

MODEL 89

3/4" Rectangular

Multiturn

Cermet Trimming

Potentiometer

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ELECTRICAL

Standard Resistance Range, Ohms	10 to 2Meg
Standard Resistance Tolerance	±10% (<100 Ohms = ±20%)
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	0.75 at 85°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Turns, Nominal	20
Dielectric Strength	1,000 Vrms
Insulation Resistance, Minimum	1,000 Megohms
Resolution	Essentially infinite
Contact Resistance Variation, Maximum	1% or 1 Ohm, whichever is greater

ENVIRONMENTAL

Seal	85°C Fluorinert® (No Leaks)
Temperature Coefficient, Maximum	±100ppm/°C
Operating Temperature Range	-55°C to +125°C
Thermal Shock	5 cycles, -55°C to +125°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 125°C (2% ΔRT, 2% ΔVR)
Rotational Life	200 cycles (3% ΔRT)
Load Life at 0.75 Watts	1,000 hours at 70°C (2% ΔRT)
Resistance to Solder Heat	260°C for 10 sec. (1% ΔRT)

MECHANICAL

Mechanical Stops	Clutch Action, both ends
Torque, Starting Maximum	5 oz.-in. (0.035 N-m)
Weight, Nominal	.05 oz. (1.4 grams)

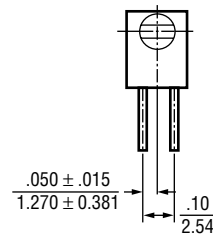
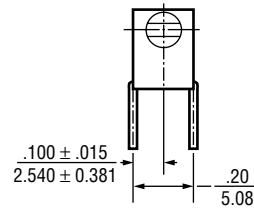
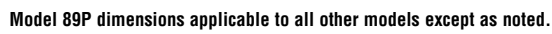
Fluorinert® is a registered trademark of 3M Company.
Specifications subject to change without notice.



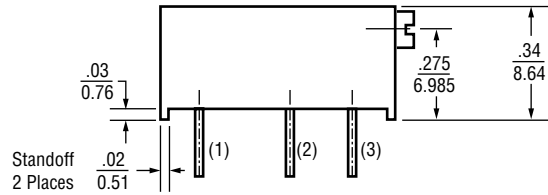
1-77

Model 89

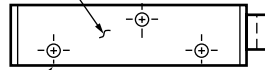
Model 89P and 90P



Model 89PH



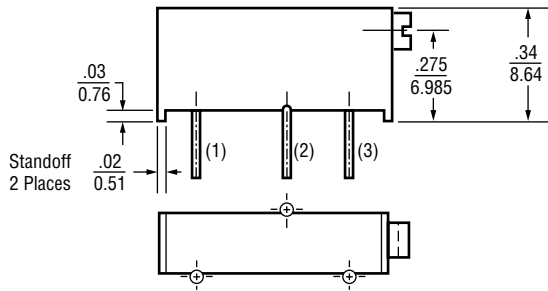
Circuit Diagram Marked
On This Surface



Housing:
Molded Plastic
(All Models)

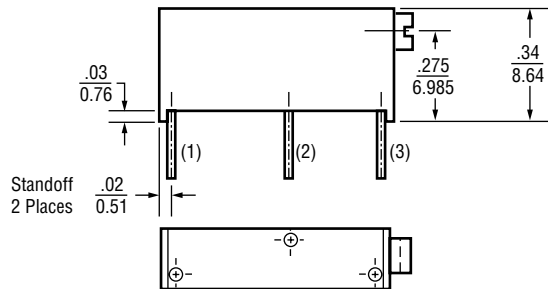
Pin Dimensions Same For 89P And 89PH

Model 89WH



Pin Dimensions Same For 89W And 89WH

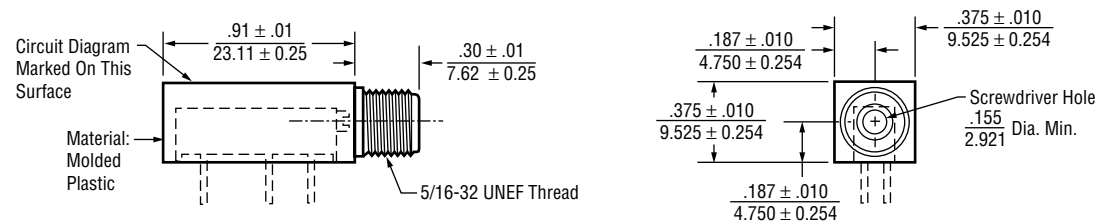
Model 89XH



Pin Dimensions Same For 89X And 89XH

PANEL MOUNT ADAPTER (Inch/mm)

Model 89B



STANDARD RESISTANCE VALUES, OHMS

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

PACKAGING

Standard: Boxes

Capacity = 100 Units (89P)
50 Units (All other styles)

Option: Tubes (Models 89P, 89PH, 89X, 89XH and 90P only.)
All units oriented with #1 pin to same side.

Magazine	Width	=	0.28"
	Height	=	0.65"
	Length	=	21.5"
	Capacity	=	25 Units

ORDERING INFORMATION

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Standard:

Model Series **89** Pin Style **P** Resistance Prefix **R** Resistance Value **10K** RoHS Compliant Product Code - Optional **LF**

(Use Model 90 to order with transparent housing)

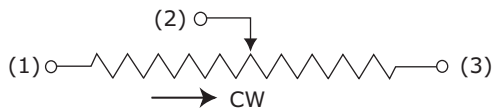
Option:

Pin Style **89 P R 10K LF TB** Packaging Option: TB = Tubes (Models 89P, 89PH, 89X, 89H, 90P Only.)

Option:

Pin Style **89 P B R 10K LF** Panel Mount Adapter (Use 89B to order Adapter without Trimmer)

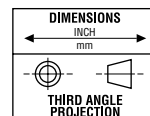
CIRCUIT DIAGRAM



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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TT electronics:

[89XR250KLF](#) [89BLF](#)

TT Electronics:

[89PR100KLF](#) [89PR100LF](#) [89PR1KLF](#) [89PR20KLF](#) [89PR2KLF](#) [89PR500LF](#) [89PHR2K](#) [89WR200K](#) [89WR250K](#)
[89XR2K](#) [89XR5K](#) [89PHR10KLF](#) [89PHR1KLF](#) [89PHR200LF](#) [89PHR200KLF](#) [89PHR500KLF](#) [89PHR50KLF](#)
[89PR100LFTB](#) [89PR1MEGLF](#) [89PR200LFTB](#) [89PR2KLFTB](#) [89PR5KLFTB](#) [89WHR1KLF](#) [89WHR500KLF](#)
[89WR10KLF](#) [89WR1KLF](#) [89WR200LF](#) [89WR250KLF](#) [89WR25KLF](#) [89WR2KLF](#) [89WR500KLF](#) [89WR50KLF](#)
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[89XR500LF](#) [89XR50KLF](#) [89XR5KLF](#) [89PR2MLF](#) [89PR20LF](#) [89PR200LF](#) [89PR50KLF](#) [89PR50LF](#) [89PR25KLF](#)
[89PR500KLF](#) [89PR5KLF](#) [89PR10KLF](#) [89PR250KLF](#) [89PR200KLF](#) [89PR10LF](#) [89PR1MLF](#) [89PR75KLF](#)
[89XR1KLFTB](#) [89XR1KLF](#) [89WR10LFTB](#) [89PHR5KLFTB](#) [89WR2MEGLFTB](#) [90PR50KLF](#) [89XR20LF](#)
[89PHR2KLFTB](#) [89PHR500KLFTB](#) [89XR200KLFTB](#) [90PR250KLFTB](#) [89PHR50KLFTB](#) [89WHR5KLF](#) [89XR2MEGLF](#)
[89XR1MEGLF](#) [90PR2KLF](#) [89WR20LFTB](#) [89PHR10LF](#) [90PR2KLFTB](#) [89PHR10KLFTB](#) [89XR20KLFTB](#)
[89WR100LFTB](#) [89WR1MEGLF](#) [89XR50LF](#) [89PR1KLFTB](#) [89WR200KLF](#) [89PR25KLFTB](#) [90PR500KLFTB](#)
[90PR100LF](#) [89XR25KLFTB](#) [90PR10LFTB](#) [90PR1MEGLF](#) [89WR500LFTB](#) [90PR500KLF](#) [89WR500LF](#)
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[90PR500LFTB](#)