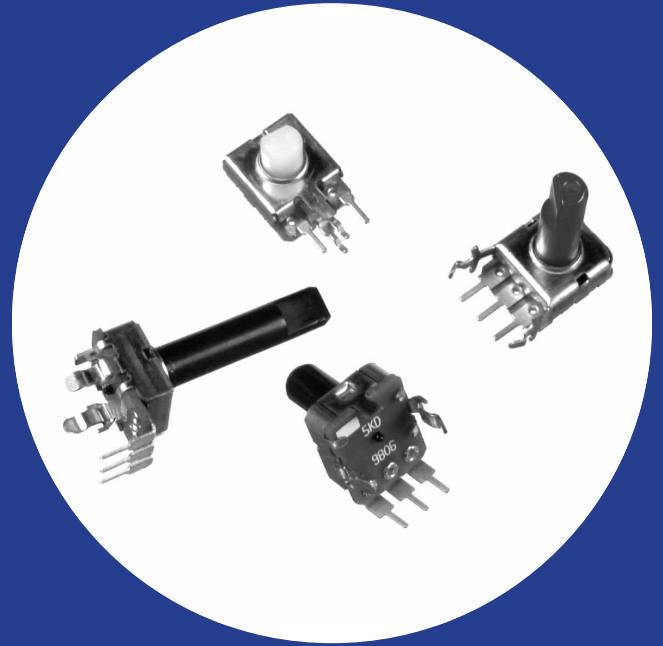


## Commercial 12mm Diameter Composition Variable Resistors

- 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:  $280^\circ$  (approximate)

### Rotational Torque

20 – 216 gcm

### Stop Strength

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

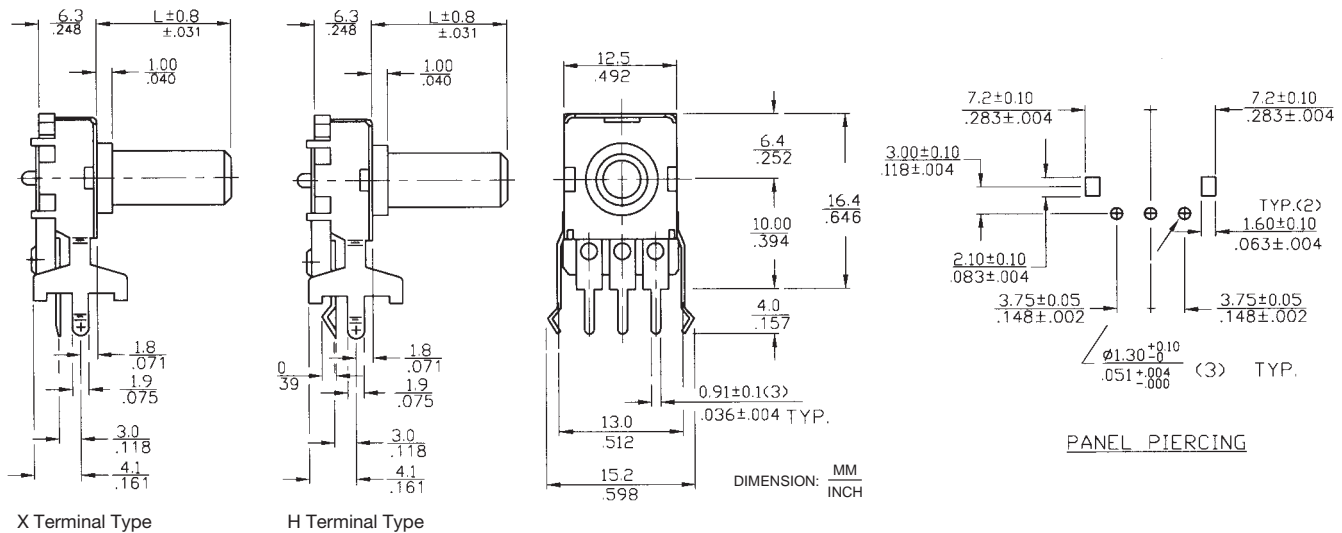
### Mounting Information

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

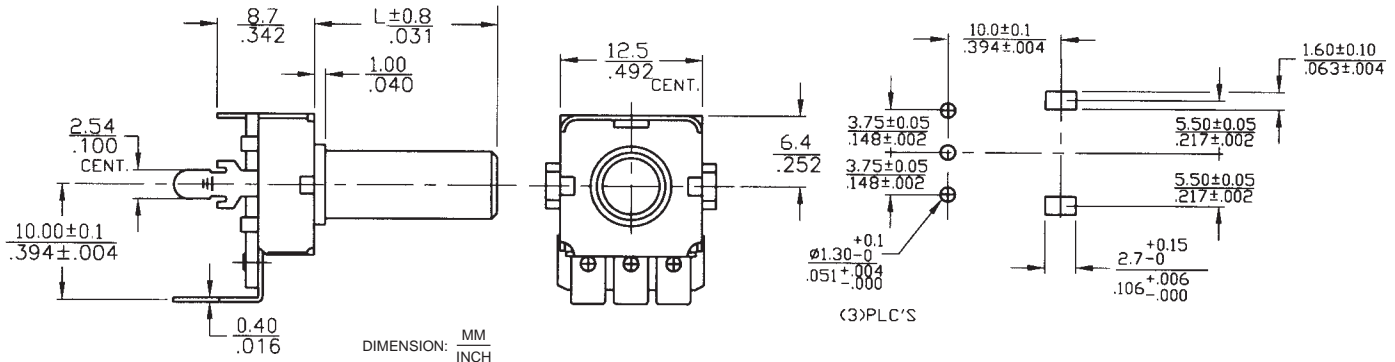
### Detent

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**      **252**      **B**      **2**      **N**

TERMINAL STYLE	
X	PC
U	PC FORMED TO REAR
H	HOOK

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

RESIST TOL	
A	±10%
B	±20%
C	±30%

DETECT	
N	NO DETENT
C	CENTER DETENT

SHAFTS AVAILABLE (ALL SHAFTS .236" [6MM] DIAMETER/EXCEPT E - DIAMETER IS .240" [6.1MM])			
LENGTH BEYOND			
COVER	INCH	COVER	MM
	TRIM		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

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

## 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>

**CTS COMPONENTS TAIWAN, LTD.** / 7, Central 6th Road (Chung Liu Road) / P.O. Box 26-20  
Kaohsiung Export Processing Zone / Kaohsiung, Taiwan, Rep. of China  
(07) 8216145 / FAX: (07) 8417642.8110040