

Series 296 Technical Data

Commercial 12mm Diameter Composition Variable Resistors

- Miniature 12mm size
- Low cost
- P.C. board mounting
- 500 ohms through 1 megohms
- Detent available



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.

Angle of Rotation

Total Rotation: $300^\circ \pm 5^\circ$

Effective Electrical Rotation: 280° (approximate)

Rotational Torque

20 – 216 gcm

Stop Strength

5" lbs (5.76 kg-cm) minimum stop strength.

Mounting Information

P.C. board mounting

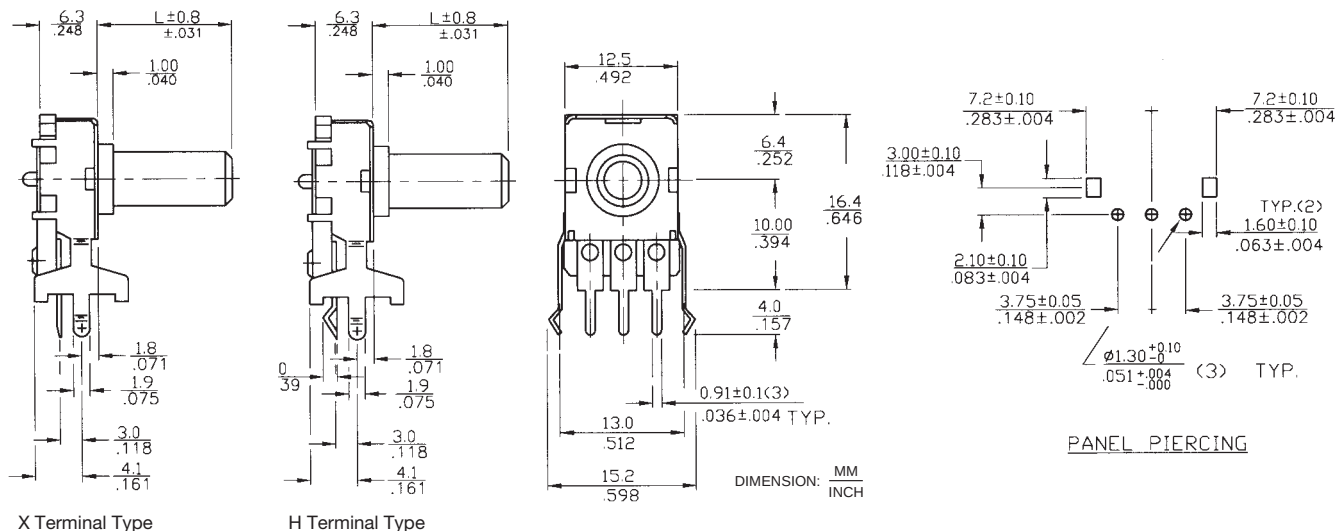
Type "X": Control shaft parallel to P.C. board.

Type "U": Control shaft vertical to P.C. board.

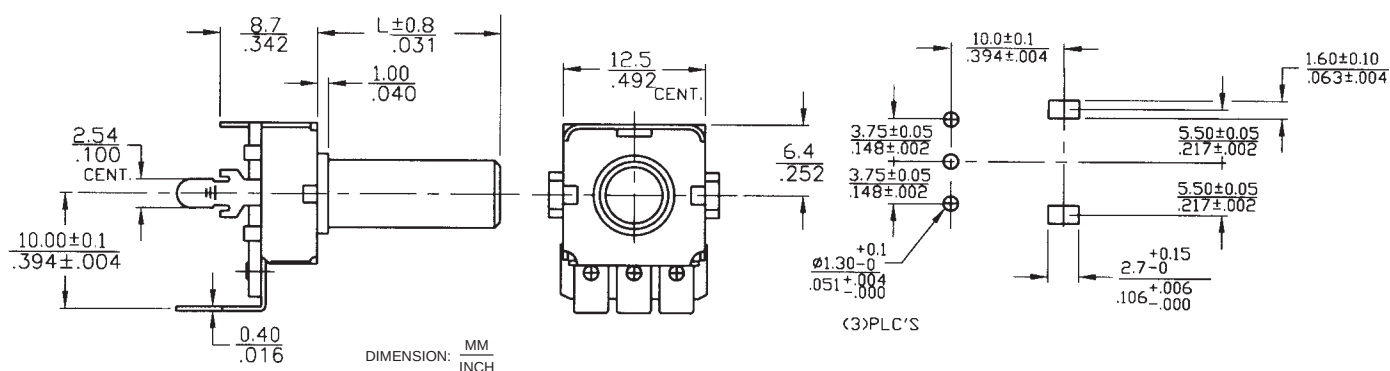
Detent

50% detent available.

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



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



Ordering Information

296

X

B

TERMINAL STYLE

X – PC
U – PC FORMED TO REAR
H – HOOK

SHAFTS AVAILABLE

(ALL SHAFTS .236" [6MM] DIAMETER/EXCEPT E - DIAMETER IS .240" [6.1MM])

LENGTH BEYOND

INCH		MM	
COVER	TRIM	COVER	TRIM
A – .640"	FLATTED .472" x .177"	A – 16.3MM	FLATTED 12x4.5MM
B – .840"	FLATTED .472" x .177"	B – 21.3MM	FLATTED 12x4.5MM
C – 1.031"	FLATTED .472" x .177"	C – 26.2MM	FLATTED 12x4.5MM
D – .540"	KNURLED .287" x .236"	D – 13.7MM	KNURLED 7.3MMx18T
E – .265"	FLATTED .218" x .204"	E – 6.7MM	FLATTED 5.5 x 5.2MM

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

Order From:

CTS CORPORATION, ELECTROCOMPONENTS / 1601 Mishawaka Street / Elkhart, Indiana 46514
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