

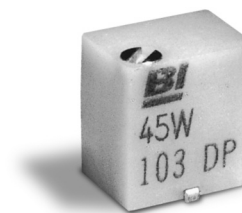
Model 45

4mm Square

High Resolution - 15 Turn

Surface Mount

Cermet Trimming Potentiometer



FEATURES AND BENEFITS

- High resolution
- 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, J-Hook or gull wing termination, and optional extended shaft

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	15 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	±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 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.*

**RoHS 2
compliant**

BI Technologies Corporation
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Phone: 714 447 2345 Website: www.bitechnologies.com
September 5, 2013



Model 45

MECHANICAL

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

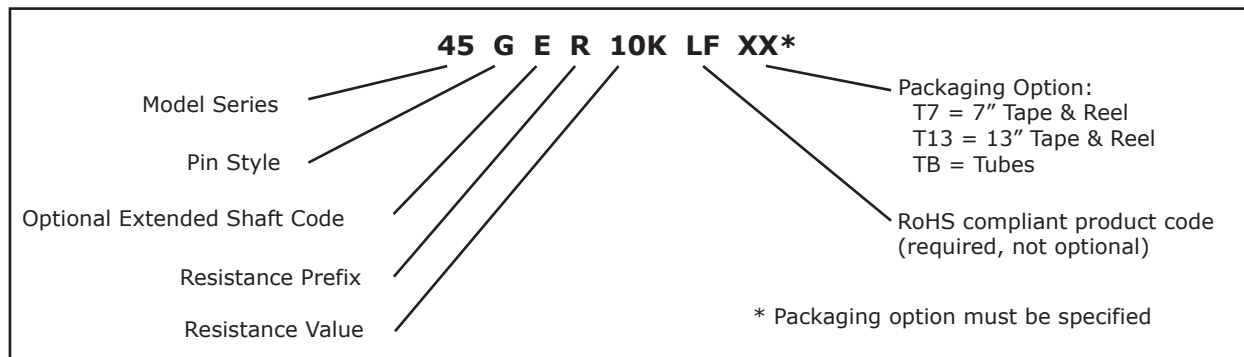
PACKAGING

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

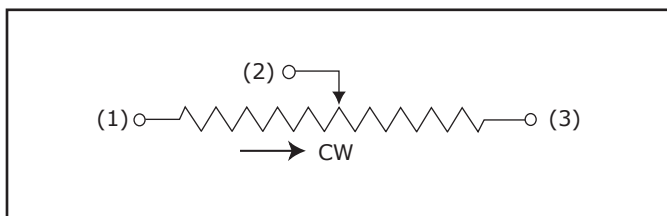
13" Reel				7" Reel	
	Pin Style	G & J	W	G & J	W
Tape	Width =	12 mm	16 mm	12 mm	16 mm
	Sprocket =	4 mm pitch	4 mm pitch	4 mm pitch	4 mm pitch
	Capacity =	1,000 units	1,000 units	500 units	250 units
Reel	Diameter =	13" (330.2 mm)		7" (178 mm)	

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

ORDERING INFORMATION



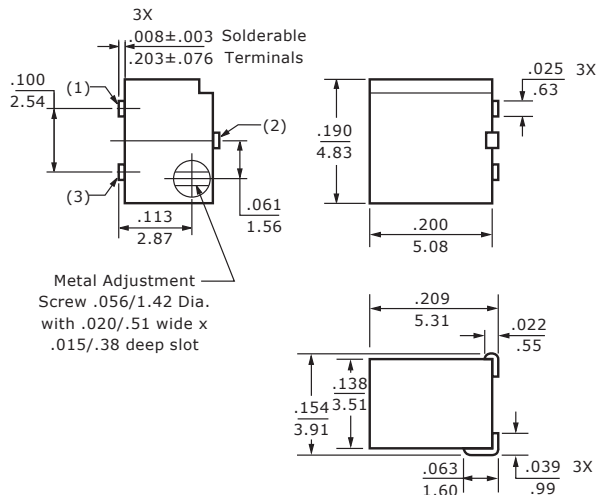
CIRCUIT DIAGRAM



Model 45

TOP ADJUSTMENT

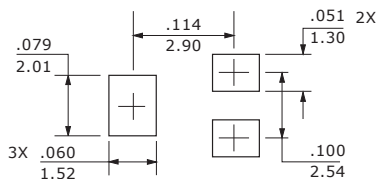
Model 45W



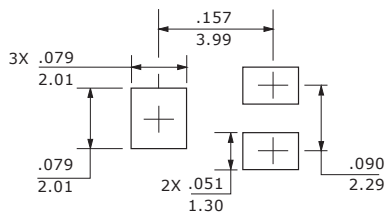
1. Dimensions in inch/mm
2. Tolerances ± 0.012 inch (0.30 mm) unless otherwise specified

SOLDER PAD LAYOUT

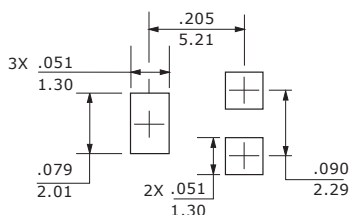
Model 45W



Model 45J

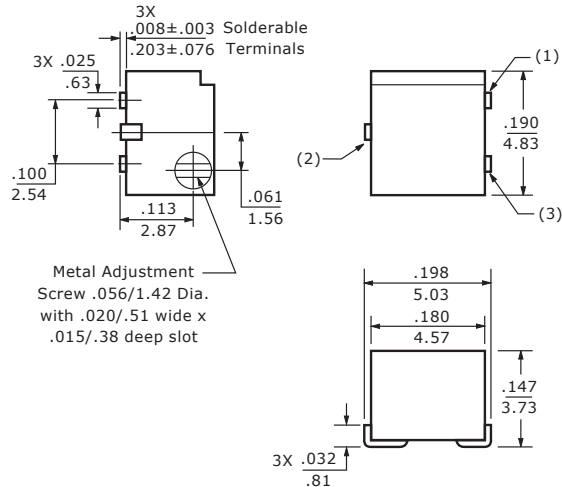


Model 45G

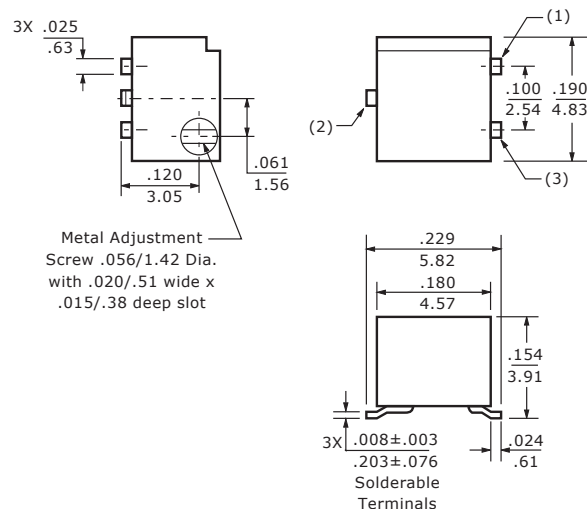


SIDE ADJUSTMENT

Model 45J

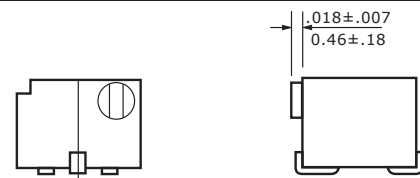


Model 45G



EXTENDED SHAFT OPTION

Available for all model 45 pin styles: 45G, 45J, and 45W



Style 45JE shown.

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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