## Model 44

# **Cermet Trimming Potentiometer**



#### **Features:**

- 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



### **Applications:**

#### Consumer electronics

- Any application requiring adjustability or calibration
- Medical

#### **Electrical**

Standard resistance range	10 Ohms to 2 Megohms			
Standard resistance tolerance	±10% (<100 Ohms = ±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 minimum			
Resolution	Essentially infinite			
Contact resistance variation	1% or 3 Ohm max., whichever is greater			

#### **Environmental**

Seal	85°C Fluorinert® (No Leaks)		
Temperature coefficient	±100 ppm/°C (<100 Ohms = ±250 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 saw-tooth, 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. maximum (1% ΔRT)		
Solderability	Per MIL-STD-202, method 208		

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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)

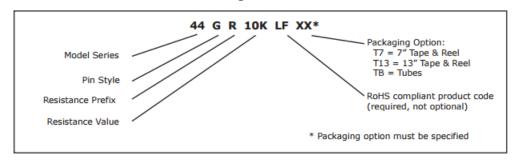
### **Packaging**

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

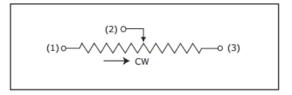
	13" Reel			7" Reel		
	Pin Style	G & J	$\mathbf{W}$	G & J	$\mathbf{W}$	
Tape	Width =	12 mm	16 mm	12 mm	16 mm	
	Sprocket =	4 mm pitch	4 mm pitch	4 mm pitch	4 mm pitch	
	Capacity =	1,000 units	1,000 units	500 units	250 units	
Reel	Diameter =	13" (330.2 mm)		7" (178 mm)		

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

### **Ordering Information**



### **Circuit Diagram**

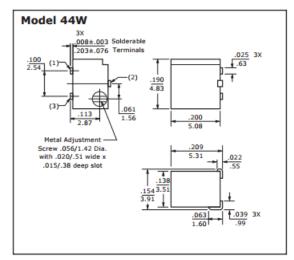


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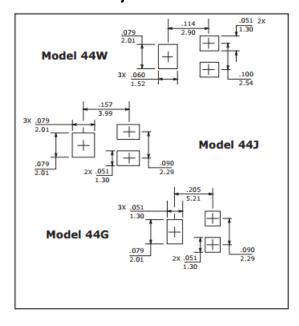
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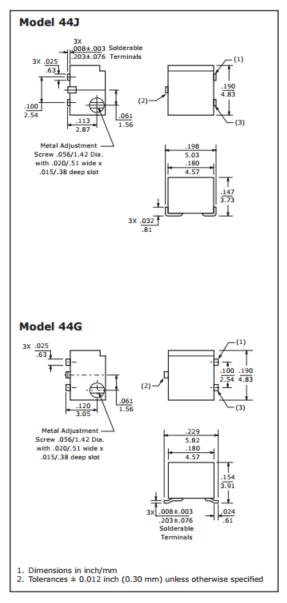
### **Top Adjustment**



### **Solder Pad Layout**



### **Side Adjustment**



#### **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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