standard or Complement



DIMENSIONS In inches (and millimeters)



SPECIFICATIONS: Series 94H and 94R

Electrical Ratings

Make-and-break Current Rating: 30 mA at 30 Vdc for 10,000 cycles of operation.

Carrying Current Rating: 100 mA at 50 Vdc

Contact Resistance: 50 mohms maximum initially (measured at 10 mA, 50 mVdc). 150 mohms maximum after life.

Insulation Resistance:(measured at 100 Vdc across open switch contacts)

Initial: 5000 Mohms minimum. After Life: 1000 Mohms minimum.

Dielectric Strength: (measured across open switch contacts) Initial: 500 Vac RMS minimum. After Life: 250 Vac RMS

Mechanical Ratings

Mechanical Life: 10,000 cycles of operation. One cycle is a rotation through all positions and a complete return through all positions.

Mechanical Shock: 1000g's, 0.5mS, half sine per MIL-STD-202F, Method 213, Test Condition E.

Vibration Resistance: 10-2000 Hz at 15G or 0.060" double amplitude per MIL-STD-202F, Method 204, Test Condition B.

Operational Torque: 2 to 6 inch-ounces initially and 1.2 inch-ounces minimum after life.

Environmental Ratings

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

Storage Temperature Range: -40° to +85°C.

Moisture Resistance: 240 hours with temperature cycling and polarization. Passes insulation resistance and dielectric strength per MIL-STD-202F, Method 106 following exposure.

Materials and Finishes

Rotor and Switch Body: Plastic (UL94V-O)

Contact Material: Copper alloy plated. 30 microinches minimum gold over 50 microinches minimum nickel.

Shorting Member: Copper alloy plated. 30 microinches minimum gold over 50 microinches minimum nickel.

Terminals: Copper alloy plated. 100 microinches minimum 90/10 tin lead solder over 50 microinches minimum nickel.

Internal O-ring: Rubber BUNA-N

Soldering Information

Soldering Temperature: 250° C for 10 seconds maximum.

Cleaning: Acceptable solutions include 1-1-1 Trichlorethane, Freon (TF, TE, or TMS), Isopropyl Alcohol and detergent (140°F maximum). Solutions which are not recommended include Acetone, Methylene Chloride, and Freon TMC.

CODE & TRUTH TABLES:

Series 94H and 94R

Standard Output	CODE OUTPUT				CODE OUTPUT	CODE OUTPUT	CODE OUTPUT	Complement Output
	1	2	4	8	1	2	4	8
0								
1	•				•	•	•	•
2		•				•	•	•
3	•	•			•	•	•	•
4			•		•	•	•	•
5	•			•	•	•	•	•
6		•		•	•	•	•	•
7	•	•		•	•	•	•	•
8				•	•	•	•	•
9	•				•	•	•	•
A	•	•			•	•	•	•
B	•				•	•	•	•
C		•			•	•	•	•
D	•	•			•	•	•	•
E			•		•	•	•	•
F	•	•	•	•	•	•	•	•

Dot indicates terminal to common connection. All switches are continuous rotation.

Octal and Octal Complement outputs are 0 thru 7 positions.

BCD and BCD Complement outputs are 0 thru 9 positions.

Hexadecimal and Hexadecimal Complement outputs are 0 thru F positions.

Standard codes have natural color rotors; complements have rotors in a contrasting color.

ORDERING INFORMATION: Series 94R

Continuous Rotation Versions			
Code	No. of Positions	Standard Code Part Number	Complement Part Number
Octal	8	94RB08C	94RC08C
BCD	10	94RB10C	94RC10C
Hexadecimal	16	94RB16C	94RC16C
Rotational Stop Versions*			
Code	No. of Positions	Standard Code Part Number	Complement Part Number
Hexadecimal	16	94RB16F	94RC16F

* Consult Grayhill for 8 or 10 position