

# MODEL 23A, B, C, S

4mm Square

Sealed Single Turn

Surface Mount

Cermet Trimming

Potentiometer



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## ELECTRICAL

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

## ENVIRONMENTAL

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| Seal                             | 85°C Fluorinert® (No Leaks)                |
| Temperature Coefficient, Maximum | ±100ppm/°C (<200 Ohms, >1Meg = ±250ppm/°C) |
| Operating Temperature Range      | -55°C to +125°C                            |
| Thermal Shock                    | 5 cycles, -55°C to +125°C (2% ΔRT, 2% ΔVR) |
| Moisture Resistance              | Ten 24 hour cycles (3% ΔRT)                |
| 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                  | 100 cycles (5% ΔRT)                        |
| Load Life at 0.25 Watts          | 1,000 hours at 70°C (3% ΔRT, 1% ΔVR)       |
| Resistance to Solder Heat        | 260°C for 10 sec. (1% ΔRT)                 |

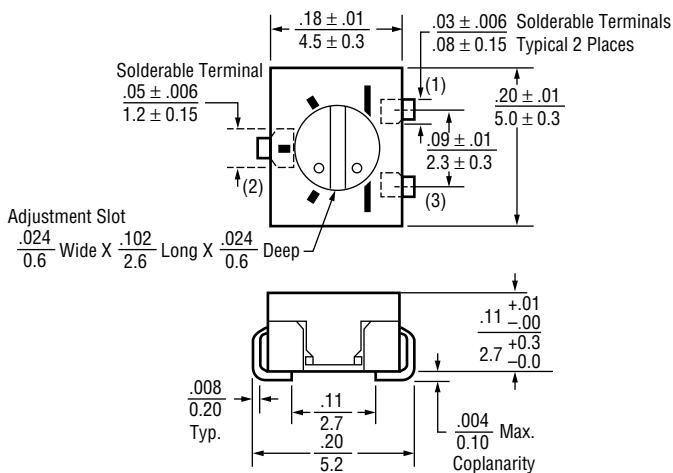
## MECHANICAL

|                        |                       |
|------------------------|-----------------------|
| Mechanical Stops       | Solid                 |
| Stop Strength, Minimum | 4 oz.-in. (300 gr-cm) |
| Torque, Maximum        | 2 oz.-in. (150 gr-cm) |
| Weight, Nominal        | .005 oz. (0.14 grams) |

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

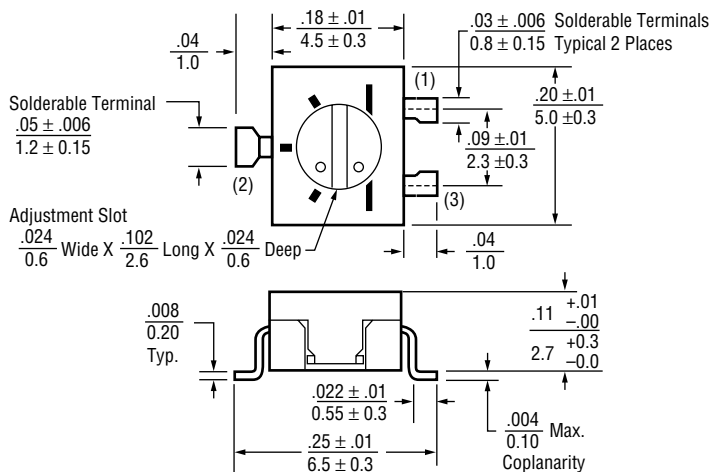
## TOP ADJUSTMENT (Inch/mm)

Model 23A - J Hook



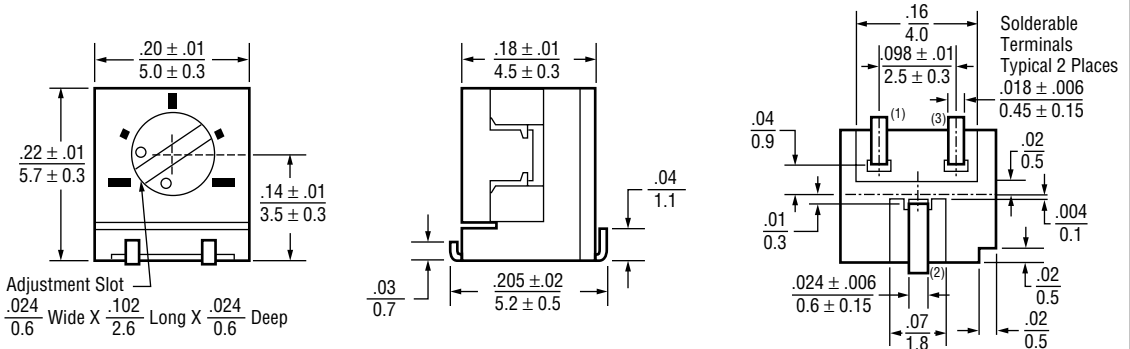
## TOP ADJUSTMENT (Inch/mm)

Model 23B - Gull Wing



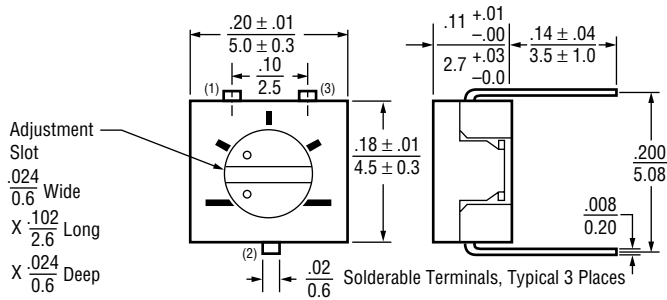
## SIDE ADJUSTMENT (Inch/mm)

Model 23S



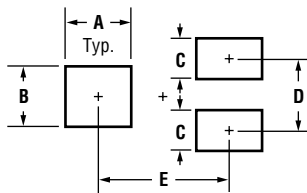
## THROUGH HOLE (Inch/mm)

Model 23C



NOTE: Bottom Adjustment Version Available – Consult Factory.

## RECOMMENDED PCB LAYOUT (Inch/mm)



|   | 23A        | 23S          | 23B        |
|---|------------|--------------|------------|
| A | .08<br>2.0 | .069<br>1.75 | .05<br>1.3 |
| B | .08<br>2.0 | .06<br>1.6   | .08<br>2.0 |
| C | .05<br>1.3 | .047<br>1.2  | .05<br>1.3 |
| D | .09<br>2.3 | .09<br>2.3   | .09<br>2.3 |
| E | .16<br>4.1 | .16<br>4.1   | .22<br>5.5 |

## STANDARD RESISTANCE VALUES, OHMS

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

## PACKAGING

**Standard:** Boxes

Capacity = 100 Units

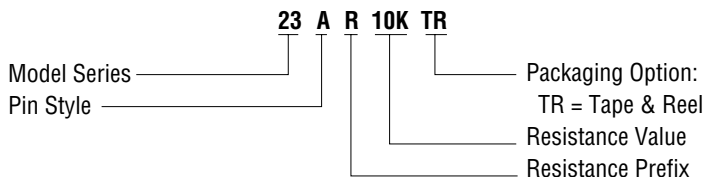
**Option:** Embossed Tape

All units oriented with #2 (slider) terminal adjacent to sprocket holes.

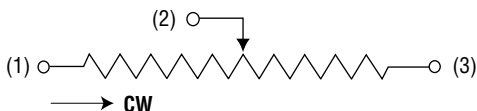
|      | Pin Style |   | A,B         | S            |
|------|-----------|---|-------------|--------------|
| Tape | Width     | = | 12 mm       | 12 mm        |
|      | Sprocket  | = | 4 mm Pitch  | 4 mm Pitch   |
|      | Capacity  | = | 500 Units   | 750 Units    |
| Reel | Diameter  | = | 7" (178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

## ORDERING INFORMATION

**Standard:**



## CIRCUIT DIAGRAM



## NOTES

English equivalents are based on 1 inch = 25.4mm and are provided for general information only.

Tolerances unless otherwise specified:  
Linear =  $\pm 0.3$  mm (.01 inches)

