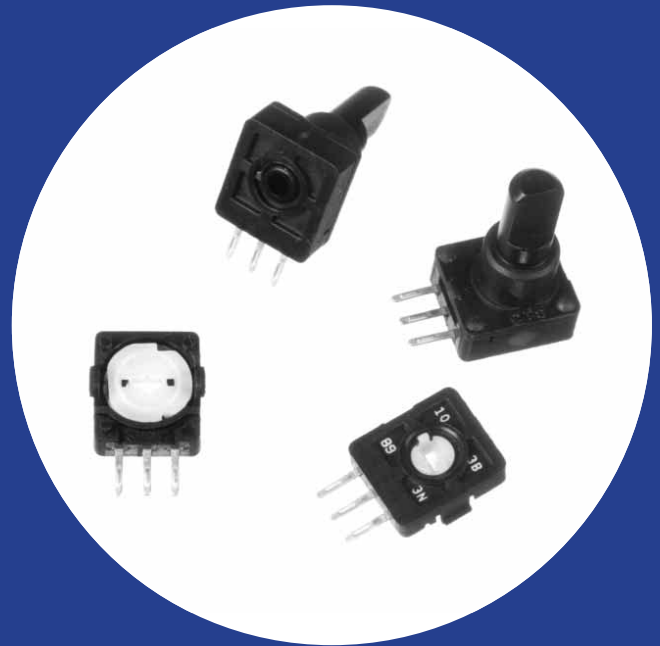


Long life, 9mm diameter, composition element, variable resistor

Features

- 1 million cycle life
- Miniature 9 mm size
- Multiple rotation angles available
- Low rotational torque
- Sturdy insert molded PC terminals
- Bushing mount or shaftless available
- Tap available



Electrical and Mechanical Specifications

Resistance Range

10 K ohms through 200 K ohms

Resistance Tolerance

Standard: $\pm 20\%$

Special: $\pm 10\%$ and $\pm 30\%$ available

Resistance Taper

Linear $\pm 5\%$

Insulation Resistance

100 megohms minimum @ 250 VDC

Operating Temperature

-10°C to $+70^{\circ}\text{C}$

Rotational Torque

3 to 10 gf-cm

Rotational Life

1,000,000 cycles

Power Rating

0.01 watt at 50°C derated to no load at 85°C

Maximum Operating Voltage

Maximum 50 VAC or 5 VDC

Angle of Rotation

Total Rotation - With Shaft: 180°

No Shaft: 360°

Effective Rotation: 38° , 40° , 50° , 60° , 70° , 85° , 90° or 110° available
(Typical joystick control use.)

Materials

Housing: UL 94V-2

Shaft / Bushing: UL 94V-2

Base UL flame class 94HB

Shaft Information

Flatted, molded shaft

Diameter: 3.96 mm or 5.0 mm,
depending on shaft trim

Mounting Information

Bushing mount (unthreaded)

Diameter: 7.00 mm

Length: 5.00 mm

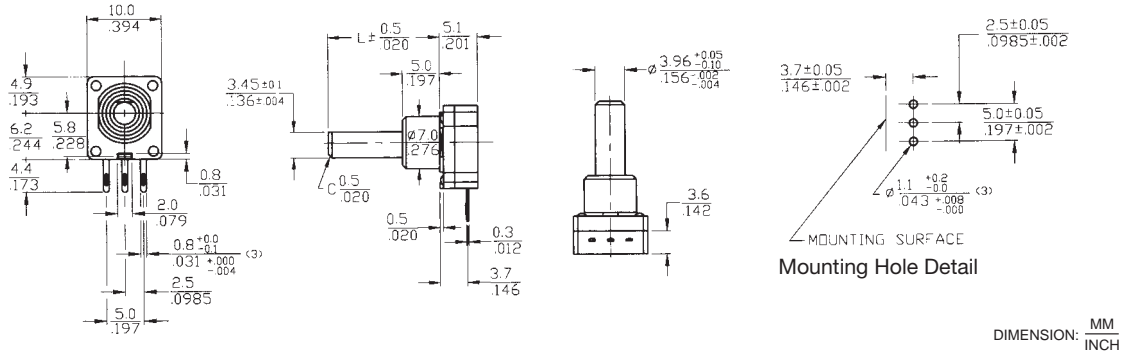
Tap Available

4° angle at 50% rotation optional

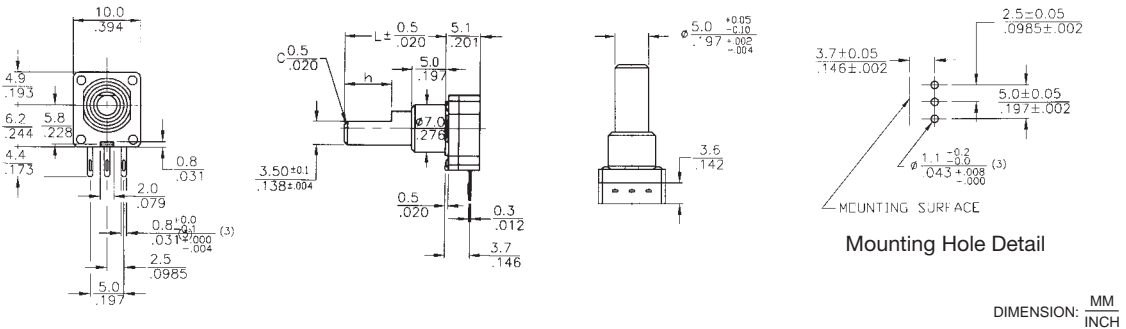
Other taps available - consult CTS

CTS SERIES 251

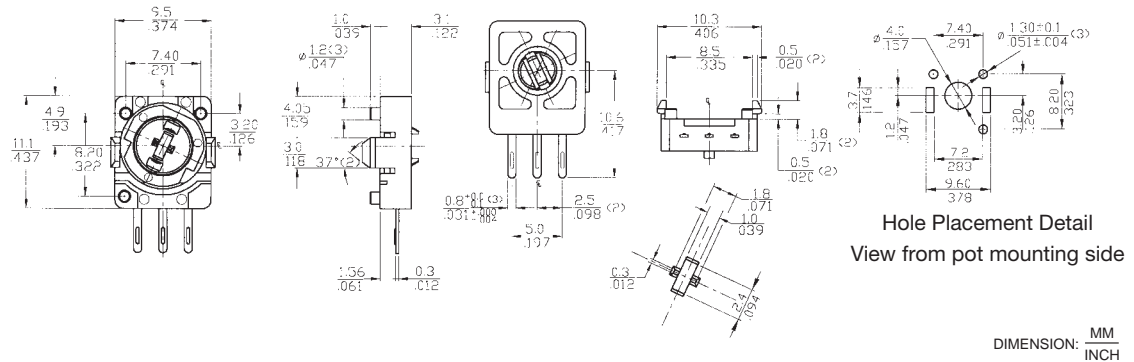
"T" Shaft Trim



"F" Shaft Trim



No Shaft



Order Information

Part Number Code For Ordering

| | | | | | | | | | | |
|--------------------------|------------|----------|-----------|----------|------------|----------|----------|----------|----------|---------------------|
| | 251 | B | 00 | 0 | 254 | A | 1 | N | 1 | |
| Terminal Type | | | | | | | | | | Specials |
| B-Straight P.C. | | | | | | | | | | 1 - None |
| "L" Shafts Length | | | | | | | | | | B - W/bushing |
| 00 - No shaft | | | | | | | | | | |
| 12 - 12 mm | | | | | | | | | | |
| 15 - 15 mm | | | | | | | | | | |
| Shafts Trim | | | | | | | | | | Resistance Tap |
| 0 - No shaft | | | | | | | | | | N: No center tap |
| F - 5 mm dia flatted | | | | | | | | | | T: 4° tap at center |
| thickness 3.5 mm | | | | | | | | | | |
| T - 4 mm dia flatted | | | | | | | | | | |
| thickness 3.45 mm | | | | | | | | | | |
| Resistance Code Examples | | | | | | | | | | |
| Code | | | | | | | | | | |
| 252 | | | | | | | | | | |
| 253 | | | | | | | | | | |
| 254 | | | | | | | | | | |
| 255 | | | | | | | | | | |
| Resistance Tol | | | | | | | | | | |
| A: ± 10% | | | | | | | | | | |
| B: ± 20% | | | | | | | | | | |
| C: ± 30% | | | | | | | | | | |
| Effective Angle | | | | | | | | | | |
| 1- 40° | | | | | | | | | | |
| 2- 50° | | | | | | | | | | |
| 3- 60° | | | | | | | | | | |
| 4- 38° | | | | | | | | | | |
| 5- 110° | | | | | | | | | | |
| 6- 85° | | | | | | | | | | |
| 7- 70° | | | | | | | | | | |
| 8- | | | | | | | | | | |
| 9- 90° | | | | | | | | | | |

Order From:

CTS CORPORATION, ELECTROCOMPONENTS / 1601 Mishawaka Street / Elkhart, Indiana 46514
 North America Toll Free (888) 287-4690 / (219) 296-6700 / FAX: (219) 293-1240 <http://www.ctscorp.com>

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 (07) 8216145 / FAX: (07) 8417642.8110040