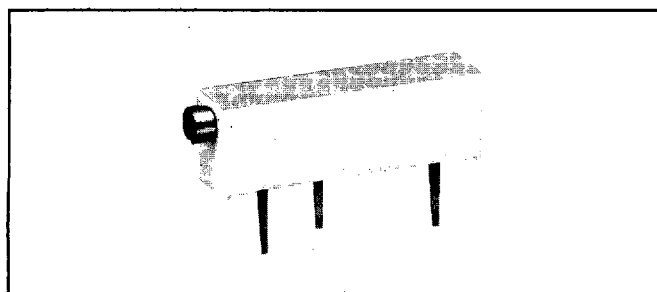


MODEL T18

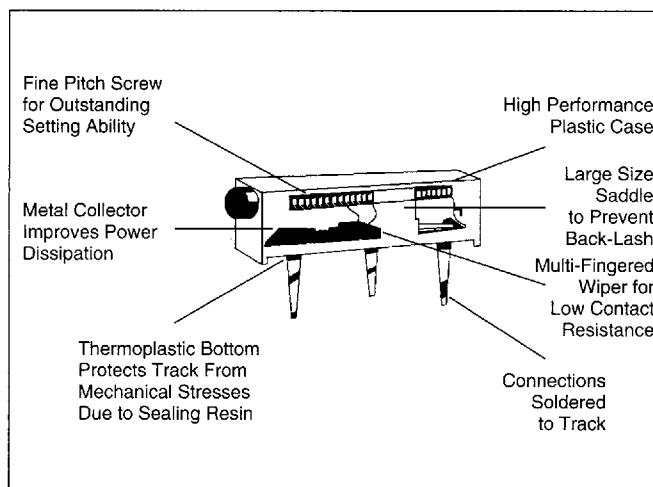
Cermet Trimmers

3/4" [19.05mm] Rectangular, Multiturn Industrial Grade



FEATURES

- 0.75 watt at + 70°C
- 3/4" [19.05mm] rectangular
- Fully sealed container
- Logarithmic taper available
- Low contact resistance variation



| STANDARD RESISTANCE ELEMENT DATA | | | | |
|-----------------------------------|--------------------------------|---------------------------------|-----------------------------------|-----------------------------------|
| STANDARD RESISTANCE VALUES (Ohms) | LINEAR LAW | | | TC - 55°C + 125°C PPM/°C |
| | MAXIMUM POWER @ + 70°C (Watts) | MAXIMUM WORKING VOLTAGE (Volts) | MAX. CURRENT THROUGH ELEMENT (mA) | |
| 10 | 0.75 | 2.7 | 270.0 | 0 + 200 |
| 20 | 0.75 | 4.06 | 184.0 | |
| 50 | 0.75 | 5.93 | 126.0 | |
| 100 | 0.75 | 8.7 | 87.0 | |
| 200 | 0.75 | 12.8 | 58.0 | ± 100 |
| 500 | 0.75 | 18.7 | 40.0 | |
| 1k | 0.75 | 27.4 | 27.0 | |
| 2k | 0.75 | 40.6 | 18.0 | |
| 5k | 0.75 | 59.3 | 11.0 | |
| 10k | 0.75 | 86.6 | 9.0 | |
| 20k | 0.75 | 128.4 | 5.8 | |
| 50k | 0.75 | 187.0 | 4.0 | |
| 100k | 0.625 | 250.0 | 2.5 | |
| 200k | 0.28 | 250.0 | 1.09 | |
| 500k | 0.13 | 250.0 | 0.44 | |
| 1M | 0.06 | 250.0 | 0.25 | |
| 2M | 0.028 | 250.0 | 0.11 | |

ELECTRICAL SPECIFICATIONS

Electrical Travel: 15 turns ± 1.

Resistance Range: 10 ohm to 2.2 Megohm.

Standard Series: 1 - 2 - 5 and E3 (1 - 2.2 - 4.7).

Resistance Tolerance: ± 10% standard. ± 5% available.

Temperature Coefficient: ± 70PPM/°C (- 55°C to + 125°C) for Rn ≥ 100 ohm typical.

Power Rating (Linear law): 0.75 watt at + 70°C.

Limiting Element Voltage (Linear law): 250 volts.

Contact Resistance Variation: 2% or 2 ohm.

End Resistance Variation: 1 ohm typical.

Dielectric Strength: 1000 V RMS.

Insulation Resistance: 10⁶ Megohm (500 VDC).

MECHANICAL SPECIFICATIONS

Mechanical Travel: 18 turns ± 5.

Operating Torque: 2.8 oz. in. maximum.

End Stop Torque: Clutch action.

Unit Weight: 0.04 ounce maximum.

Resistive Element: Cermet.

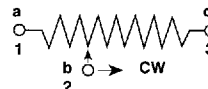
ENVIRONMENTAL SPECIFICATIONS

Temperature Limits: - 55°C to + 125°C.

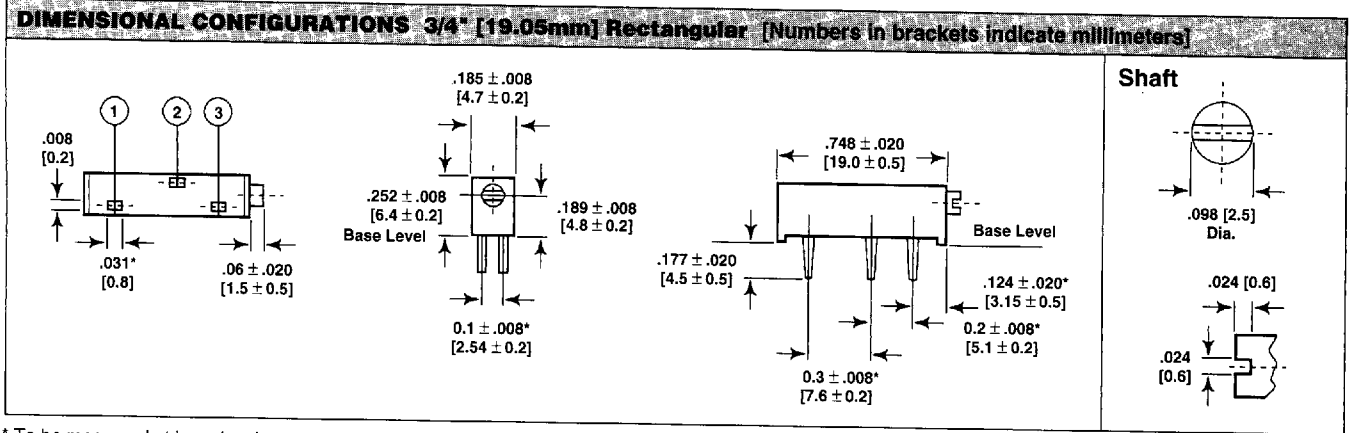
Climatic Category: 55/100/56.

Sealing: Fully sealed container IP67. Water washable.

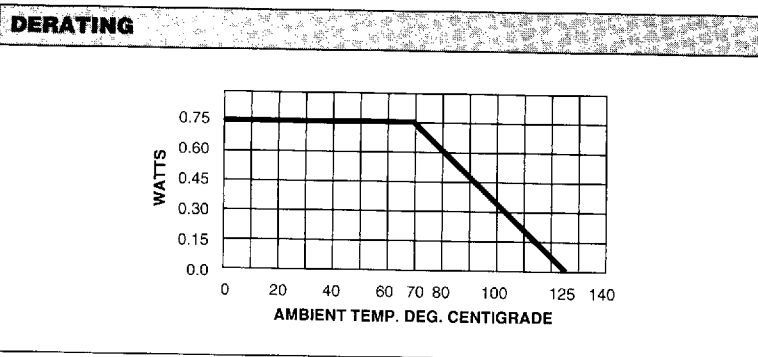
CIRCUIT DIAGRAM



MODEL T18



| ENVIRONMENTAL PERFORMANCE | | | |
|---------------------------|--|--|--------------------------------------|
| TEST | CONDITIONS | TYPICAL VALUES AND DRIFTS | |
| | | $\frac{\Delta R_{ac}}{R_{ac}} \%$ | $\frac{\Delta R_{ab}}{R_{ab}} \%$ |
| Climatic Sequence | Phase A dry heat + 125°C Phase B damp heat Phase C cold - 55°C Phase D damp heat 5 cycles | 0.5% | 1% |
| Long Term Damp Heat | 56 days | 0.5% Dielectric strength: 1000 V RMS Insulation resistance: > 10 ⁴ MΩ | 1% |
| Rapid Temperature Change | 5 cycles - 55°C at + 125°C | 0.5% | $\Delta \frac{V_{ab}}{V_{ac}} 1\%$ |
| Shock | 50 g 11ms 3 successive shocks in 3 directions | 0.2% | 0.3% |
| Vibration | 10 - 55 Hz 0.75mm or 10 g during 6 hours | 0.2% | $\Delta \frac{V_{ab}}{V_{ac}} 0.3\%$ |
| Rotational Life | 200 cycles | 1% Contact resistance variation: < 2% R _n | — |
| Load Life | 1000 hours at rated power 90°/30° - ambient temperature + 70°C | 1% Contact resistance variation: < 1% R _n | 2% |



PART MARKING

- Trademark
- Model
- Value
- Tolerance
- Date code
- Marking of terminal: 3

HOW TO ORDER

| | | | |
|--|----------------|--------------------|-----------------|
| T18 MODEL | 220kΩ VALUE | ± 10% TOLERANCE | TU PACKAGING |
| <div>No Code = Plastic box of 100 pieces TU = In tube by 25 pieces</div> | | | |

Note: On delivery, the wiper is positioned at mid-travel.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Vishay:](#)

[T18 20K 10%](#)