

12mm Round, Single-Turn, Through-Hole Sealed Wirewound Trimmers



Features

- 12mm round, single-turn, through-hole, sealed wirewound trimmers
- Top and side adjust styles available
- Low equivalent noise resistance
- High setting stability
- Low temperature coefficient
- Long rotational life
- Meets UL 94V-0 flammability requirements
- Sealed to withstand wave soldering and immersion cleaning processes

Specifications

Electrical

Standard Resistance Range	10Ω to 20kΩ (standard 1, 2 & 5 sequence)
Resistance Tolerance	±10% standard
End Resistance	0.2% or 1Ω, whichever is greater
Resistance Taper	Linear
Peak Noise (C.R.V.)	0.5% or 2Ω, whichever is greater
Power Rating	0.5 watt at +70°C, 0 watt at +125°C
Temperature Coefficient	±50ppm/°C
Insulation Resistance	1,000MΩ minimum at 500VDC
Dielectric Strength	900VAC, 1 minute
Adjustment Travel	270° ± 10°

Mechanical

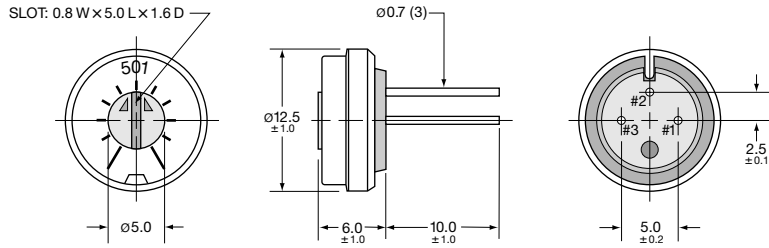
Mechanical Travel	300° ± 10°
Shaft Torque	30 to 300 gf·cm (0.42 to 4.16 oz·in)
Stop Strength	1 kgf·cm (13.86 oz·in) min.
Flammability of Plastic Materials	Meets UL 94V-0
Nominal Weight	1.5g (P); 2.4g (S, X)
Marking	Resistance code, date code, model type, terminal identification

Environmental

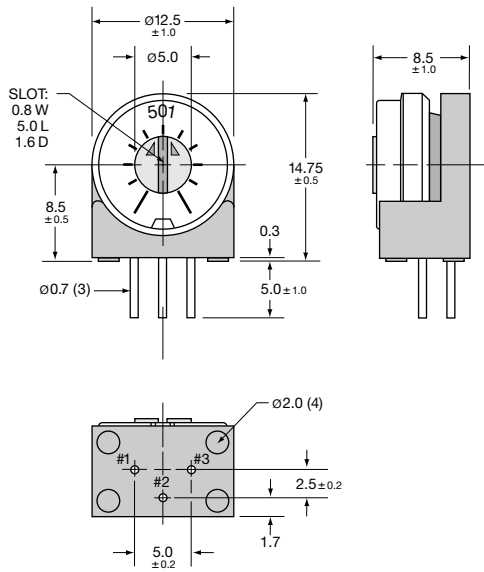
Temperature Range	-55°C to +125°C
Low Temperature Exposure	-55°C, 1 hours $\Delta T/R \leq \pm 1\% + 0.05\Omega$
High Temperature Exposure	+125°C, 250 hours $\Delta T/R \leq \pm 1\% + 0.05\Omega$
Load Life	+70°C, 0.5 watt, 1,000 hours $\Delta T/R \leq \pm 2\%$
Thermal Shock	-55°C, +125°C, 30 minutes each, 5 cycles $\Delta T/R \leq \pm 1\% + 0.05\Omega$
Humidity	+40°C, 90-95% RH, 0.5 watt, 500 hours $\Delta T/R \leq \pm 2\%$
Soldering Heat Resistance	350°C, 5 seconds $\Delta T/R \leq \pm 1\% + 0.05\Omega$
Seal Test	+85°C, hot water for 1 minute
Rotational Life	200 cycles without discontinuity $\Delta T/R \leq \pm 2\%$

$\Delta T/R$ = Total Resistance Change; S.S. = Setting Stability (voltage ratio)

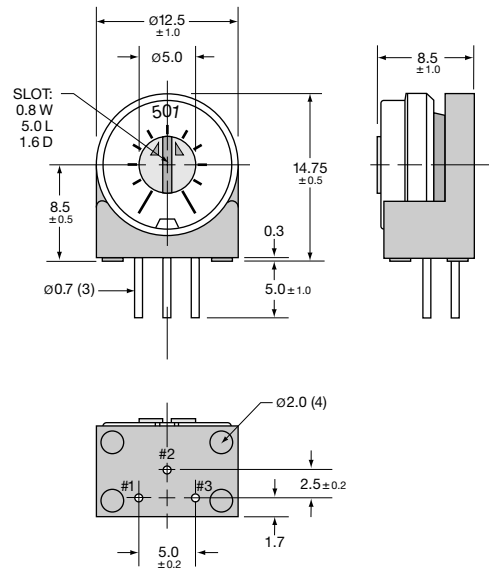
RA12P
P Terminal Style, Single-Slot, Top Adjust



RA12S
S Terminal Style, Single-Slot, Side Adjust



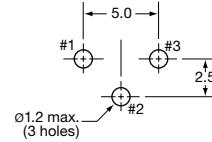
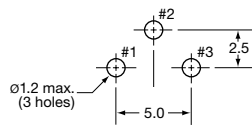
RA12X
X Terminal Style, Single-Slot, Side Adjust



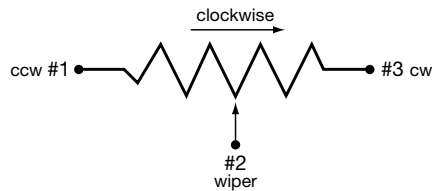
Recommended PCB Layouts

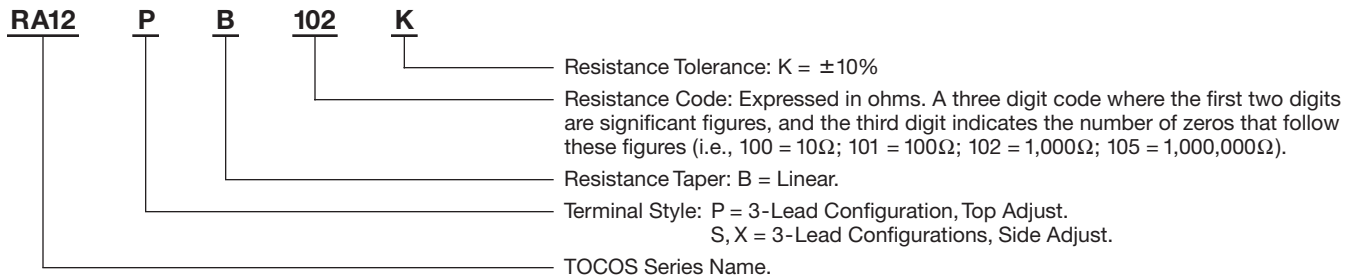
P & S Pin-Out

X Pin-Out



Electrical Schematic






Part Numbers

Nominal Resistance		Catalog No. Bulk	Resolution		Potentiometer Styles
Value (Ω)	Code		Ohms (Ω)	Percent (%)	

RA12P Through-Hole, P Terminal Style, Single-Slot, Top Adjust


Value (Ω)	Code	Catalog No. Bulk	Ohms (Ω)	Percent (%)
10	100	RA12P B 100 K	0.11	1.13
20	200	RA12P B 200 K	0.18	0.90
50	500	RA12P B 500 K	0.34	0.69
100	101	RA12P B 101 K	0.51	0.51
200	201	RA12P B 201 K	0.81	0.41
500	501	RA12P B 501 K	2.20	0.44
1,000	102	RA12P B 102 K	3.90	0.39
2,000	202	RA12P B 202 K	6.04	0.30
5,000	502	RA12P B 502 K	10.4	0.20
10,000	103	RA12P B 103 K	18.9	0.19
20,000	203	RA12P B 203 K	27.6	0.14



RA12P

RA12S Through-Hole, S Terminal Style, Single-Slot, Side Adjust


Value (Ω)	Code	Catalog No. Bulk	Ohms (Ω)	Percent (%)
10	100	RA12S B 100 K	0.11	1.13
20	200	RA12S B 200 K	0.18	0.90
50	500	RA12S B 500 K	0.34	0.69
100	101	RA12S B 101 K	0.51	0.51
200	201	RA12S B 201 K	0.81	0.41
500	501	RA12S B 501 K	2.20	0.44
1,000	102	RA12S B 102 K	3.90	0.39
2,000	202	RA12S B 202 K	6.04	0.30
5,000	502	RA12S B 502 K	10.4	0.20
10,000	103	RA12S B 103 K	18.9	0.19
20,000	203	RA12S B 203 K	27.6	0.14



RA12S

RA12X Through-Hole, X Terminal Style, Single-Slot, Side Adjust

Value (Ω)	Code	Catalog No. Bulk	Ohms (Ω)	Percent (%)
10	100	RA12X B 100 K	0.11	1.13
20	200	RA12X B 200 K	0.18	0.90
50	500	RA12X B 500 K	0.34	0.69
100	101	RA12X B 101 K	0.51	0.51
200	201	RA12X B 201 K	0.81	0.41
500	501	RA12X B 501 K	2.20	0.44
1,000	102	RA12X B 102 K	3.90	0.39
2,000	202	RA12X B 202 K	6.04	0.30
5,000	502	RA12X B 502 K	10.4	0.20
10,000	103	RA12X B 103 K	18.9	0.19
20,000	203	RA12X B 203 K	27.6	0.14



RA12X

Packaging

Standard: Bulk Packaging Quantity
 10 pieces per vinyl bag; 100 pieces per box.

Soldering and Cleaning Guidelines

For soldering, cleaning and other information, refer to Guidelines and Precautions for Using Potentiometers.