

# MODEL 68

## 3/8" Square

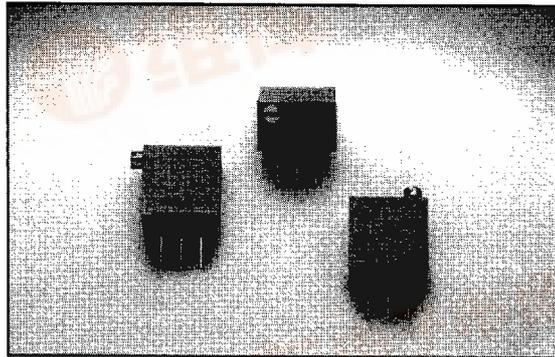
## Multi-Turn

## Cermet Trimming

## Potentiometer

Distributor Item

1



### ELECTRICAL

Standard Resistance Range, Ohms	10 to 2Meg
Standard Resistance Tolerance	±10% (<100 Ohms = ±20%)
Input Voltage, Maximum	200 Vdc or rms not to exceed power rating
Slider Current, Maximum	100mA or within rated power, whichever is less
Power Rating, Watts	0.5 at 85°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Turns, Nominal	20
Dielectric Strength	900 Vrms
Insulation Resistance, Minimum	1,000 Megohms
Resolution	Essentially infinite
Contact Resistance Variation, Maximum	1% or 1 Ohm, whichever is greater

### ENVIRONMENTAL

Seal	85°C Fluorinert® (No Leaks)
Temperature Coefficient, Maximum	±100ppm/°C
Temperature Range	-55°C to +125°C
Thermal Shock	5 cycles, -55°C to +125°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 (3% ΔRT)
Load Life at 0.5 Watts	1,000 hours at 70°C (2% ΔRT)
Resistance to Solder Heat	260°C for 10 sec. (1% ΔRT)

### MECHANICAL

Mechanical Stops	Clutch Action, both ends
Torque, Starting Maximum	5 oz.-in. (0.035 N-m)
Weight, Nominal	.04 oz. (1.13 grams)

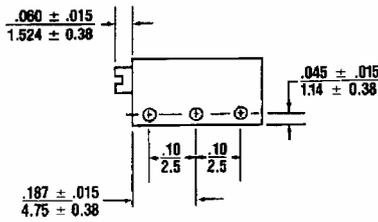
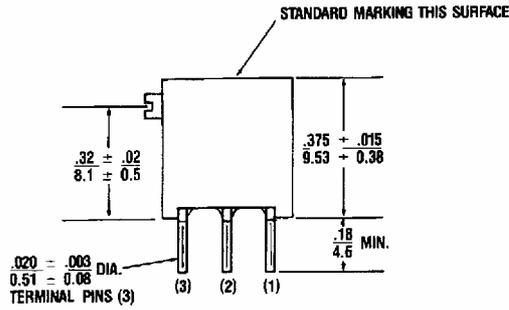
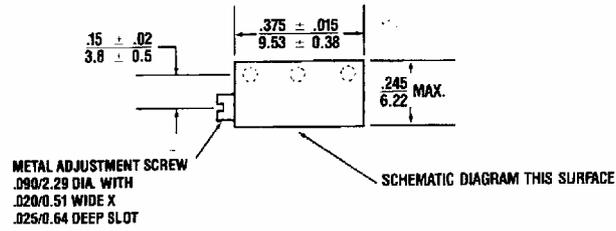
Fluorinert® is a registered trademark of 3M Company.  
Specifications subject to change without notice.

### STANDARD RESISTANCE VALUES, OHMS

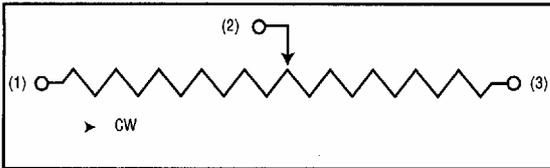
10	200	5K	50K	500K
20	500	10K	100K	1Meg
50	1K	20K	200K	2Meg
100	2K	25K	250K	

## SIDE ADJUSTMENT

Model 68X



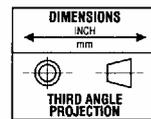
## CIRCUIT DIAGRAM



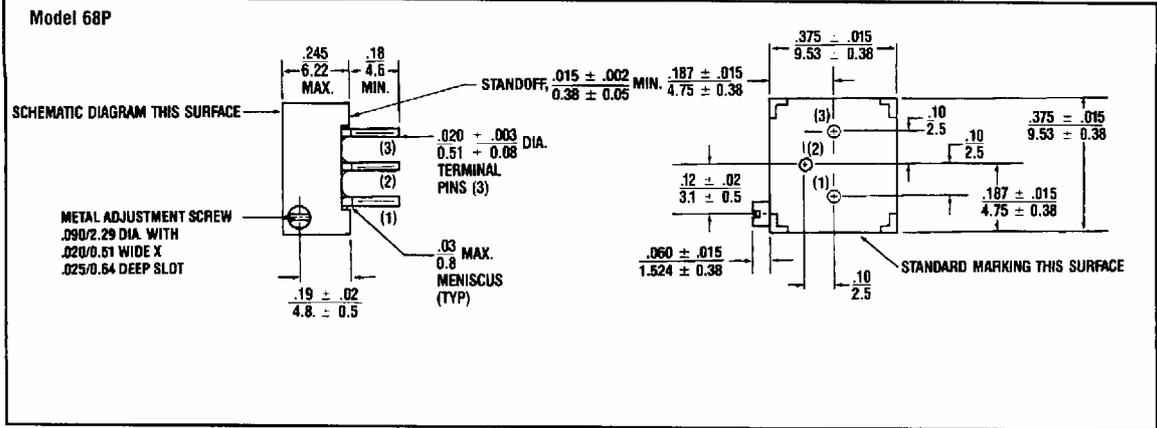
## NOTES

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.

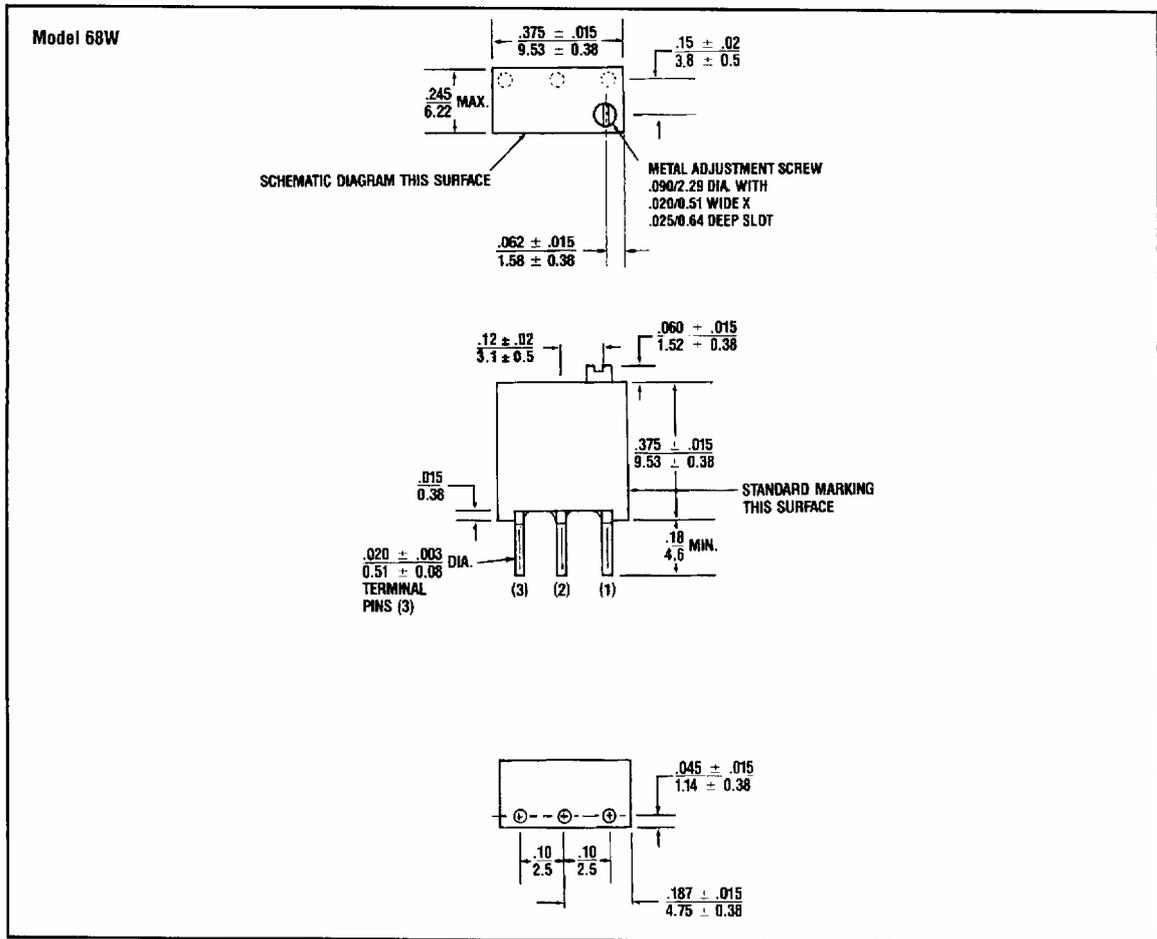
Tolerances unless otherwise specified:  
 Linear =  $\pm .01$  inches (.25mm)  
 Angular =  $\pm 2$  degrees



## SIDE ADJUSTMENT



## TOP ADJUSTMENT



## PACKAGING

**Standard:** Boxes

Capacity, Units = 100 (68W)  
 = 50 (All other styles)

**Option:** Tubes

All Units oriented with #1 pin to same side

Pin Style		P	W	X
Magazine	Width	= 0.57"	0.33"	0.33"
	Height	= 0.66"	0.90"	0.90"
	Length	= 20.9"	20.4"	24.4"
Capacity Units		= 50	50	50

**Option:**

Tape & Reel, Ammo Pack (Available only for 68W and 68X)  
 All units oriented with #1 pin to the right of the direction of feed

Seat Plane to Centerline of Sprocket Hole		=	.71" (18.03 mm)
Tape	Width	=	18 mm
	Sprocket	=	Single Hole .50" spacing
	Capacity, Units	=	1,000
Reel	Diameter	=	14" (356 mm)
Ammo	Tape Fold	=	12" (305 mm)
Box		=	1.8" x 13" x 10" (46mm x 330mm x 254mm)

## ORDERING INFORMATION

**Standard:**

68 P R 10K  
 Model Series ————|——— Resistance Value  
 Pin Style ————|——— Resistance Prefix

**Option:**

68 W R 10K TB  
 Pin Style ————|——— Packaging Option  
 TB = Tubes