

MODEL 84

1/4" Square

Multiturn

Surface Mount

Cermet Trimming

Potentiometer



1

ELECTRICAL

| | |
|--|--|
| Standard Resistance Range, Ohms | 10 to 1Meg |
| Standard Resistance Tolerance | ±10% |
| Input Voltage, Maximum | 200 Vdc or rms not to exceed power rating |
| Slider Current, Maximum | 100mA or within rated power, whichever is less |
| Power Rating, Watts | 0.25 at 85°C derating to 0 at 150°C |
| End Resistance, Maximum | 2 Ohms |
| Actual Electrical Travel, Turns, Nominal | 12 |
| Dielectric Strength | 900 Vrms |
| Insulation Resistance, Minimum | 1,000 Megohms |
| Resolution | Essentially infinite |
| Contact Resistance Variation, Maximum | 1% or 1 Ohms, whichever is greater |

ENVIRONMENTAL

| | |
|----------------------------------|--|
| Seal | 85°C Fluorinert® (No Leaks) |
| Temperature Coefficient, Maximum | ±100ppm/°C (<100 Ohms = ±250ppm/°C) |
| Operating Temperature Range | -65°C to +150°C |
| Thermal Shock | 5 cycles, -65°C to +150°C (1% ΔRT, 1% ΔVR) |
| Moisture Resistance | Ten 24 hour cycles (1% ΔRT, IR 100 Megohms Min.) |
| Shock, 6ms Sawtooth | 100G's (1% ΔRT, 1% ΔVR) |
| Vibration | 20G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR) |
| High Temperature Exposure | 250 hours at 150°C (2% ΔRT, 2% ΔVR) |
| Rotational Life | 200 cycles (3% ΔRT) |
| Load Life at 0.5 Watts | 1,000 hours at 85°C (2% ΔRT) |
| Resistance to Solder Heat | 260°C for 10 sec. (1% ΔRT) |
| Temperature Exposure, Maximum | 215°C for 3 min. (1% ΔRT) |

MECHANICAL

| | |
|--------------------------|--------------------------|
| Mechanical Stops | Clutch action, both ends |
| Torque, Starting Maximum | 3 oz.-in. (0.021 N-m) |
| Weight, Nominal | .014 oz. (.40 grams) |

Fluorinert® is a registered trademark of 3M Company.
Specifications subject to change without notice.

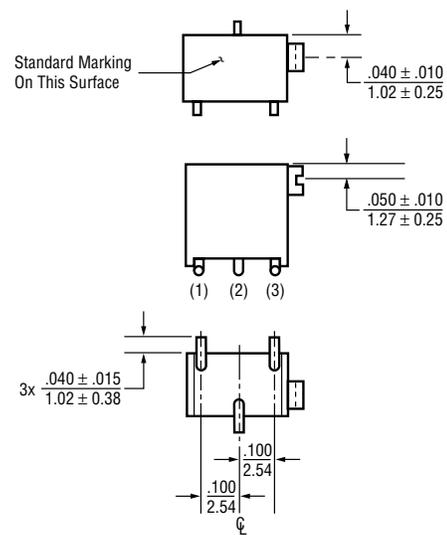
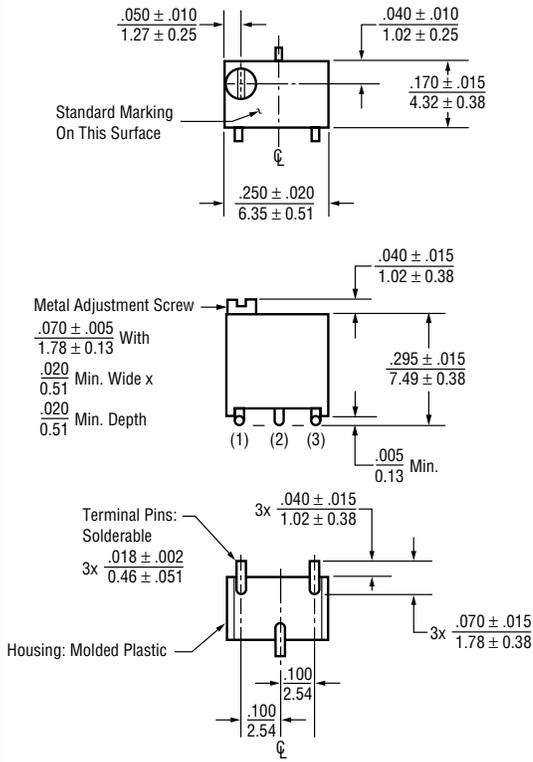


TOP ADJUSTMENT (Inch/mm)

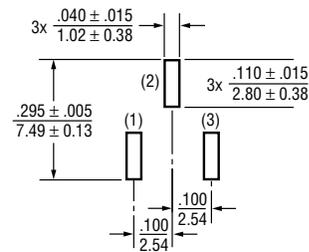
SIDE ADJUSTMENT (Inch/mm)

Model 84W

Model 84X



Recommended PCB Layout - Models 84W and 84X

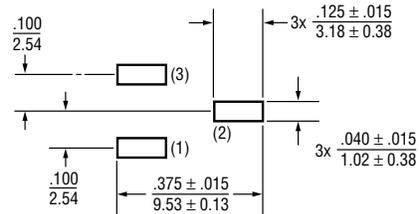
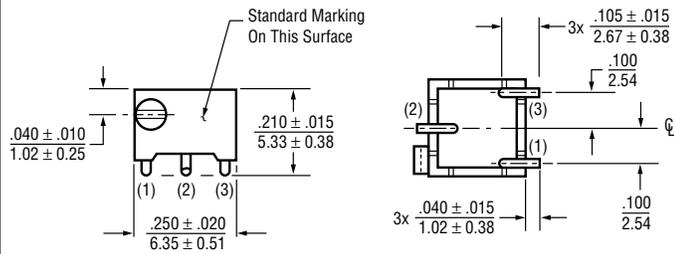


Note: Model 84W dimensions applicable to all models except as noted.

SIDE ADJUSTMENT (Inch/mm)

Model 84P

Recommend PCB Layout - Model 84P



STANDARD RESISTANCE VALUES, OHMS

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| | | | | | |
|----|-----|----|-----|------|------|
| 10 | 100 | 1K | 10K | 50K | 250K |
| 20 | 200 | 2K | 20K | 100K | 500K |
| 50 | 500 | 5K | 25K | 200K | 1Meg |

PACKAGING

Standard: Tubes

All units oriented with #1 pin to same side.

| | Pin Style | = | P | W/X |
|----------|-----------|---|----------------|------------------------------|
| Magazine | Width | = | 0.47"(11.93mm) | 0.37"(9.39mm) |
| | Height | = | 0.32"(8.13mm) | 0.47"(11.93mm) |
| | Length | = | 14.5"(368mm) | 14.5"(368mm) 16.5"(429mm) |
| | Capacity | = | 50 Units | 50 Units |

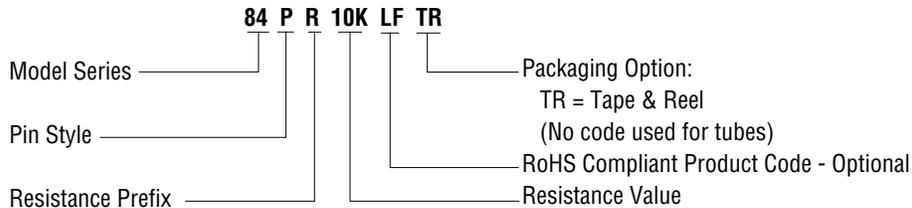
Option: Embossed Tape & Reel (84P & 84W only)

All units oriented with #1 pin to the right of the direction of feed.

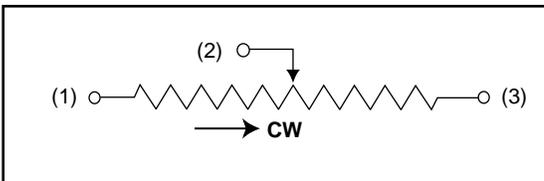
| | Pin Style | = | P | W/X |
|------|-----------|---|--------------|-------------|
| Tape | Width | = | 16 mm | 24mm |
| | Sprocket | = | 4 mm pitch | 4mm pitch |
| | Capacity | = | 500 Units | 400 Units |
| Reel | Diameter | = | 13" (330 mm) | 13" (330mm) |

ORDERING INFORMATION

Standard:



CIRCUIT DIAGRAM



NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:
Linear = ± .01 inches (25mm)
Angular = ± 2 degrees

