Model 44

4mm Square Multiturn Surface Mount Cermet Trimming Potentiometer



FEATURES AND BENEFITS

- Space saving SMD package 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 and J-Hook or gull wing termination

ELECTRICAL

| Standard Resistance Range | 10 Ohms to 2 Megohms |
|-------------------------------|--|
| | · · · · · · · · · · · · · · · · · · · |
| Standard Resistance Tolerance | $\pm 10\%$ (<100 Ohms = $\pm 20\%$) |
| Input Voltage | 300 Vdc Max. or rms not to exceed power rating |
| Slider Current | 100 mA Max. or within rated power, whichever is less |
| Power Rating | 0.25 Watts at 85°C derating to 0 at 150°C |
| End Resistance | 1% or 2 Ohms Max., whichever is greater |
| Actual Electrical Travel | 9 turns nominal |
| Dielectric Strength | 600 Vrms |
| Insulation Resistance | 1,000 Megohms Min. |
| Resolution | Essentially infinite |
| Contact Resistance Variation | 1% or 3 Ohms Max., whichever is greater |

ENVIRONMENTAL

| Seal | 85°C Fluorinert® (No Leaks) |
|-----------------------------|--|
| Temperature Coefficient | $\pm 100 \text{ ppm/°C } (<100 \text{ Ohms} = \pm 250 \text{ ppm/°C})$ |
| Operating Temperature Range | -65°C to +150°C |
| Thermal Shock | Five cycles -65°C to +150°C (2% ΔRT, 1% ΔVR) |
| Moisture Resistance | Ten 24 hour cycles (2% ΔRT, IR 10 Megohms Min.) |
| Shock | 6 ms sawtooth, 100 G's (1% ΔRT, 1% ΔVR) |
| Vibration | 20 G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR) |
| Rotational Life | 200 cycles (3% ΔRT, 1% CRV) |
| Load Life | 1,000 hours at 85°C & 0.25 Watts (2% ΔRT, 1% CRV) |
| Resistance to Solder Heat | 260°C for 10 sec. (1% ΔRT) |
| Temperature Exposure | 215°C for 3 min. Max. (1% ΔRT) |
| Solderability | Per MIL-STD-202, Method 208 |

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

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Phone: 714 447 2345 Website: www.bitechnologies.com

May 19, 2010



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MECHANICAL

| Mechanical Stops | Clutch action, both ends |
|------------------|------------------------------|
| Torque, Starting | 3 ozin. Max. (0.021 N-m) |
| Weight | 0.01 oz. nominal (0.3 grams) |

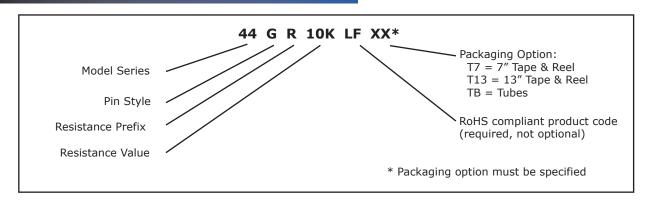
PACKAGING

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

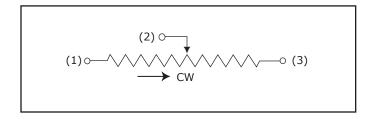
| | | 13" Reel | | 7" Reel | |
|------|------------|----------------|-------------|-------------|------------|
| | Pin Style | G & J | w | G&J | w |
| Таре | Width = | 12 mm | 16 mm | 12 mm | 16 mm |
| | Sprocket = | 4 mm pitch | 4 mm pitch | 4 mm pitch | 4 mm pitch |
| | Capacity = | 1,000 units | 1,000 units | 500 units | 250 units |
| Reel | Diameter = | 13" (330.2 mm) | | 7" (178 mm) | |

Option: Anti-static tubes. All units oriented with #1 pin to same side. Tube capacity = 100 units.

ORDERING INFORMATION



CIRCUIT DIAGRAM



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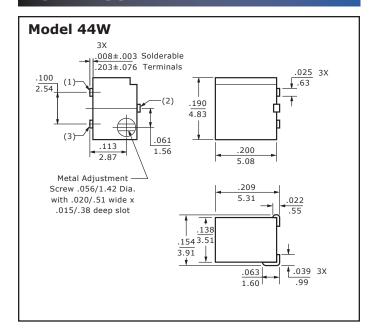
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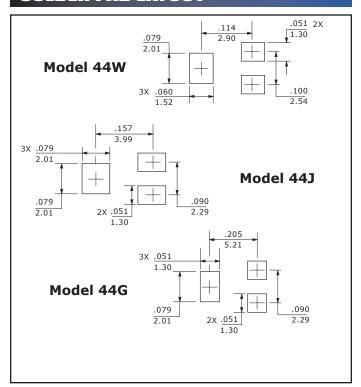
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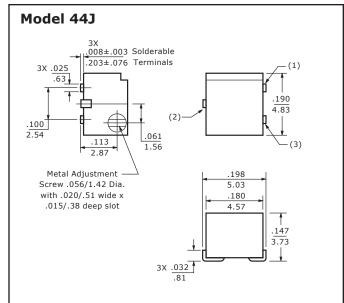
TOP ADJUSTMENT



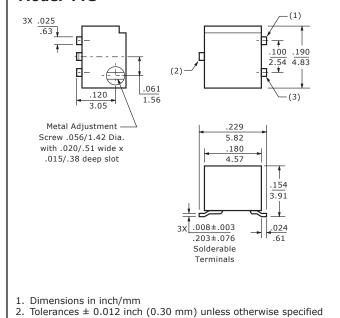
SOLDER PAD LAYOUT



SIDE ADJUSTMENT



Model 44G



STANDARD RESISTANCE VALUES

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

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