# **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     | $\pm 100 \text{ ppm/°C} (<200 \text{ Ohms or } >1 \text{Meg} = \pm 250 \text{ ppm/°C})$ |
| 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 ozin. Min. (300 g-cm)        |
| Torque           | 2 ozin. Max. (150 g-cm)        |
| Weight           | 0.005 oz. nominal (0.14 grams) |

General Note

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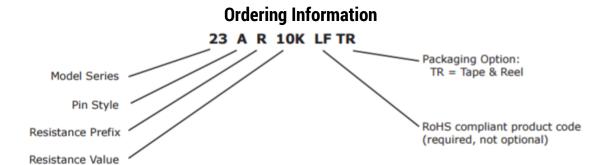
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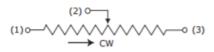
## **Packaging Information**

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            |
|------|------------|-------------|--------------|
| Таре | 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) |

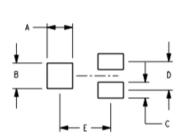
## **Circuit Diagram**



#### **Standard Resistance Values, Ohms**

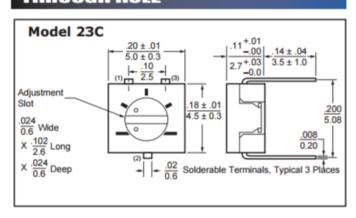
| 100 | 1K | 10K | 100K | 1Meg |
|-----|----|-----|------|------|
| 200 | 2K | 20K | 200K | 2Meg |
| 500 | 5K | 50K | 500K |      |

#### RECOMMENDED PCB LAYOUT



| Inch/mm |             |             |      |
|---------|-------------|-------------|------|
|         | 23A         | 238         | 23\$ |
| Α       | 2.00        | .051<br>1.3 | 2.0  |
| В       | 2.00        | 2.0         | 2.0  |
| С       | .051<br>1.3 | 1.3         | 1.3  |
| D       | 2.3         | 2.3         | 2.54 |
| Ε       | 157         | .217        | .137 |

#### **THROUGH HOLE**



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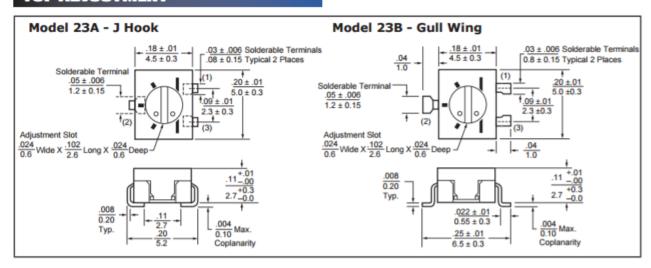
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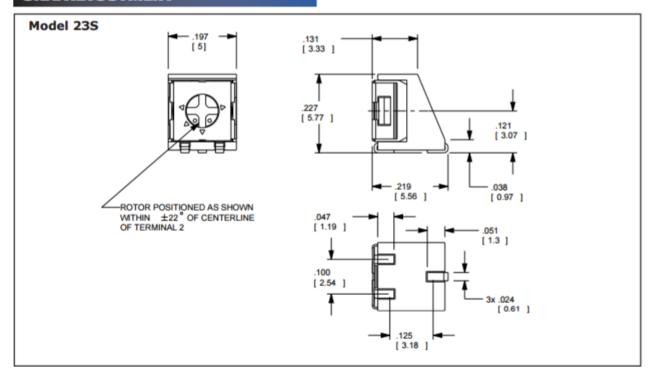


# **Outline Drawings**

#### **TOP ADJUSTMENT**



#### SIDE ADJUSTMENT



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