

# MODEL 93

## 1/2" Diameter

## Single Turn

## Cermet Trimming

## Potentiometer



### ELECTRICAL

Standard Resistance Range, Ohms	20 to 2Meg
Standard Resistance Tolerance	$\pm 10\%$ (<100 Ohms = $\pm 20\%$ )
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	1.0 at 70°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Nominal	270°
Dielectric Strength	900 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	$\pm 100\text{ppm}/^\circ\text{C}$
Operating Temperature Range	-55°C to +125°C
Thermal Shock	5 cycles, -55°C to +125°C (1% $\Delta\text{RT}$ , 1% $\Delta\text{VR}$ )
Moisture Resistance	Ten 24 hour cycles (1% $\Delta\text{RT}$ , IR 100 Megohms Min.)
Shock, 6ms Sawtooth	100G's (1% $\Delta\text{RT}$ , 1% $\Delta\text{VR}$ )
Vibration	20G's, 10 to 2,000 Hz (1% $\Delta\text{RT}$ , 1% $\Delta\text{VR}$ )
High Temperature Exposure	250 hours at 125°C (2% $\Delta\text{RT}$ , 2% $\Delta\text{VR}$ )
Rotational Life	200 cycles (3% $\Delta\text{RT}$ )
Load Life at 0.5 Watts	1,000 hours at 70°C (2% $\Delta\text{RT}$ )
Resistance to Solder Heat	260°C for 10 sec. (1% $\Delta\text{RT}$ )

### MECHANICAL

Mechanical Stops	24 oz.-in.
Stop Strength	1.5 lb.-in. (0.169 N-m)
Torque, Starting Maximum	5 oz.-in. (0.035 N-m)
Weight, Nominal	.052 oz. (1.5 grams)

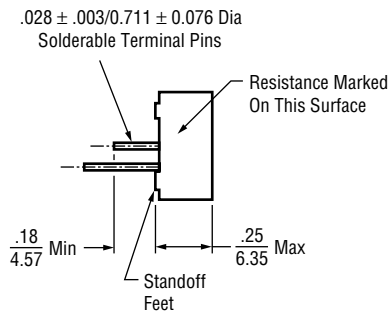
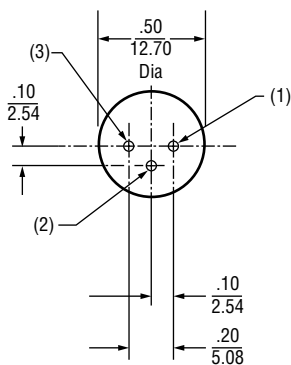
Fluorinert® is a registered trademark of 3M Company.  
Specifications subject to change without notice.

## TOP ADJUSTMENT

Slot  $.250 \pm .005 / 6.350 \pm 0.127$  Long  
 $X .030 \begin{smallmatrix} +.000 \\ -.005 \end{smallmatrix} / 0.762 \begin{smallmatrix} +0.000 \\ -.0127 \end{smallmatrix}$  Wide  
 $X .035 \begin{smallmatrix} +.000 \\ -.005 \end{smallmatrix} / 0.889 \begin{smallmatrix} +0.000 \\ -.0127 \end{smallmatrix}$  Deep



Arrow And Graduations  
In Contrasting Color



## STANDARD RESISTANCE VALUES, OHMS

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

PACKAGING

Standard: Boxes  
Capacity = 50 units

ORDERING INFORMATION

Standard:

93

P

R

10K

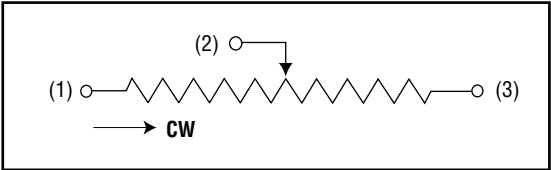
Model Series

Pin Style

Resistance Value

Resistance Prefix

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

