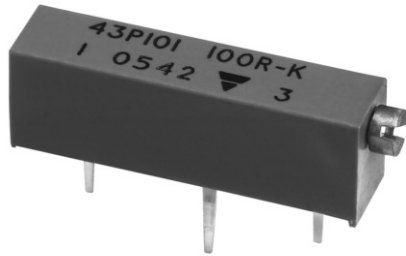


3/4" Rectangular (19 mm) Multi-Turn Cermet Trimmer



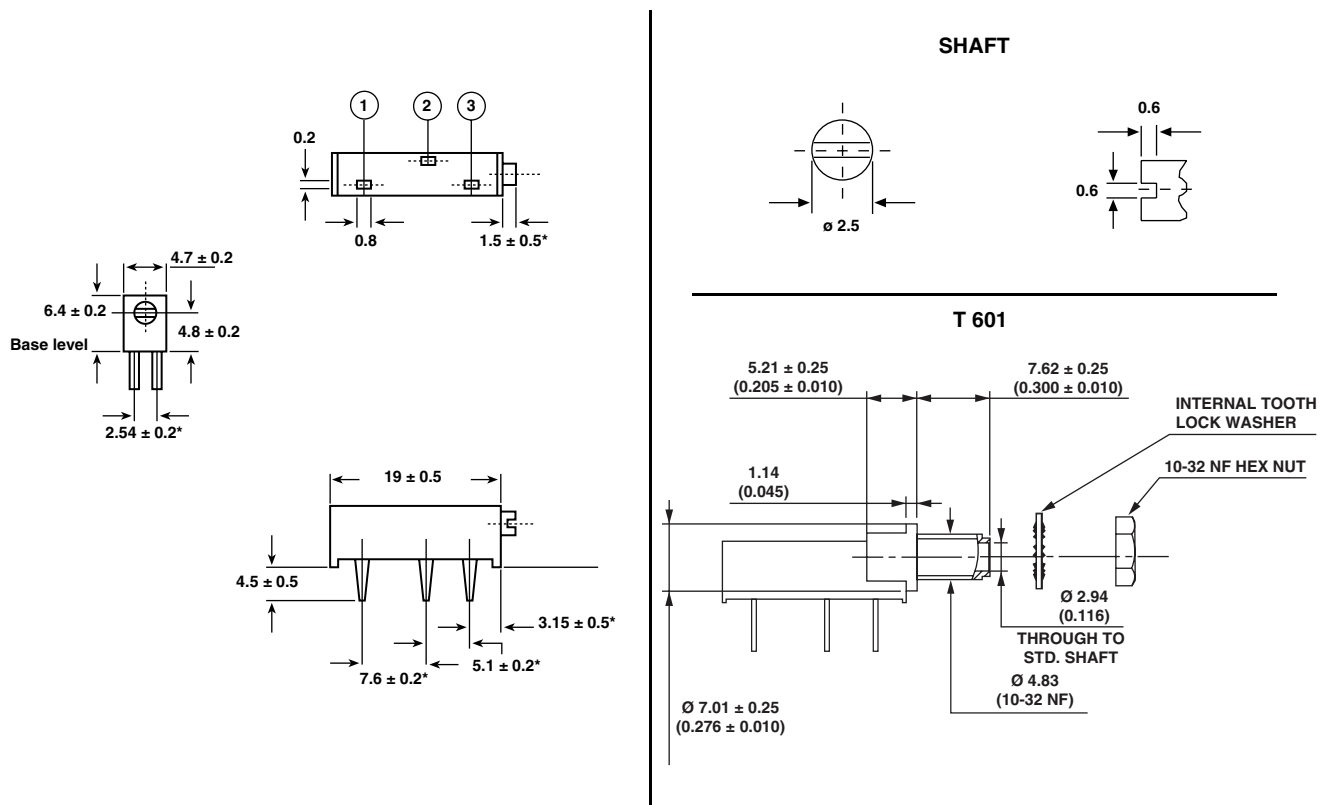
FEATURES

- Panel mount
- Chevron shaft for sealing and smooth consistent torque
- Solder terminations for improved reliability
- Multi-finger wiper for better C.R.V.

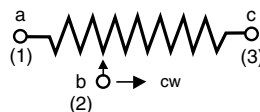


The Model 43 is manufactured to the highest international standards. This product, sealed to 85 °C for 1 minute (IEC. 68-2-17) has an effective travel of 18 turns nominal and a resistance range of 10 Ω to 2 MΩ.

DIMENSIONS in inches (millimeters)



CIRCUIT DIAGRAM



Tolerance unless otherwise specified ± 0.5



| ELECTRICAL SPECIFICATIONS | | |
|---------------------------------------|-------------|---------------------------------------|
| Resistive Element | | cermet |
| Electrical Travel | | 15 turns \pm 1 |
| Resistance Range | | 10 Ω to 2.2 M Ω |
| Standard series E3 | | 1 - 2.2 - 4.7 and 1 - 2 - 5 |
| Tolerance | Standard | \pm 10 % |
| | On Request | \pm 5 % |
| Power Rating | Linear | 0.50 W at + 70 °C |
| | Logarithmic | not applicable |
| Temperature Coefficient | | See Standard Resistance Element Table |
| Limiting Element Voltage (Linear Law) | | 250 V |
| Contact Resistance Variation | | 2 % Rn or 1 Ω |
| End Resistance (Typical) | | 1 Ω |
| Dielectric Strength (RMS) | | 1000 V |
| Insulation Resistance (500 VDC) | | 10 ⁶ M Ω |

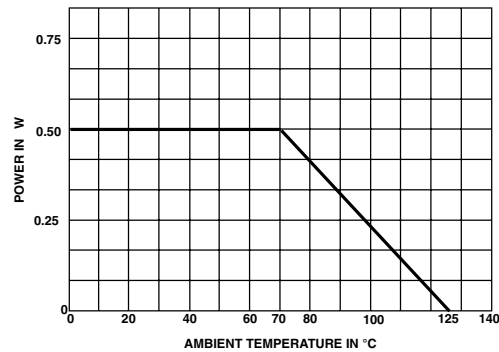
MECHANICAL SPECIFICATIONS

| | |
|-----------------------------|----------------------------|
| Mechanical Travel | 18 turns \pm 5 |
| Operating Torque (max. Ncm) | 2 |
| End Stop Torque | clutch action |
| Unit Weight (max. g) | 1 |
| Wiper (actual travel) | positioned at approx. 50 % |

Environmental specifications

| | |
|-------------------|--------------------------------|
| Temperature Range | - 55 °C to + 125 °C |
| Climatic Category | 55/125/56 |
| Sealing | fully sealed container IP67 |

POWER RATING CHART



| PERFORMANCE | | | |
|--------------------------|--|--|---|
| TESTS | CONDITIONS | TYPICAL VALUES AND DRIFTS | |
| | | $\frac{\Delta RT}{RT}$ (%) | $\frac{\Delta R_{1-2}}{R_{1-2}}$ |
| Load Life | 1000 hours at rated power 90°/30° - ambient temp. 70 °C | \pm 1 % Contact res. variation: < 3 % Rn | \pm (3 % \pm 5 Ω) |
| Climatic Sequence | Phase A dry heat 125 °C Phase B damp heat Phase C cold - 55 °C Phase D damp heat 5 cycles | \pm 0.5 % | \pm 1 % |
| Long Term Damp Heat | 56 days | \pm 0.5 % Dielectric strength: 1000 V _{RMS} Insulation resistance: > 10 ⁴ M Ω | \pm 1 % |
| Rapid Temperature Change | 5 cycles - 55 °C at + 125 °C | \pm 0.5 % | $\frac{\Delta V_{1-2}}{V_{1-3}} \leq \pm$ 1 % |
| Shock | 50 g at 11 m seconds 3 successive shocks in 3 directions | \pm 0.2 % | \pm 0.3 % |
| Vibration | 10 - 55 Hz 0.75 mm or 10 g during 6 hours | \pm 0.2 % | $\frac{\Delta V_{1-2}}{V_{1-3}} \leq \pm$ 0.3 % |
| Rotational Life | 200 cycles | \pm (2 % + 3 Ω) Contact res. variation: < 2 % Rn | |



3/4" Rectangular (19 mm)
Multi-Turn Cermet Trimmer

Vishay Spectrol

| STANDARD RESISTANCE ELEMENT DATA | | | | |
|----------------------------------|---------------------|----------------------|-----------------|------------------------------------|
| STANDARD RESISTANCE VALUES | LINEAR LAW | | | TYPICAL TCR - 55 °C + 125 °C |
| | MAX. POWER AT 70 °C | MAX. WORKING VOLTAGE | MAX. WIPER CUR. | |
| Ω | W | V | mA | ppm/°C |
| 10 | 0.5 | 2.24 | 224 | ± 100 |
| 22 | 0.5 | 3.32 | 151 | |
| 47 | 0.5 | 4.85 | 103 | |
| 100 | 0.5 | 7.07 | 71 | |
| 220 | 0.5 | 10.5 | 48 | |
| 470 | 0.5 | 15.3 | 33 | |
| 1K | 0.5 | 22.4 | 22 | |
| 2K2 | 0.5 | 33.2 | 15 | |
| 4K7 | 0.5 | 48.5 | 10 | |
| 10K | 0.5 | 70.7 | 7.1 | |
| 22K | 0.5 | 105 | 4.8 | |
| 47K | 0.5 | 153 | 3.3 | |
| 100K | 0.5 | 224 | 2.2 | |
| 220K | 0.28 | 250 | 1.1 | |
| 470K | 0.13 | 250 | 0.5 | |
| 1M | 0.06 | 250 | 0.3 | |

MARKING

- Printed:
- VISHAY trademark
 - model
 - ohmic value
 - manufacturing date
 - marking of terminal 3

| PACKAGING |
|---|
| <ul style="list-style-type: none"> - In box of 200 pieces, code BO200 - In tube by 25 pieces, code "TU25" |

| ORDERING INFORMATION | | | | |
|----------------------|----------------------|-------------------------------|------------------|-------------|
| 43P | 103 | T000 | BO200 | e3 |
| MODEL AND PIN STYLE | EIA RESISTANCE VALUE | SPECIAL (omit if standard) | PACKAGING | LEAD FINISH |
| | | T601 - Panel mount | on request: TU25 | e3: pure Sn |

| SAP PART NUMBERING GUIDELINES | | | | | | | | | | | | | | |
|---|---|---|---|-------------|---|---|------|----------------|---|---|-------------------------|--|--|--|
| M | 4 | 3 | P | 1 | 0 | 3 | K | B | 4 | 0 | | | | |
| MODEL | | | | OHMIC VALUE | | | TOL. | PACKAGING CODE | | | SPECIAL (IF APPLICABLE) | | | |
| See the end of this data book for conversion tables | | | | | | | | | | | | | | |



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