

# Multi-Turn Trimmer

## 64 Series



### Features:

- 1/4" square
- Multi-turn
- Cermet

### Description:

We offer a wide variety of trimming potentiometers in top and side adjust, through hole, and SMD packaging. Our trimming potentiometers are sealed to be compatible with aqueous PCB cleaning process. The cermet element printing technology offers high-reliability and long life.

The multi-turn trimmers from the BI Technologies brand are sealed to withstand aggressive water wash and have a very long life. These trimmers offer unmatched quality and reliability and feature package options that create efficient space saving solutions.

### Applications:

- Any application requiring adjustability or calibration
- Medical
- Consumer electronics
- Air conditioners
- Food processors
- Smoke detectors
- Dishwaters
- Computer monitors

### ELECTRICAL

Standard Resistance Range, Ohms	10 to 1Meg
Standard Resistance Tolerance	±10%
Input Voltage, Maximum	200Vdc or rms not to exceed power rating
Slider Current, Maximum	100mA or within rated power, whichever is less
Power Rating, Watts	0.25 at 85°C derating to 0 at 150°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Turns, Nominal	12
Dielectric Strength	900Vrms
Insulation Resistance, Minimum	1,000 Megohms
Resolution	Essentially infinite
Contact Resistance Variation, Maximum	1% or 1 Ohms, whichever is greater

#### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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### ENVIRONMENTAL

Seal	85°C Fluorinert® (No Leaks)
Temperature Coefficient, Maximum	±100ppm/°C
Operating Temperature Range	-65°C to +150°C
Thermal Shock	5 cycles, -65°C to +150°C (1% ΔRT, 1% ΔVR)
Moisture Resistance	Ten 24 hour cycles (1% ΔRT, IR 1,000 Megohms Min.)
Shock, 6ms Sawtooth	100G's (1% ΔRT, 1% ΔVR)
Vibration	20G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR)
High Temperature Exposure	250 hours at 125°C (2% ΔRT, 2% ΔVR)
Rotational Life	200 cycles (2% ΔRT)
Load Life at 0.25 Watts	1,000 hours at 85°C (2% ΔRT)
Resistance to Solder Heat	260°C for 10 sec. (1% ΔRT)

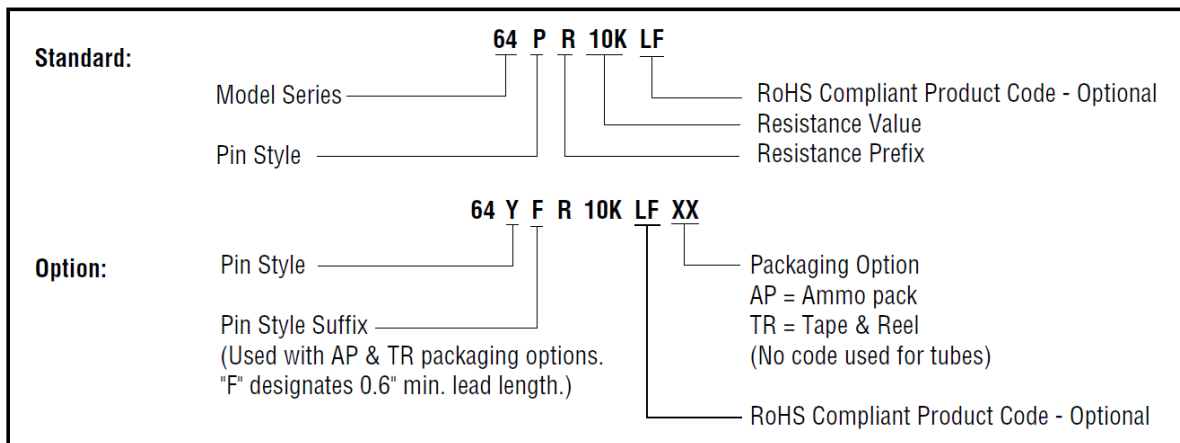
### MECHANICAL

Mechanical Stops	Clutch action, both ends
Torque, Starting Maximum	3 oz.-in. (0.021 N-m)
Weight, Nominal	.014 oz. (0.40 grams)

### STANDARD RESISTANCE VALUES, OHMS

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

### ORDERING INFORMATION



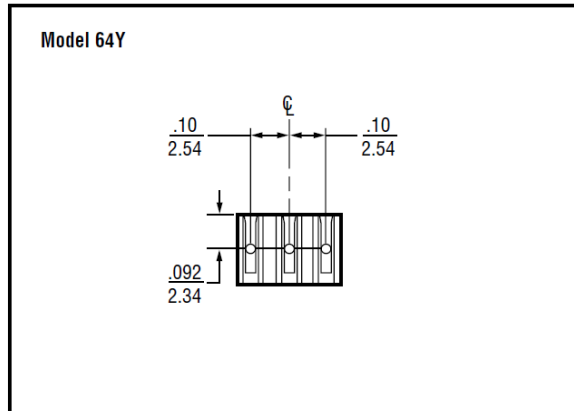
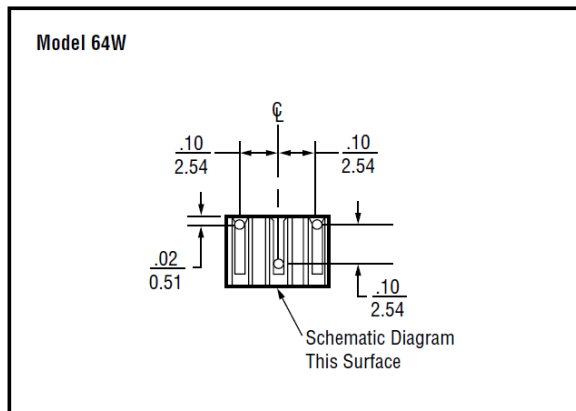
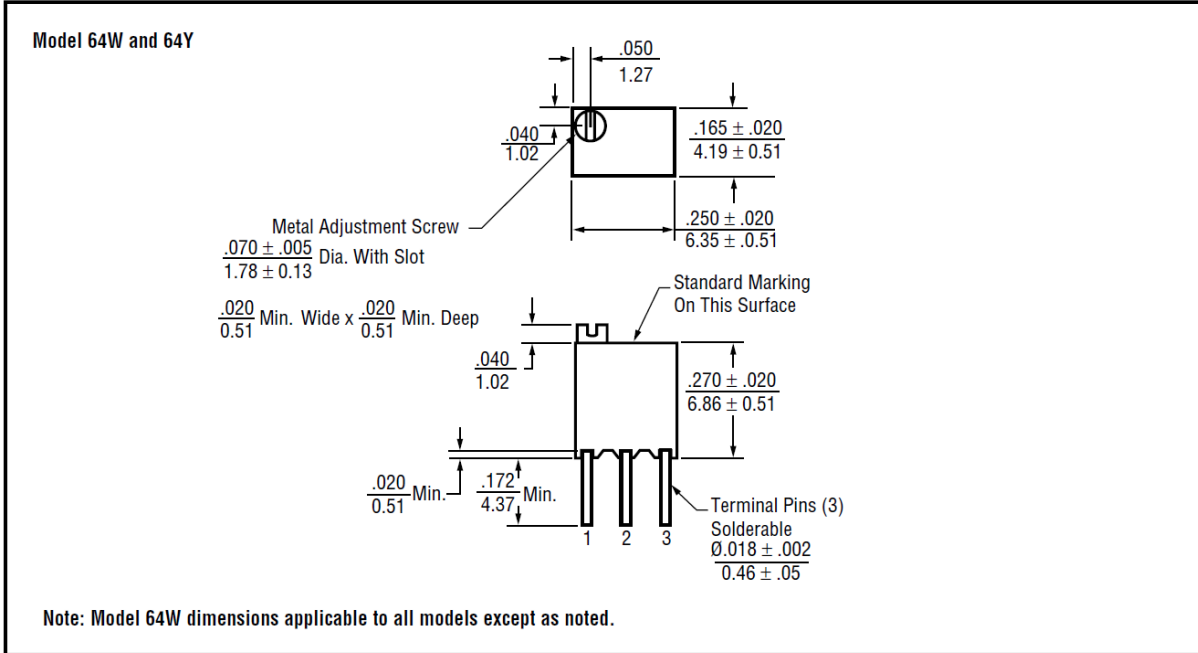
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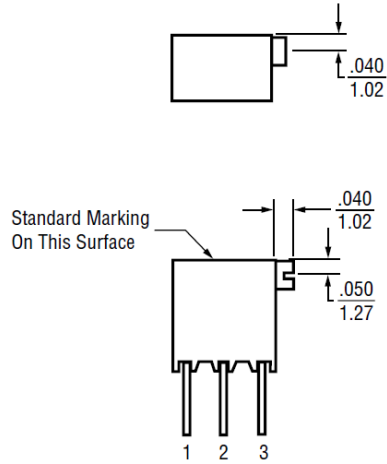
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### TOP ADJUSTMENT (Inch/mm)

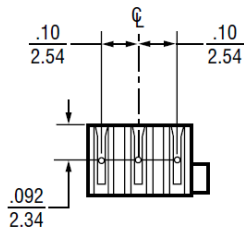


### SIDE ADJUSTMENT (Inch/mm)

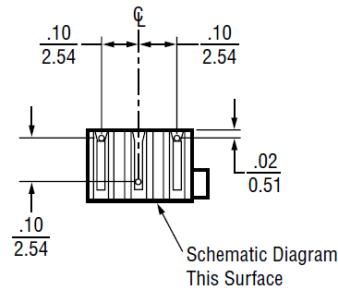
Model 64X and 64Z



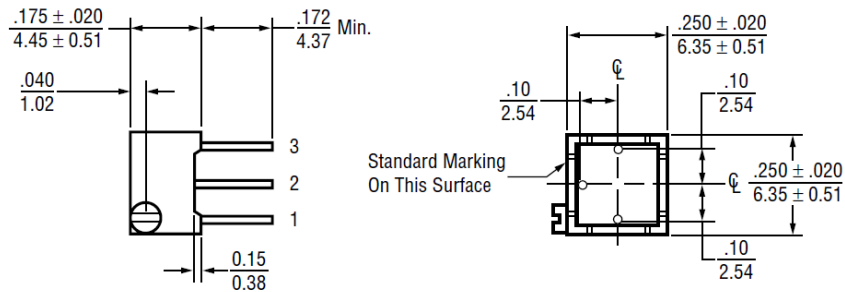
Model 64Z



Model 64X



Model 64P



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### PACKAGING

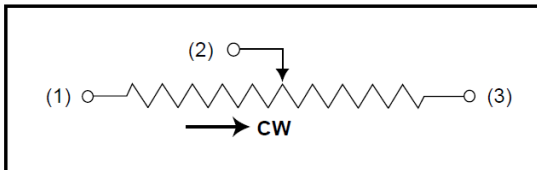
**Standard:** Tubes  
All units oriented with #1 pin to same side.

	Pin Style		P, W, Y	X, Z
Magazine	Width	=	0.38" (9.65 mm)	0.38" (9.65 mm)
	Height	=	0.62" (15.75mm)	0.62" (15.75mm)
	Length	=	14.5" (368 mm)	16.9" (429 mm)
	Capacity	=	50 Units	50 Units

**Option:** Tape & Reel, Ammo Pack (Available only for 64Y and 64Z)  
All units oriented with #1 pin to the right of the direction of feed.

Tape	Seat Plane to Centerline of Sprocket Hole	=	.71" (18 mm)
	Width	=	18 mm
	Sprocket	=	Single Hole .50" spacing
	Capacity	=	1,000 Units
Reel	Diameter	=	14" (363 mm)
Ammo	Tape Fold	=	12"
	Box	=	1.8" x 13" x 10" (46mm x 330mm x 254mm)

### 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 = ± .01 inches (.25mm)  
Angular = ± 2 degrees

