

# Single Turn Trimmer

## Model 82



### Features:

- 1/4" diameter
- Single turn
- Cermet



### 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%ΔVVR)       |
| 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)  |

#### 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.

### Packaging Information

**Standard:** Boxes

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

**Option:** Tubes

All units oriented with #1 pin to same side.

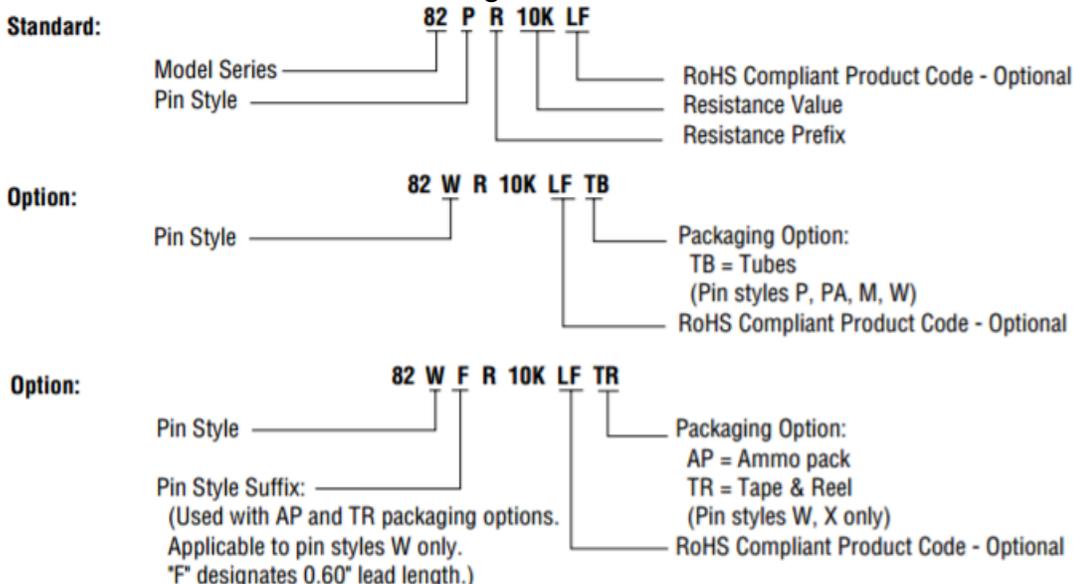
|          | Pin Style |   | PA       | P,M,W     |
|----------|-----------|---|----------|-----------|
| Magazine | Width     | = | 0.28"    | 0.34"     |
|          | Height    | = | 0.94"    | 0.65"     |
|          | Length    | = | 15.6"    | 27.5"     |
|          | Capacity  | = | 50 Units | 100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

**Option:** Tape & Reel, Ammo Pack (Available for 82W Only)

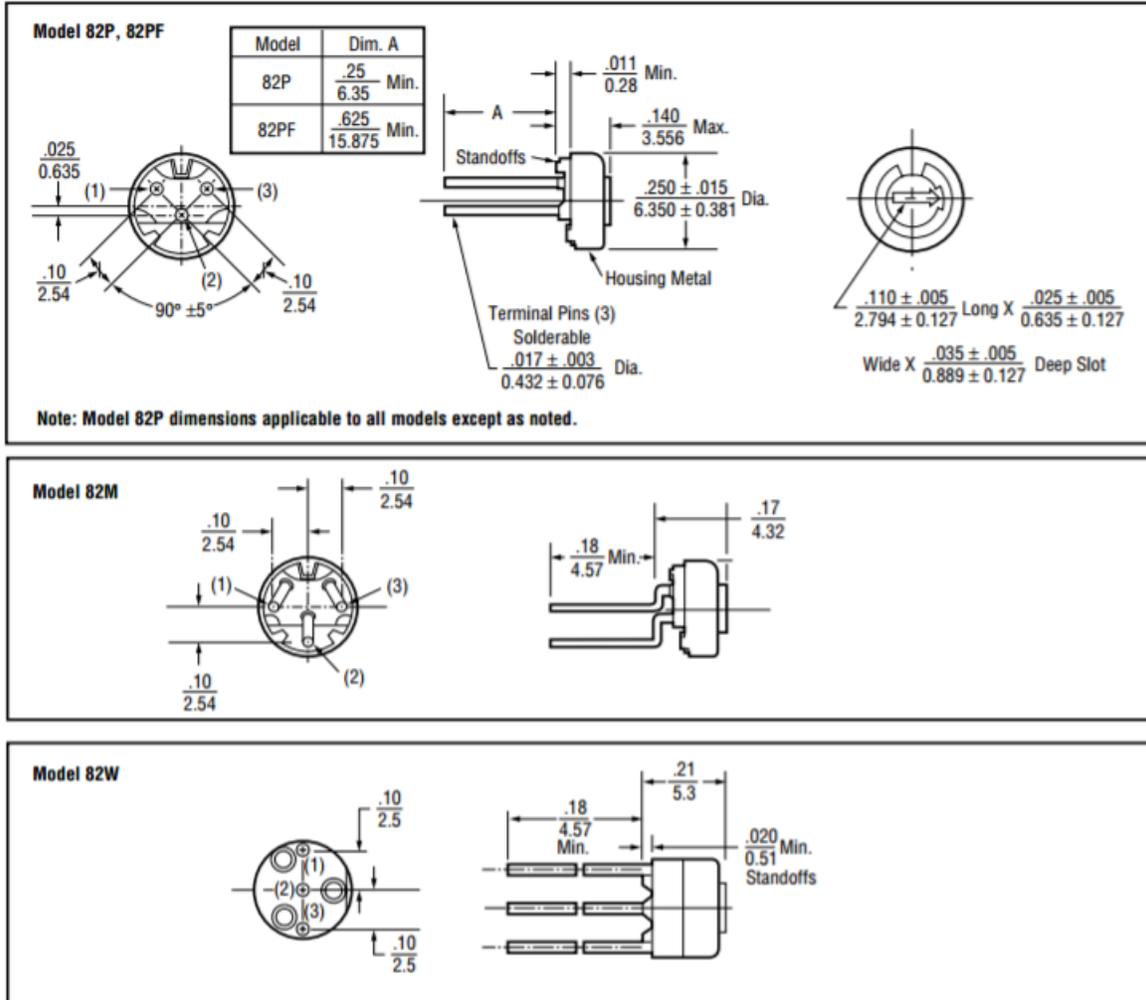
All units oriented with #1 pin to the right of the direction of feed.

|      |   |   |                          |
|------|---|---|--------------------------|
|      | 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"         |

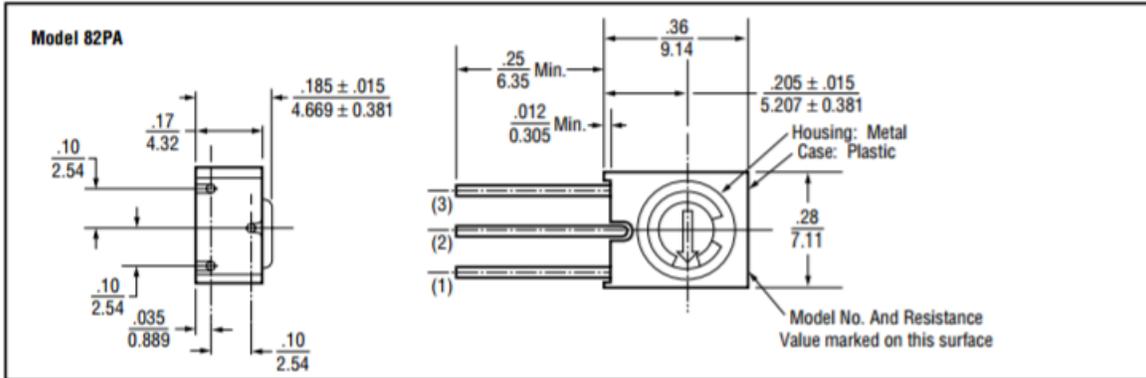
### Ordering Information



### Outline Drawings—Top Adjustment



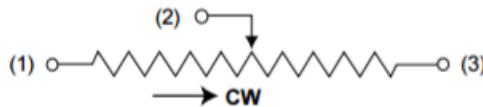
### Outline Drawings—Side Adjustment



### Standard Resistance Values, Ohms

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

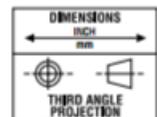
### Circuit Diagram



#### 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



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