

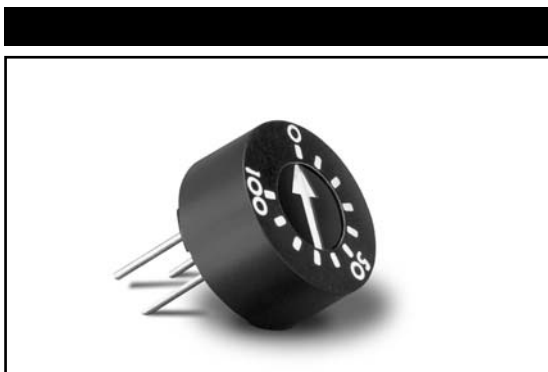
# MODEL 93

## 1/2" Diameter

## Single Turn

## Cermet Trimming

## Potentiometer



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### 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 1.0 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.

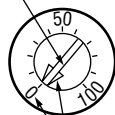


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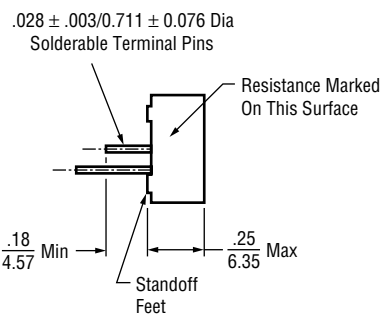
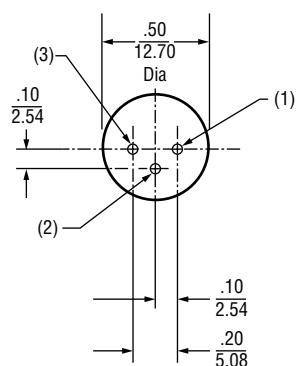
Model 93

# TOP ADJUSTMENT (Inch/mm)

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

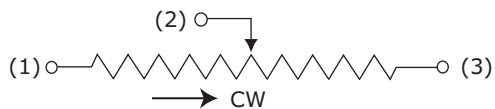
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## ORDERING INFORMATION

Standard:

Model Series ——— **93** **P** **R** **10K** **LF** ——— RoHS Compliant Product Code - Optional  
Pin Style ——— Resistance Value  
Resistance Prefix

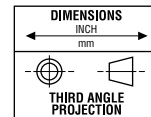
## CIRCUIT DIAGRAM



## 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



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