

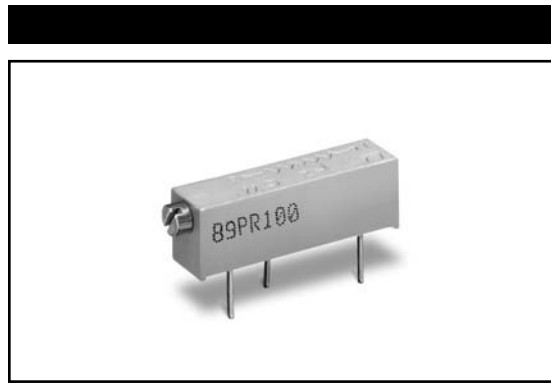
# MODEL 89

## 3/4" Rectangular

## Multiturn

## Cermet Trimming

## Potentiometer



1

### 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.

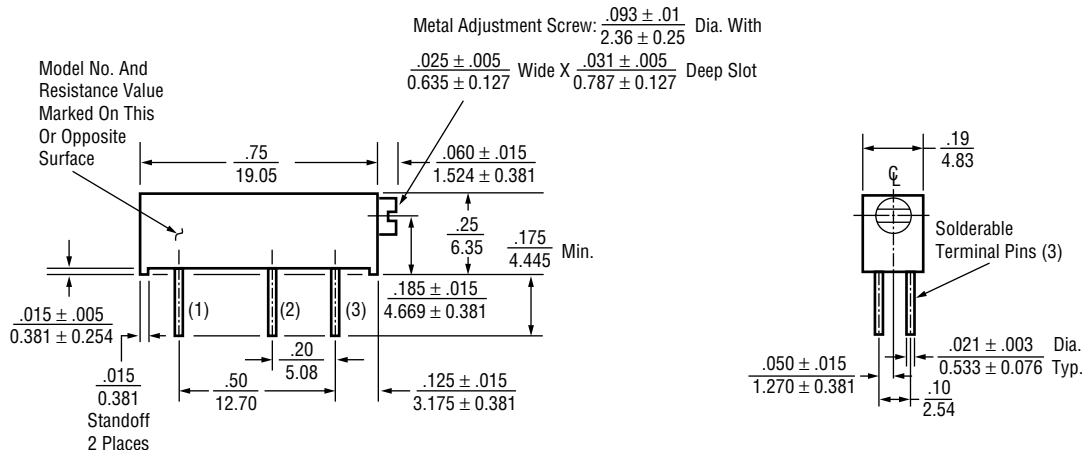


1-77

Model 89

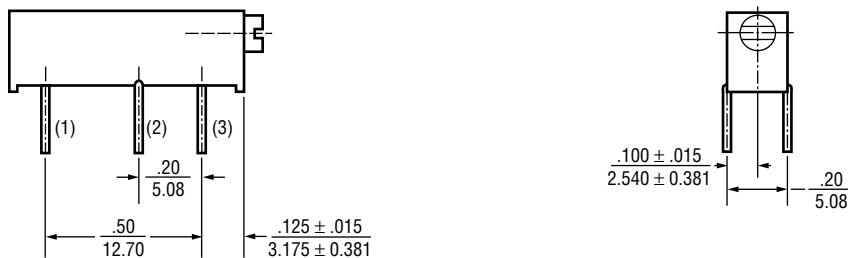
# LOW PROFILE (Inch/mm)

## Model 89P and 90P



Model 89P dimensions applicable to all other models except as noted.

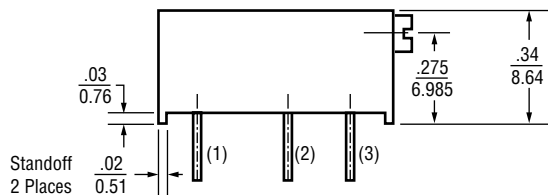
## Model 89W



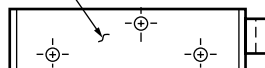
## Model 89X



**Model 89PH**



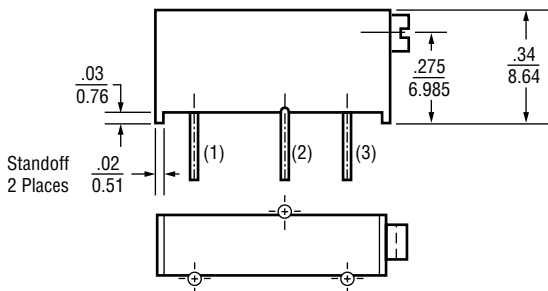
Circuit Diagram Marked  
On This Surface



Housing:  
Molded Plastic  
(All Models)

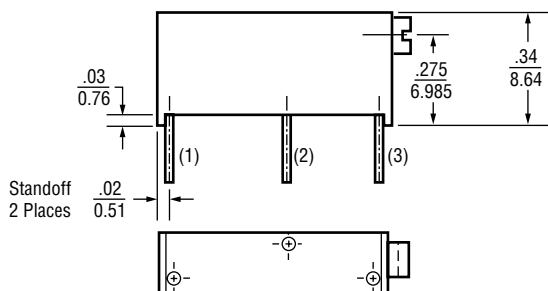
Pin Dimensions Same For 89P And 89PH

**Model 89WH**



Pin Dimensions Same For 89W And 89WH

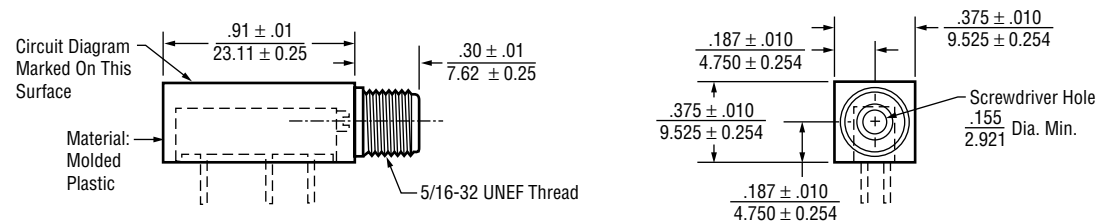
**Model 89XH**



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

1

### 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)

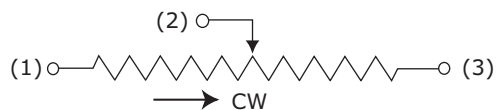
### Option:

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)

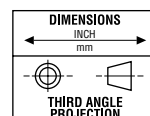
## CIRCUIT DIAGRAM



## 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 =  $\pm 2$  degrees



# Mouser Electronics

Authorized Distributor

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[89PHR2K](#) [89WR200K](#) [89WR250K](#) [89XR2K](#) [89XR5K](#) [89XR250K](#)