1/4" Diameter
Single Turn Cermet Trimming

## Potentiometer

## ELECTRICAL

| Standard Resistance Range, Ohms | 10 to 1 Meg |
| :--- | ---: |
| Standard Resistance Tolerance | $\pm 10 \%(<100$ Ohms $= \pm 20 \%)$ |
| Input Voltage, Maximum | 200 Vdc or rms not to exceed power rating |
| Slider Current, Maximum | 100 mA or within rated power, whichever is less |
| Power Rating, Watts | 0.5 at $70^{\circ} \mathrm{C}$ derating to 0 at $125^{\circ} \mathrm{C}$ |
| End Resistance, Maximum | 20 hms |
| Actual Electrical Travel, Nominal | $220^{\circ}$ |
| 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 | $85^{\circ} \mathrm{C}$ Fluorinert® (No Leaks) |
| :--- | ---: |
| Temperature Coefficient, Maximum | $\pm 100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ |
| Operating Temperature Range | $-55^{\circ} \mathrm{C} \mathrm{to}+125^{\circ} \mathrm{C}$ |
| Thermal Shock | 5 cycles, $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}(1 \% \Delta \mathrm{RT}, 1 \% \Delta \mathrm{VR})$ |
| Moisture Resistance | Ten 24 hour cycles $(1 \% \Delta \mathrm{RT}, \mathrm{IR} 100 \mathrm{Megohms} \mathrm{Min)}$. |
| Shock, 6ms Sawtooth | 100 G 's $(1 \% \Delta \mathrm{RT}, 1 \% \Delta \mathrm{VR})$ |
| Vibration | 20 G s, 10 to $2,000 \mathrm{~Hz}(1 \% \Delta \mathrm{RT}, 1 \% \Delta \mathrm{VR})$ |
| High Temperature Exposure | 250 hours at $125^{\circ} \mathrm{C}(2 \% \Delta \mathrm{RT}, 2 \% \Delta \mathrm{VR})$ |
| Rotational Life | $200 \mathrm{cycles}(3 \% \Delta \mathrm{RT})$ |
| Load Life at 0.5 Watts | 1,000 hours at $70^{\circ} \mathrm{C}(2 \% \Delta \mathrm{RT})$ |
| Resistance to Solder Heat | $260^{\circ} \mathrm{C}$ for 10 sec. $(1 \% \Delta \mathrm{RT})$ |

## mechanical

| Mechanical Stops | Solid |
| :--- | ---: |
| Torque, Starting Maximum | 3 oz.-in. $(0.021 \mathrm{~N}-\mathrm{m})$ |
| 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)


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


## SIDE ADJUSTMENT (Inch/mm)



Bif fechnologies

STANDARD RESISTANGE VALUES, OHMS

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

## 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 |
| :--- | :--- | :--- | :--- | :--- |
| Magazine | Width | $=$ | $0.28 "$ | 0.34 " |
|  | Height | $=$ | $0.94 "$ | $0.65 "$ |
|  | Length | $=$ | $15.6^{\prime \prime}$ | $27.5 "$ |
|  | Capacity | $=$ | 50 Units | 100 Units |

Option: $\quad$ 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 <br> Centerline of <br> Sprocket Hole |  | $=$ |
| :--- | :--- | :--- | :--- |
| Tape | Width | $=$ | $.71 "(18.03 \mathrm{~mm})$ |
|  | Sprocket | $=$ | Single Hole $.50 "$ spacing |
|  | Capacity | $=$ | 1,000 Units |
| Reel | Diameter | $=$ | $14^{\prime \prime}(356 \mathrm{~mm})$ |
| Ammo | Tape Fold | $=$ | $12^{\prime \prime}(305 \mathrm{~mm})$ |
|  | Box | $=$ | $1.5 " \times 13^{\prime \prime} \times 10^{\prime \prime}$ |



## CIRCUIT DIAGRAM



## NOTES

Metric equivalents, based on 1 inch $=25.4 \mathrm{~mm}$ 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 $(.25 \mathrm{~mm})$
Angular $= \pm 2$ degrees

