

# MODEL 82

## 1/4" Diameter

### Single Turn

### Cermet Trimming

### Potentiometer



1

#### ELECTRICAL

Standard Resistance Range, Ohms	10 to 1Meg
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 70°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Nominal	220°
Dielectric Strength	600 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
Operating 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 100 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	Solid
Torque, Starting Maximum	3 oz.-in. (0.021 N-m)
Weight, Nominal	.02 oz. (0.60 grams)

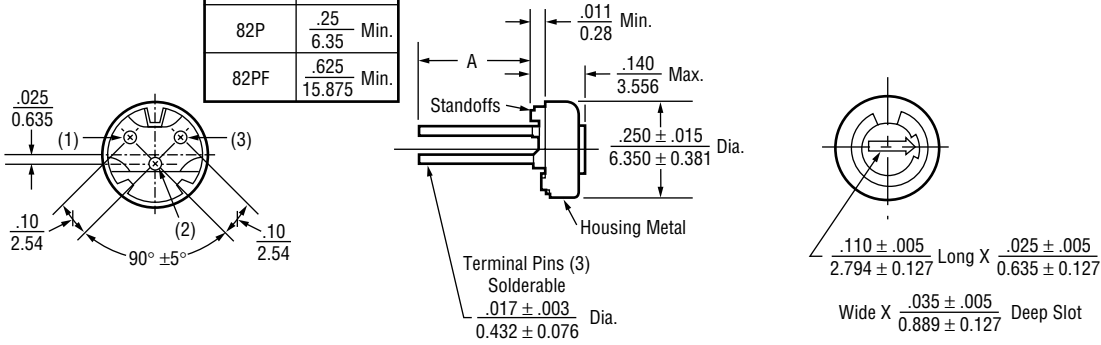
Fluorinert® is a registered trademark of 3M Company.  
Specifications subject to change without notice.



**TOP ADJUSTMENT (Inch/mm)**

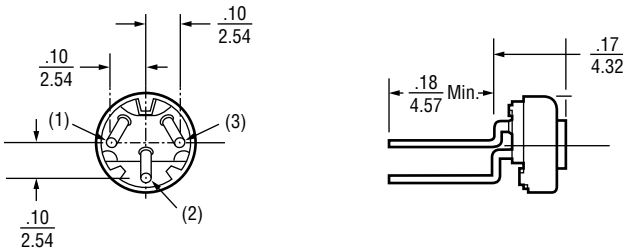
**Model 82P, 82PF**

Model	Dim. A
82P	$\frac{.25}{6.35}$ Min.
82PF	$\frac{.625}{15.875}$ Min.

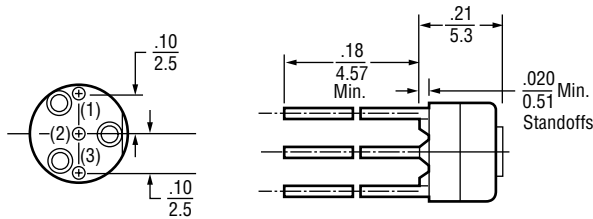


Note: Model 82P dimensions applicable to all models except as noted.

**Model 82M**

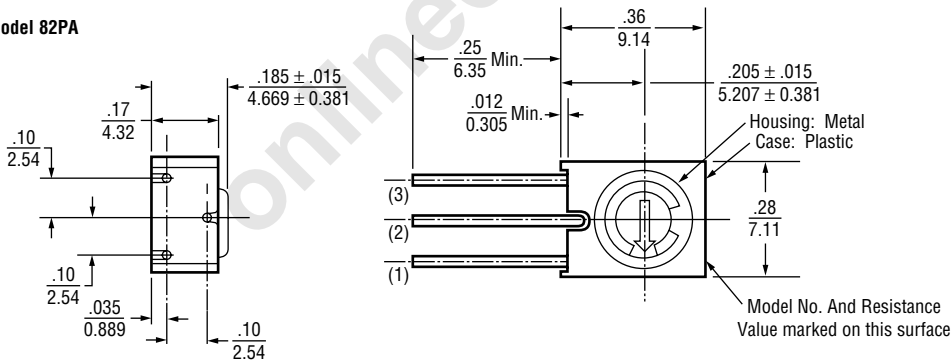


**Model 82W**



**SIDE ADJUSTMENT (Inch/mm)**

**Model 82PA**



**STANDARD RESISTANCE VALUES, OHMS**

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

**PACKAGING**

**Standard:** Boxes

Capacity	=	50 Units (82PA, 82PF)
	=	100 Units (All other styles)

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

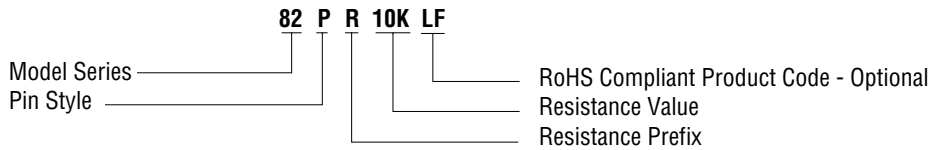
	Pin Style	PA	P,M,W
Magazine	Width	= 0.28"	0.34"
	Height	= 0.94"	0.65"
	Length	= 15.6"	27.5"
	Capacity	= 50 Units	100 Units

**Option:** Tape & Reel, Ammo Pack (Available for 82W Only)  
All units oriented with #1 pin to the right of the direction of feed.

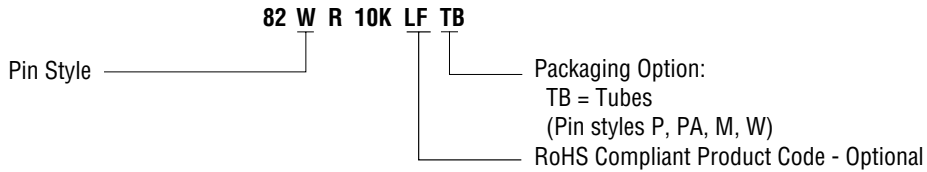
	Seat Plane to Centerline of Sprocket Hole	=	.71" (18.03 mm)
Tape	Width	=	18 mm
	Sprocket	=	Single Hole .50" spacing
	Capacity	=	1,000 Units
Reel	Diameter	=	14" (356 mm)
Ammo	Tape Fold	=	12" (305 mm)
	Box	=	1.5" x 13" x 10"

**ORDERING INFORMATION**

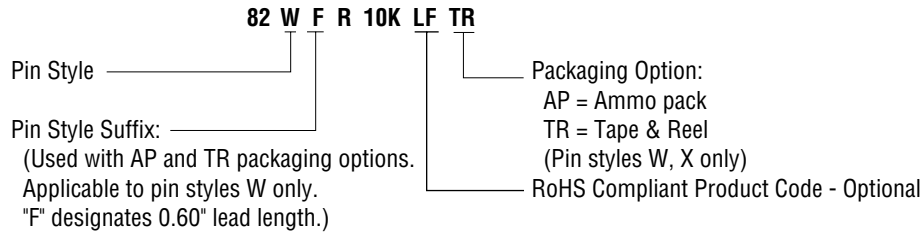
**Standard:**



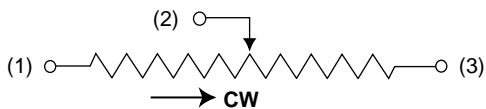
**Option:**



**Option:**



**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

