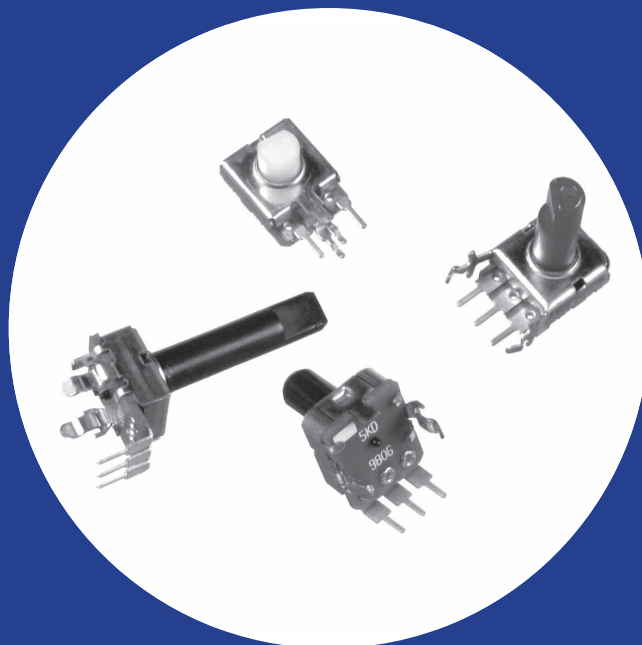


Commercial 12mm Diameter Composition Variable Resistors

Features

- Miniature 12mm size
- Low cost
- Snap-in bracket for PC board mounting
- Detent available
- Insulated shaft available
- RoHS compliant



Electrical and Mechanical Specifications

Resistance Range

Standard: 500 ohms through 1 megohms.
Special: For non-standard resistance values, please contact CTS.

Resistance Tolerance

Standard: $\pm 20\%$
Special: Tighter tolerances available in most resistance values.

Power Rating, Watts

0.15 watts @ 50°C derated to no load @ 85°C for linear curve.
0.1 watts @ 50°C derated to no load @ 85°C for regular non-linear curve.

Voltage Rating

Across end terminals:
Standard 250 VDC; Special: 350 VDC load not to exceed wattage ratings at given ambient temperature.

Insulation Resistance

100 Megohms min. @ 250 VDC.

Rotational Angle

Total Rotation: $300^\circ \pm 5^\circ$
Effective Electrical Rotation: 280° (approximate)

Rotational Torque

20 – 216 gcm (0.3~3 in-oz)

Stop Strength

5.76 kg-cm (5 in-lb) min. for no detent pots
3 kg-cm (2.6 in-lb) min. for with detent pots

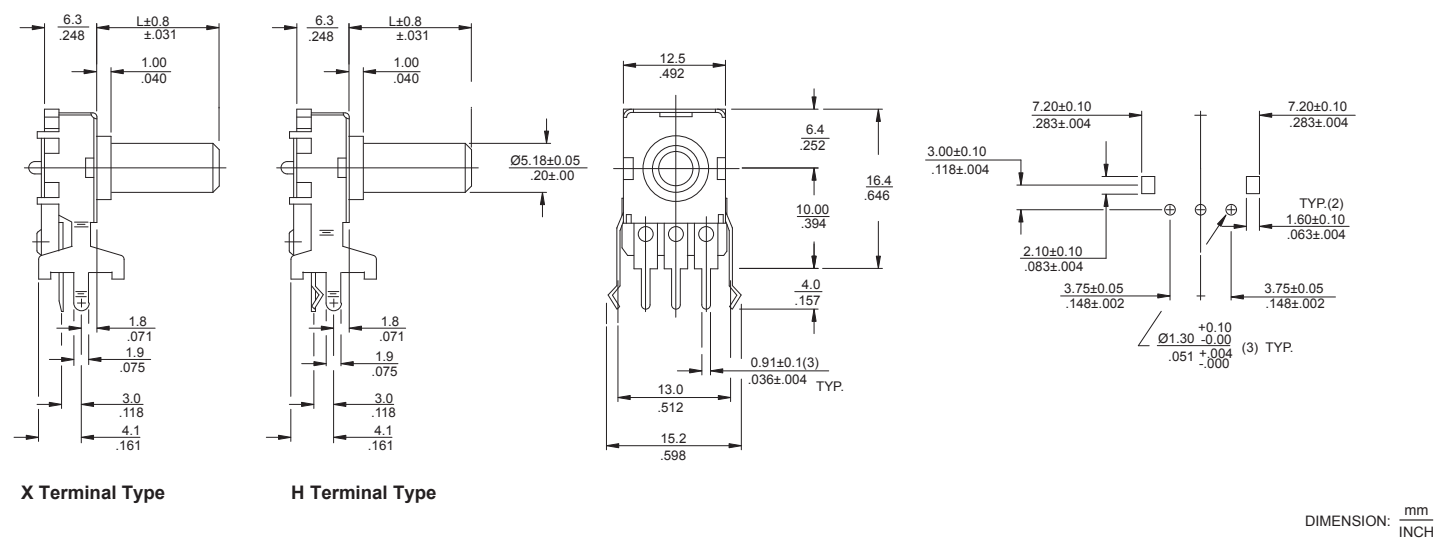
Mounting Information

P.C. board mounting
Type "X": Control shaft parallel to P.C. board.
Type "U": Control shaft vertical to P.C. board.
Type "H": Same as "X" type except terminals hooked

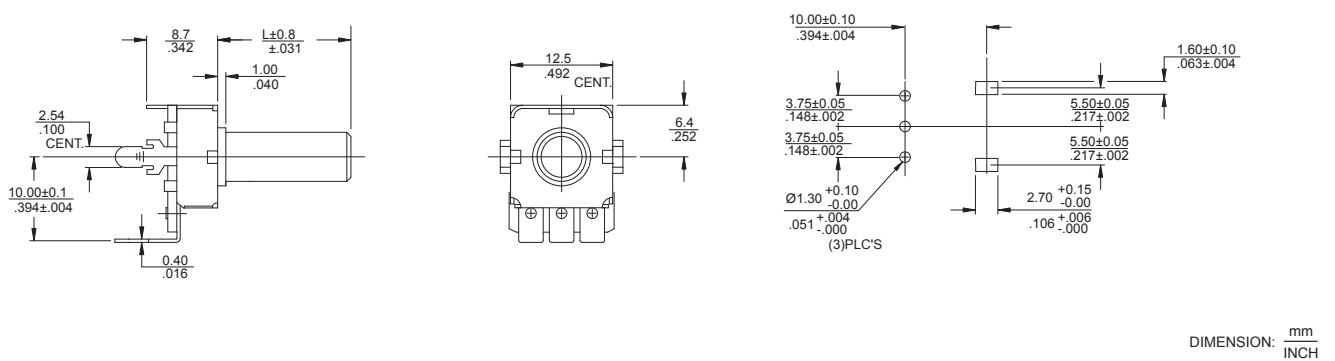
Detent

Center detent available.

XM 296RE/HM 296RE
Molded Shaft, Control Shaft Parallel to P.C. Board



UM 296RE
Molded Shaft, Control Shaft Vertical to P.C. Board



Ordering Information

296

TERMINAL STYLE

X – PC
U – PC FORMED TO REAR
H – HOOK

X

B

252

RESISTANCE CODE EXAMPLES

CODE	RESISTANCE
501	500 OHMS
102	1K
252	2.5K
502	5K
103	10K
253	25K
503	50K
104	100K

B

RESIST TOL

A – ±10%
B – ±20%
C – ±30%

2

TAPER

1 – LINEAR
2 – 10% AUD
3 – 10% CCW AUD

N

DETENT

N – NO DETENT
C – CENTER DETENT

SHAFTS AVAILABLE

(ALL SHAFTS .236" Dia. (6.0mm) except "E" - Diameter is .240" (6.1mm))

LENGTH BEYOND	
COVER	TRIM
A – .640" (16.3mm)	FLATTED .472"X.177" (12X4.5mm)
B – .840" (21.3mm)	FLATTED .472"X.177" (12X4.5mm)
C – 1.031" (26.2mm)	FLATTED .472"X.177" (12X4.5mm)
D – .540" (13.7mm)	KNURLED .287"X.18T (7.3mmX18T)
E – .265" (6.7mm)	FLATTED .218"X.204" (5.5X5.2mm)
F – .640" (16.3mm)	FLATTED .276"X.177" (7X4.5mm)
G – .717" (18.2mm)	FLATTED .276"X.177" (7X4.5mm)
H – 1.035" (26.3mm)	FLATTED .276"X.177" (7X4.5mm)