

Multi-Turn Trimmer

Model 89



Features:

- 1/4" square
- Surface mount
- Cermet



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 | 0.75 at 85°C derating to 0 at 125°C |
| End Resistance, Maximum | 2 Ohms |
| Actual Electrical Travel, Turns, Nominal | 20 |
| Dielectric Strength | 1,000 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 0.75 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 | .05 oz. (1.4 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.

TT Electronics | BI Technologies
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Packaging Information

Standard: Boxes

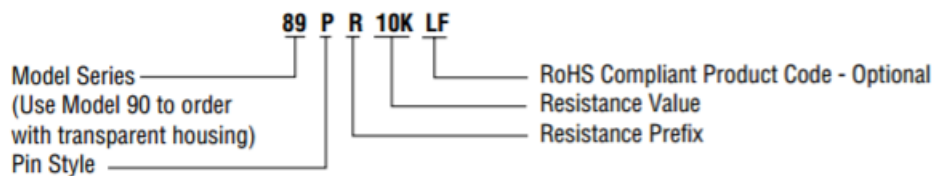
Capacity = 100 Units (89P)
50 Units (All other styles)

Option: Tubes (Models 89P, 89PH, 89X, 89XH and 90P only.)
All units oriented with #1 pin to same side.

| | | | |
|----------|----------|---|----------|
| Magazine | Width | = | 0.28" |
| | Height | = | 0.65" |
| | Length | = | 21.5" |
| | Capacity | = | 25 Units |

Ordering Information

Standard:



Option:



Option:



Standard Resistance Values

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

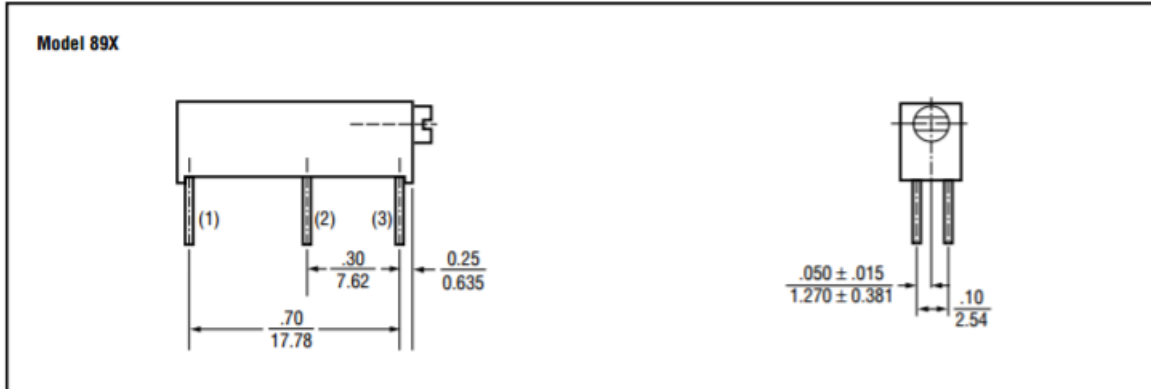
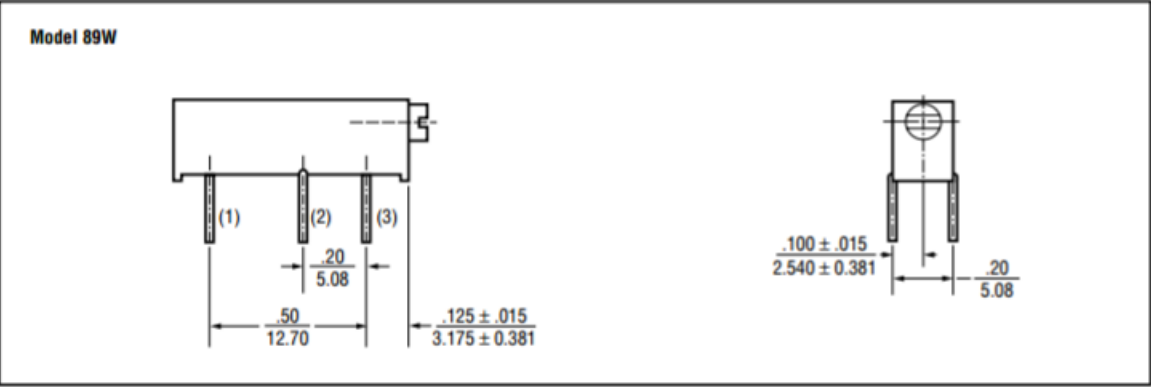
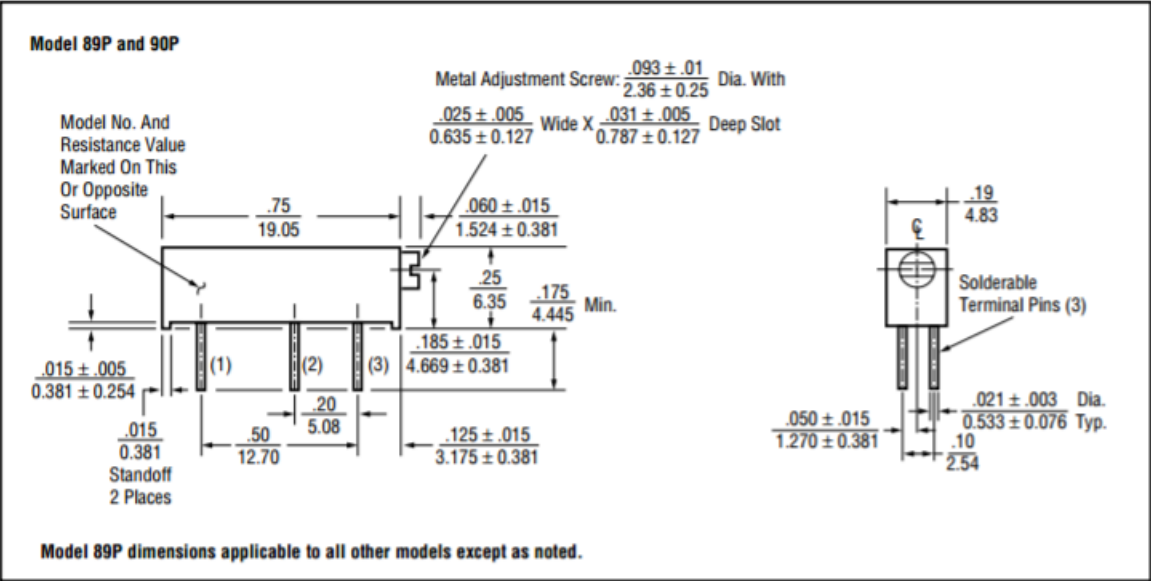
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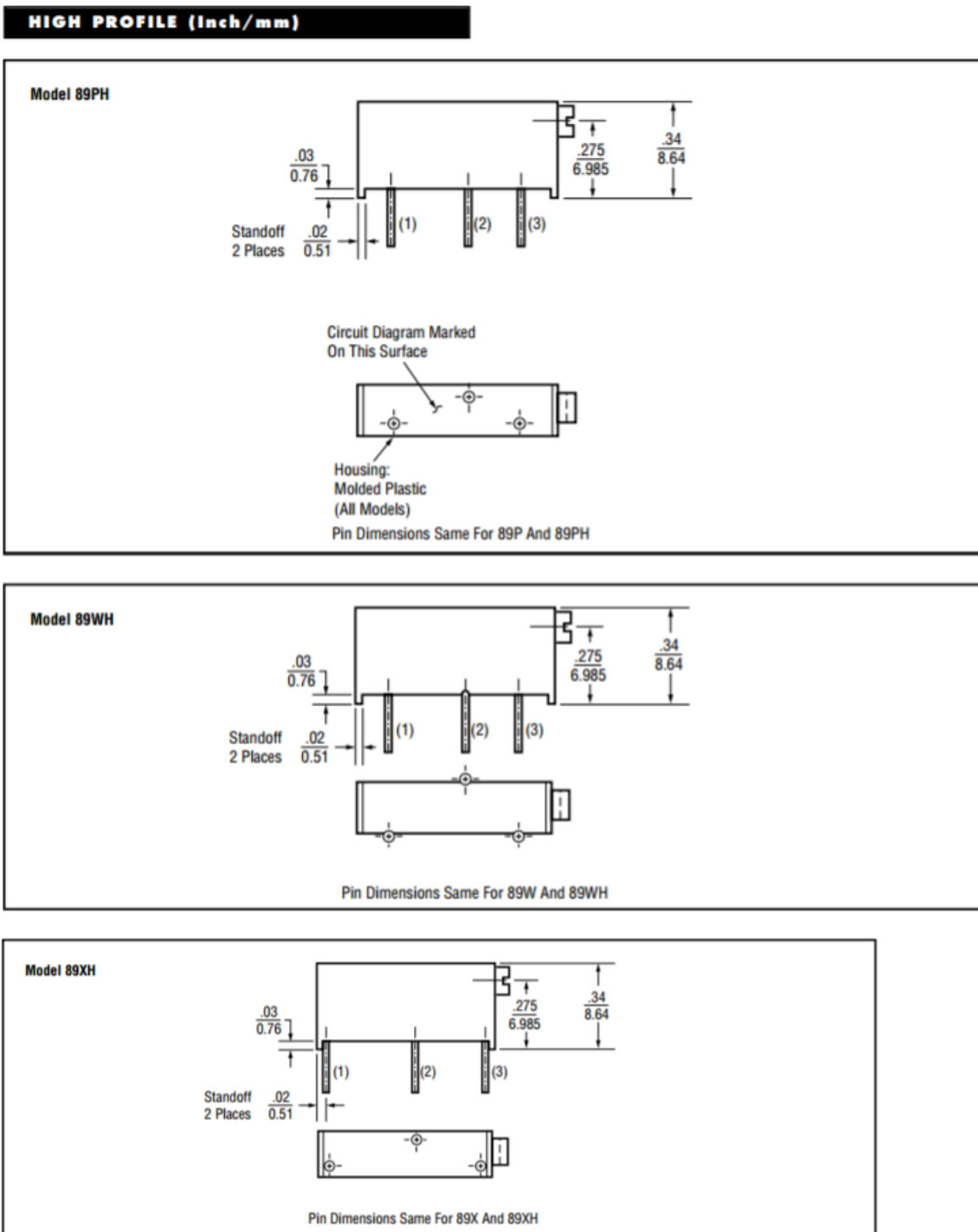
Outline Drawings

LOW PROFILE (Inch/mm)



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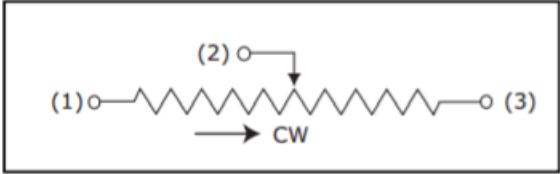
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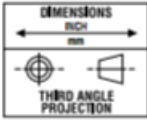
CIRCUIT DIAGRAM



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 = ± 2 degrees



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