## MODEL 44

4mm Square Multiturn

## Surface Mount

Cermet Trimming
Potentiometer

## ELECTRICAL



| Standard Resistance Range, Ohms | 10 to 2 Meg |
| :--- | ---: |
| Standard Resistance Tolerance | $\pm 10 \%(<100$ Ohms $= \pm 20 \%)$ |
| Input Voltage, Maximum | 300 Vdc or rms not to exceed power rating |
| Slider Current, Maximum | 100 mA or within rated power, whichever is less |
| Power Rating, Watts | 0.25 at $85^{\circ} \mathrm{C}$ derating to 0 at $150^{\circ} \mathrm{C}$ |
| End Resistance, Maximum | $1 \%$ or 20 hms, whichever is greater |
| Actual Electrical Travel, Turns, Nominal | 9 |
| Dielectric Strength | 600 Vrms |
| Insulation Resistance, Minimum | 1,000 Megohms |
| Resolution | Essentially infinite |
| Contact Resistance Variation, Maximum | $1 \%$ or 3 Ohms, whichever is greater |

## ENVIRONMENTAL

| Seal | $85^{\circ} \mathrm{C}$ Fluorinert® ${ }^{\text {® }}$ (No Leaks) |
| :---: | :---: |
| Temperature Coefficient, Maximum | $\pm 100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}\left(<100 \mathrm{Ohms}= \pm 250 \mathrm{ppm} /{ }^{\circ} \mathrm{C}\right)$ |
| Operating Temperature Range | $-65^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$ |
| Thermal Shock | 5 cycles, $-65^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}(2 \% \Delta \mathrm{RT}, 1 \% \Delta \mathrm{VR})$ |
| Moisture Resistance | Ten 24 hour cycles ( $2 \% \Delta \mathrm{RT}$, IR 10 Megohms Min.) |
| Shock, 6ms Sawtooth | 100G's (1\% $\Delta \mathrm{RT}, 1 \% \Delta \mathrm{VR})$ |
| Vibration | 20G's, 10 to 2,000 Hz (1\% $\Delta \mathrm{RT}$, 1\% 4 VR ) |
| Rotational Life | 200 cycles (3\% 4 RT, 1\% CRV) |
| Load Life at 0.25 Watts | 1,000 hours at $85^{\circ} \mathrm{C}(2 \% \Delta \mathrm{RT}, 1 \% \mathrm{CRV})$ |
| Resistance to Solder Heat | $260^{\circ} \mathrm{C}$ for 10 sec . ( $1 \% \Delta \mathrm{RT}$ ) |
| Temperature Exposure, Maximum | $215^{\circ} \mathrm{C}$ for $3 \mathrm{~min} .(1 \% \Delta \mathrm{RT}$ ) |
| Solderability | Per MIL-STD-202, Method 208 |

## MECHANICAL

| Mechanical Stops | Clutch action, both ends |
| :--- | ---: |
| Torque, Starting Maximum | 3 oz.-in. ( $0.021 \mathrm{~N}-\mathrm{m}$ ) |
| Weight, Nominal | .01 oz. $(0.3$ grams $)$ |

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SOLDER PAD LAYOUT (Inch/mm)


SIDE ADJUSTMENT (Inch/mm)
Model 44J


Model 44G


## Standard resistance values, ohms

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

## FEATURES AND BENEFITS

- Space saving SMD design for the most compact board designs
- Sealed to withstand aggressive water wash
- Long life - set and forget construction
- BI quality and reliability
- Available in top and side adjustment versions, J-Hook or gull wing termination


## PACKAGING

Standard: Embossed Tape \& Reel
All units oriented with \#1 pin to the right of the direction of feed.


Option: Anti-Static Tubes
All units oriented with \#1 pin to same side.
Magazine Capacity $=100$ Units

## ORDERING INFORMATION



* Packaging option must be specified.


## CIRCUIT DIAGRAM



## NOTES

Metric equivalents, based on 1 inch $=25.4 \mathrm{~mm}$ 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 $= \pm .012$ inches $(.30 \mathrm{~mm})$ Angular $= \pm 2$ degrees

