

# Single Turn Trimmer

## Model 23



### Features:

- 4 mm square
- Sealed single turn
- Cermet
- Surface mount



## Electrical

|                               |  |
|-------------------------------|--|
| Standard Resistance Range     | 100 Ohms to 2 Megohms                          |
| Standard Resistance Tolerance | ±20%   |
| Input Voltage                 | 200 Vdc Max. or rms not to exceed power rating |
| Power Rating                  | 0.25 Watts at 70°C derating to 0 at 125°C      |
| End Resistance                | 1% or 3 Ohms Max., whichever is greater        |
| Actual Electrical Travel      | 200° nominal                                   |
| Dielectric Strength           | 500 Vrms                                       |
| Insulation Resistance         | 100 Megohms Min.                               |
| Resolution                    | Essentially infinite                           |
| Contact Resistance Variation  | 2% or 3 Ohms Max., whichever is greater        |

## Environmental

|                             |   |
|-----------------------------|---|
| Seal                        | 85°C Fluorinert® (No Leaks)                       |
| Temperature Coefficient     | ±100 ppm/°C (<200 Ohms or >1Meg = ±250 ppm/°C)    |
| Operating Temperature Range | -55°C to +125°C                                   |
| Thermal Shock               | Five cycles -55°C to +125°C (2% ΔRT, 2% ΔVR)      |
| Moisture Resistance         | Ten 24 hour cycles (3% ΔRT)                       |
| Shock                       | 6 ms sawtooth, 100 G's (1% ΔRT, 1% ΔVR)           |
| Vibration                   | 20 G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR)           |
| High Temperature Exposure   | 250 hours at 125°C (2% ΔRT, 2% ΔVR)               |
| Rotational Life             | 100 cycles (5% ΔRT)                               |
| Load Life                   | 1,000 hours at 70°C & 0.25 Watts (3% ΔRT, 1% ΔVR) |
| Resistance to Solder Heat   | 260°C for 10 sec. (1% ΔRT)                        |

## Mechanical

|                  |                                |
|------------------|--------------------------------|
| Mechanical Stops | Solid                          |
| Stop Strength    | 4 oz.-in. Min. (300 g-cm)      |
| Torque           | 2 oz.-in. Max. (150 g-cm)      |
| Weight           | 0.005 oz. nominal (0.14 grams) |

### General Note

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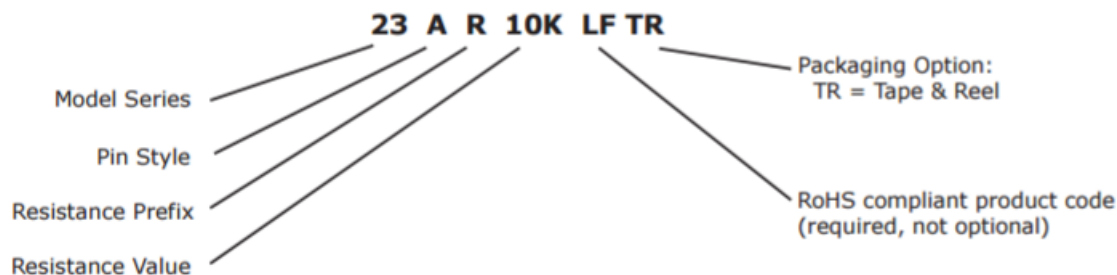
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### Ordering Information



### Packaging Information

Standard (no code): Boxes. Capacity = 100 units.

Option (TR code): Tape & Reel. All units oriented with #2 (slider) pin adjacent to sprocket holes.

|      | Pin Style  | A,B         | S            |
|------|------------|-------------|--------------|
| Tape | Width =    | 12 mm       | 12 mm        |
|      | Sprocket = | 4 mm pitch  | 4 mm pitch   |
|      | Capacity = | 500 units   | 750 units    |
| Reel | Diameter = | 7" (178 mm) | 10" (254 mm) |

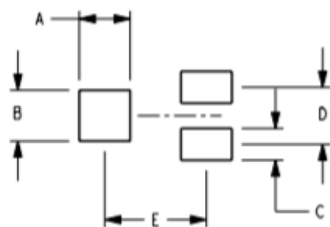
### Circuit Diagram



### Standard Resistance Values, Ohms

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

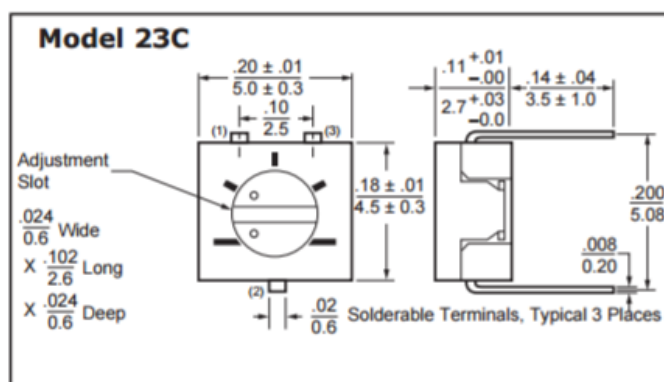
### RECOMMENDED PCB LAYOUT



#### Inch/mm

|   | 23A                 | 23B                | 23S                 |
|---|---------------------|--------------------|---------------------|
| A | $\frac{.079}{2.00}$ | $\frac{.051}{1.3}$ | $\frac{.079}{2.0}$  |
| B | $\frac{.079}{2.00}$ | $\frac{.079}{2.0}$ | $\frac{.079}{2.0}$  |
| C | $\frac{.051}{1.3}$  | $\frac{.051}{1.3}$ | $\frac{.051}{1.3}$  |
| D | $\frac{.091}{2.3}$  | $\frac{.091}{2.3}$ | $\frac{.10}{2.54}$  |
| E | $\frac{.157}{4.00}$ | $\frac{.217}{5.5}$ | $\frac{.137}{3.48}$ |

### THROUGH HOLE



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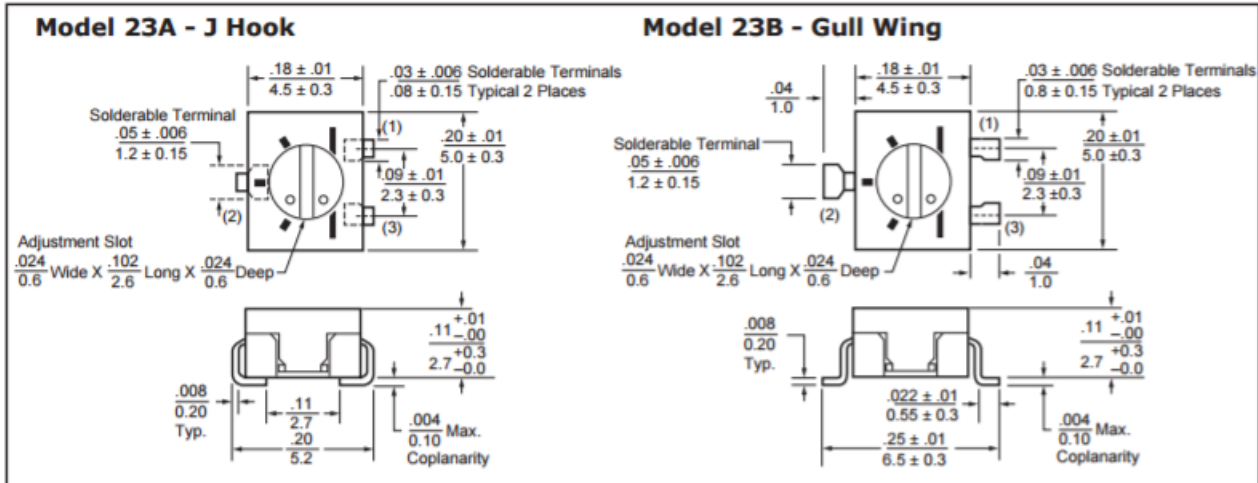
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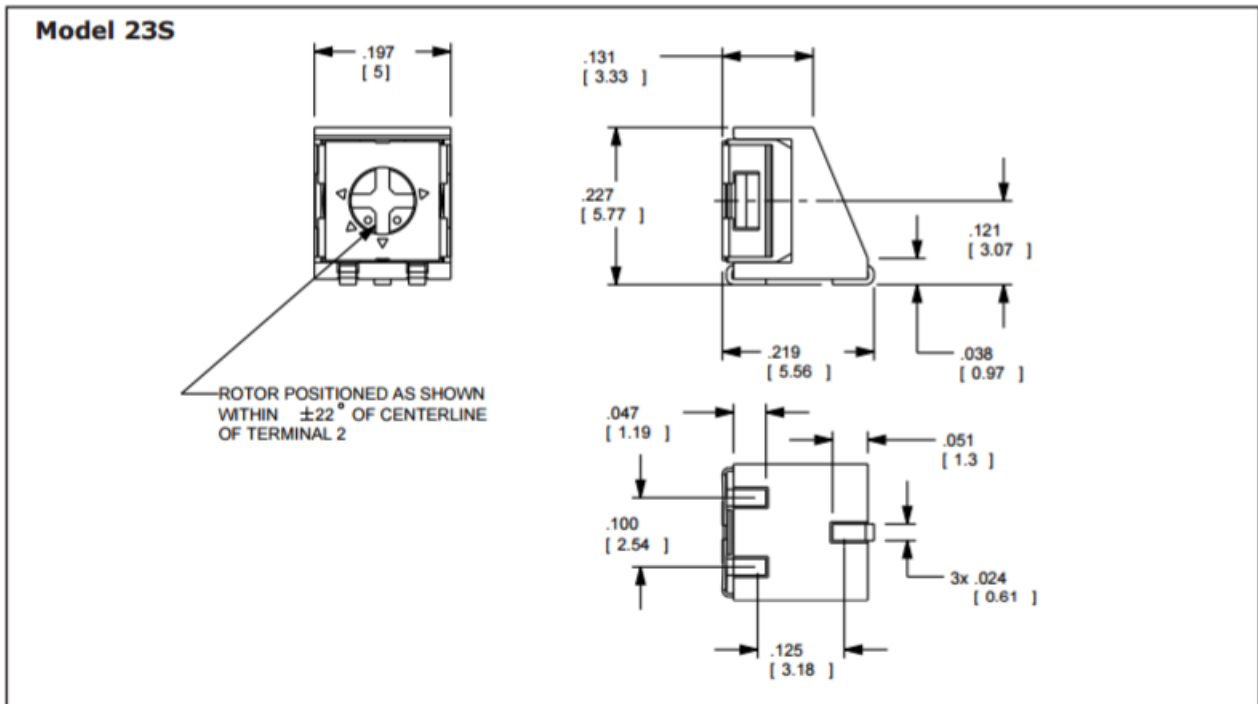


### Outline Drawings

#### TOP ADJUSTMENT



#### SIDE ADJUSTMENT



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