

MODEL 84**1/4" Square****Multiturn****Surface Mount****Cermet Trimming****Potentiometer**

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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)

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Specifications subject to change without notice.

TOP ADJUSTMENT (Inch/mm)[illegible]

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

SIDE ADJUSTMENT (Inch/mm)**SIDE ADJUSTMENT (Inch/mm)**

Model 84P

Standard Marking
On This Surface

Top View Dimensions:

- Overall Width: $.250 \pm .020$ (6.35 \pm 0.51)
- Overall Height: $.210 \pm .015$ (5.33 \pm 0.38)
- Top Hole Diameter: $.040 \pm .010$ (1.02 \pm 0.25)
- Pin (1) Spacing: $.250 \pm .020$ (6.35 \pm 0.51)
- Pin (2) Spacing: $.250 \pm .020$ (6.35 \pm 0.51)
- Pin (3) Spacing: $.250 \pm .020$ (6.35 \pm 0.51)

Side View Dimensions:

- Pin (1) Length: $.105 \pm .015$ (2.67 \pm 0.38)
- Pin (2) Length: $.100$ (2.54)
- Pin (3) Length: $.100$ (2.54)
- Pin (1) Width: $.040 \pm .015$ (1.02 \pm 0.38)
- Pin (2) Width: $.100$ (2.54)
- Pin (3) Width: $.100$ (2.54)

Recommend PCB Layout - Model 84P

PCB Layout Dimensions:

- Pin (1) Spacing: $.375 \pm .015$ (9.53 \pm 0.13)
- Pin (2) Spacing: $.125 \pm .015$ (3.18 \pm 0.38)
- Pin (3) Spacing: $.125 \pm .015$ (3.18 \pm 0.38)
- Pin (1) Width: $.100$ (2.54)
- Pin (2) Width: $.100$ (2.54)
- Pin (3) Width: $.100$ (2.54)

Recommend PCB Layout - Model 84P

The diagram shows the recommended PCB layout for Model 84P. It includes dimensions and tolerances for components (1), (2), and (3). The layout is defined by the following dimensions:

- Distance from the left edge to the center of component (1): $.100 \pm .015$ (2.54)
- Distance from the left edge to the center of component (2): $.375 \pm .015$ (9.53 \pm 0.13)
- Distance from the left edge to the center of component (3): $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (1) to the center of component (2): $.375 \pm .015$ (9.53 \pm 0.13)
- Distance from the center of component (2) to the right edge: $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (3) to the right edge: $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (1) to the center of component (3): $.100 \pm .015$ (2.54)
- Distance from the center of component (2) to the center of component (3): $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (1) to the center of component (2): $.375 \pm .015$ (9.53 \pm 0.13)
- Distance from the center of component (2) to the center of component (3): $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (3) to the right edge: $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (1) to the right edge: $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (2) to the right edge: $.125 \pm .015$ (3.18 \pm 0.38)
- Distance from the center of component (3) to the right edge: $.125 \pm .015$ (3.18 \pm 0.38)

STANDARD RESISTANCE VALUES, OHMS

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:

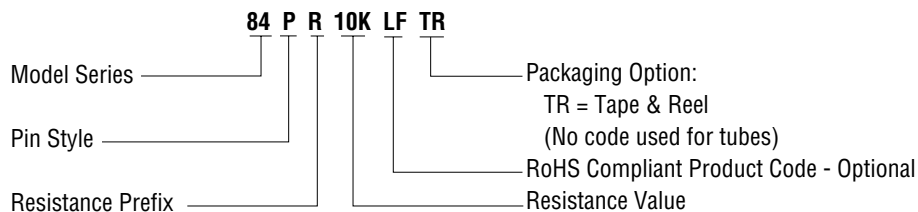
Embossed Tape & Reel (84P & 84W only)

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

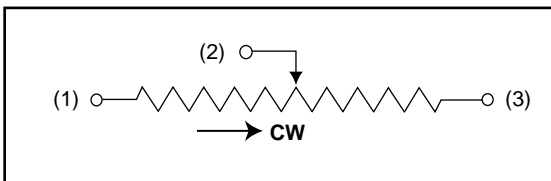
	Pin Style	=	P	W/X
Tape	Width	=	16 mm	24mm
	Sprocket	=	4 mm pitch	4mm pitch
	Capacity	=	500 Units	400 Units
Reel	Diameter	=	13" (330 mm)	13" (330mm)

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 = $\pm .01$ inches (.25mm)
Angular = ± 2 degrees

