

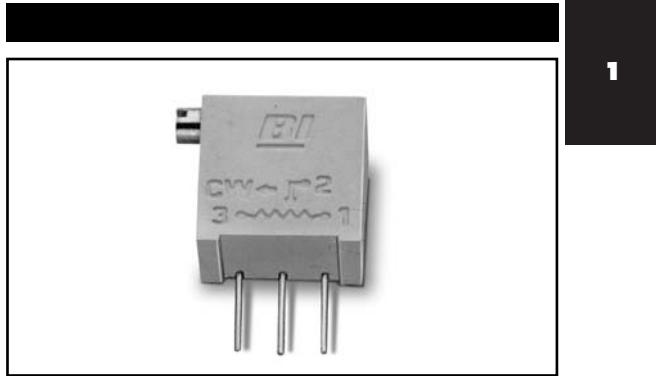
MODEL 68

3/8" Square

Multiturn

Cermet Trimming

Potentiometer



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

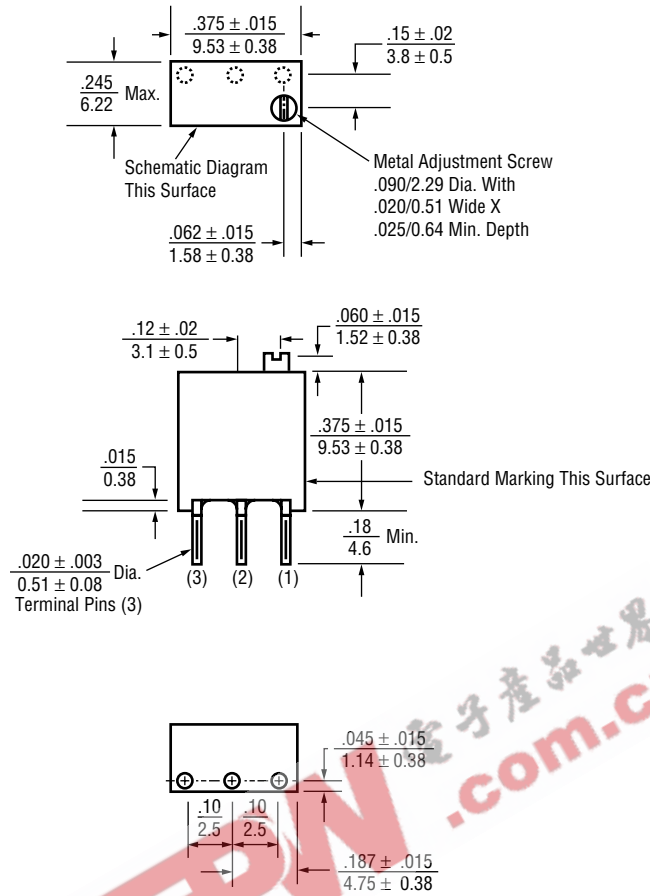
| | |
|--------------------------|--------------------------|
| Mechanical Stops | Clutch Action, both ends |
| Torque, Starting Maximum | 5 oz.-in. (0.035 N-m) |
| Weight, Nominal | .04 oz. (1.13 grams) |

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



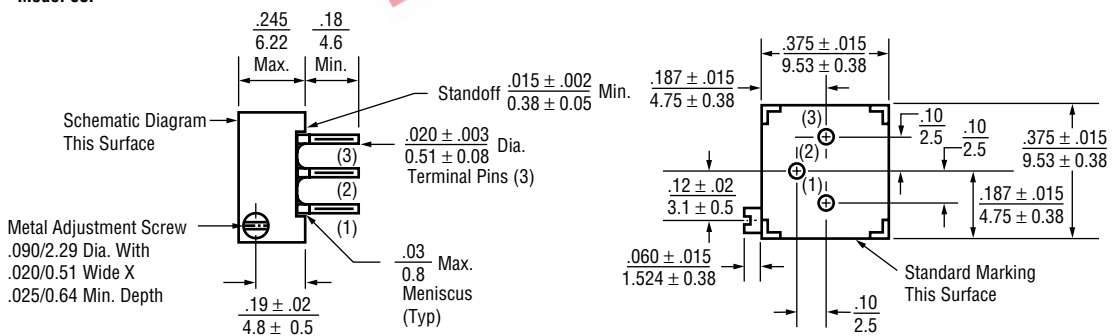
TOP ADJUSTMENT (Inch/mm)

Model 68W



SIDE ADJUSTMENT (Inch/mm)

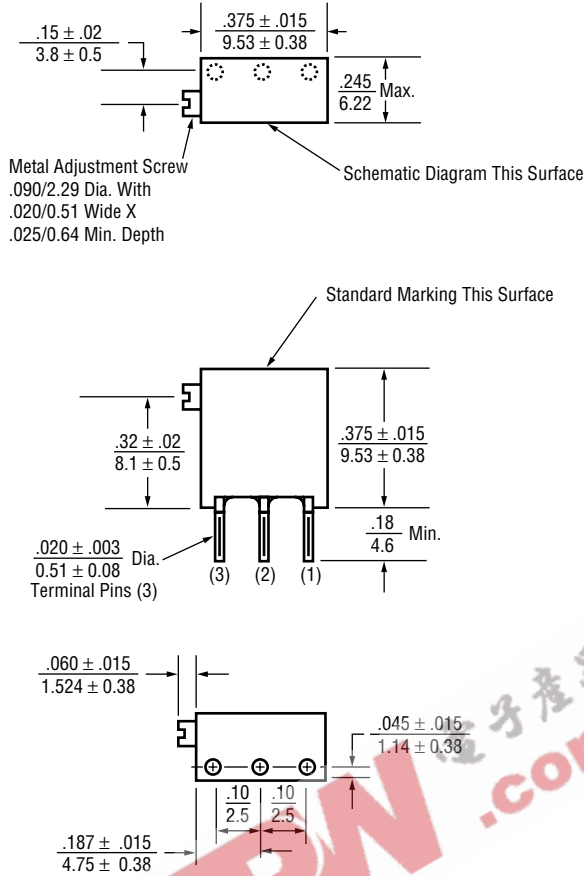
Model 68P



SIDE ADJUSTMENT (Inch/mm)

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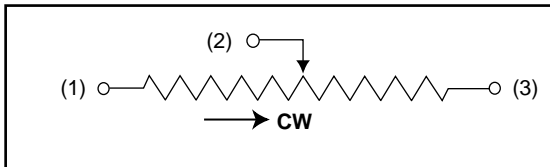
Model 68X



STANDARD RESISTANCE VALUES, OHMS

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

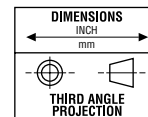
CIRCUIT DIAGRAM



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



PACKAGING

Standard: Boxes

Capacity = 100 Units (68W)
= 50 Units (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 | = | 50 Units | 50 Units | 50 Units |

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 | = | 1,000 Units |
| Reel | Diameter | = | 14" (356 mm) |
| Ammo Box | Tape Fold | = | 12" (305 mm) |
| | | = | 1.8" x 13" x 10" (46mm x 330mm x 254mm) |

ORDERING INFORMATION

Standard:

Model Series ———— **68 P R 10K LF** ———— RoHS Compliant Product Code - Optional
Pin Style ———— Resistance Value
Resistance Prefix

Option:

Pin Style ———— **68 W R 10K LF TB** ———— Packaging Option:
TB = Tubes
(Pin styles P, W, X)

Option:

Pin Style ———— **68 W F R 10K LF TR** ———— Packaging Option:
AP = Ammo pack
TR = Tape & Reel
(Pin styles W, X only)

Pin Style Suffix: ————
(Used with AP and TR packaging options.
Applicable to pin styles W & X only.
"F" designates 0.70" lead length.)