

3/8" Square (10mm) Multi-Turn Cermet Trimmer



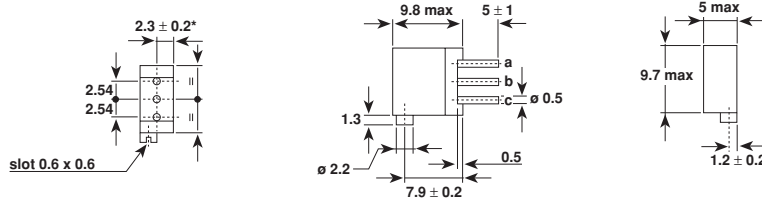
FEATURES

- Industrial Grade
- 0.5 Watt at 70°C
- CECC 41 100
- MIL-R-22097
- Good stability
- Contact resistance variation < 1% typical
- Meets MIL-R-22097 specifications

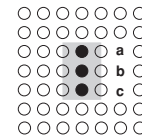
The Model 64 is a small size trimmer - 3/8" x 3/8" x 3/16" - answering PC board mounting requirements. Five versions are available which differ by the position of the control screw in relation to the PC board plane and by the spacing of the terminals. Excellent operational stability is provided by the use of a cermet element.

DIMENSIONS in millimeters

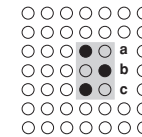
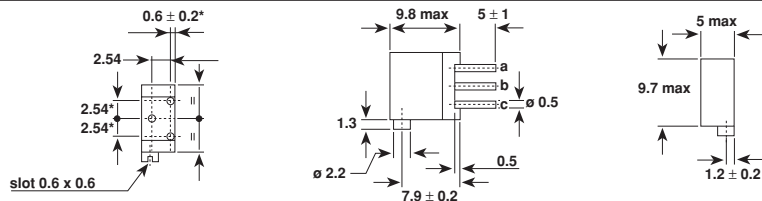
64X



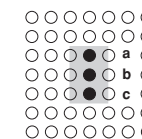
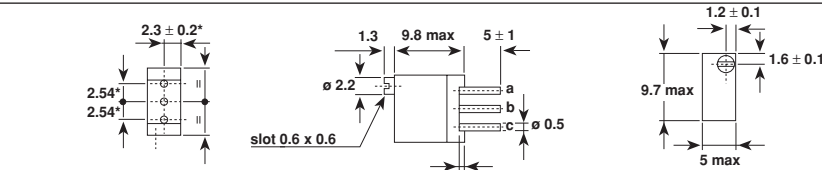
Terminal Spacing on a 2.54 PCB



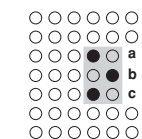
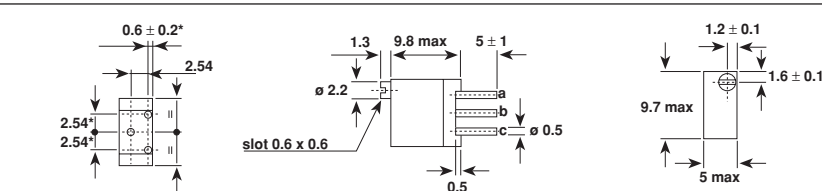
64Z



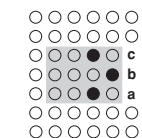
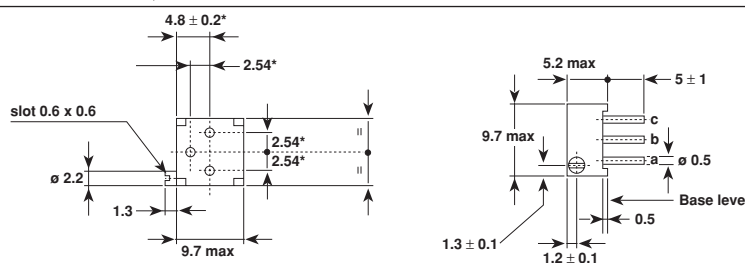
64W



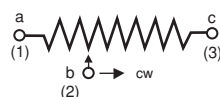
64Y



64P



CIRCUIT DIAGRAM



*to be measured at base level



3/8" Square (10mm)
Multi-Turn Cermet Trimmer

Vishay Spectrol

| ELECTRICAL SPECIFICATIONS | | |
|---------------------------------------|-------------|---------------------------------------|
| Resistive Element | | cermet |
| Electrical Travel | | 19 turns ± 2 |
| Resistance Range | | 10Ω to 2.2MΩ |
| Standard series E3 | | 1 - 2 - 2.5 - 5 |
| Tolerance | Standard | ± 10% |
| | On Request | ± 5% |
| Power Rating | Linear | 0.5W at + 70°C |
| | Logarithmic | not applicable |
| Temperature Coefficient | | See Standard Resistance Element Table |
| Limiting Element Voltage (Linear Law) | | 250V |
| Contact Resistance Variation | | 2% Rn or 2Ω |
| End Resistance (Typical) | | 1Ω |
| Dielectric Strength (RMS) | | 1000V |
| Insulation Resistance (500VDC) | | 10 ⁶ MΩ |

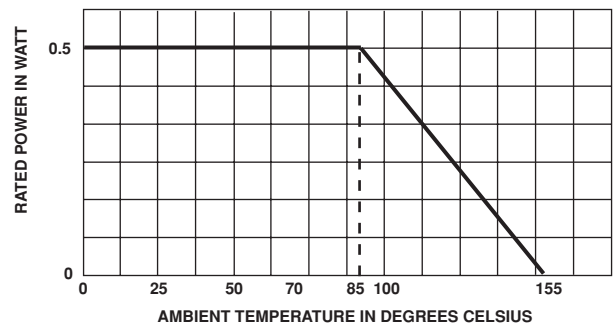
MECHANICAL SPECIFICATIONS

| | |
|-----------------------------|---------------|
| Mechanical Travel | 22 turns ± 5 |
| Operating Torque (max. Ncm) | 1.5 |
| End Stop Torque | clutch action |
| Unit Weight (max. g) | 1.2 |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-------------------|--------------------------------|
| Temperature Range | - 55°C to + 155°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 | ± 1% Contact res. variation: < 1% Rn | ± 2% |
| Climatic Sequence | Phase A dry heat 125°C - 30% Pr 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: 1000V RMS Insulation resistance: > 10 ⁴ MΩ | ± 1% |
| Rapid Temperature Change | 5 cycles - 55°C at + 125°C | ± 0.5% | $\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 1% |
| Shock | 50 g at 11m secs 3 successive shocks in 3 directions | ± 0.1% | ± 0.2% |
| Vibration | 10-55 Hz 0.75mm or 10 g during 6 hours | ± 0.1% | $\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 0.2% |
| Rotational Life | 200 cycles | ± 2% Contact res. variation: < 1% Rn | |

**STANDARD RESISTANCE ELEMENT DATA**

| STANDARD RESISTANCE VALUES | LINEAR LAW | | | T.C. -55°C +125°C |
|----------------------------|--------------------|----------------------|---------------------------|-------------------------|
| | MAX. POWER AT 85°C | MAX. WORKING VOLTAGE | MAX. CUR. THROUGH ELEMENT | |
| Ω | W | V | mA | ppm/°C |
| 10 | 0.5 | 2.2 | 224 | 0 |
| 22 | ↓ | 3.3 | 150 | |
| 47 | | 4.8 | 103 | |
| 100 | | 7 | 70 | ± 100 |
| 220 | | 10.5 | 47 | |
| 470 | | 15.3 | 32 | |
| 1k | | 22.4 | 22 | |
| 2.2k | | 33.2 | 15 | |
| 4.7k | | 48.5 | 10 | |
| 10k | | 70.7 | 7 | |
| 22k | | 105 | 4.8 | |
| 47k | ↓ | 153 | 3.2 | |
| 100k | 0.5 | 224 | 2.2 | |
| 220k | 0.28 | 250 | 1.1 | |
| 470k | 0.13 | 250 | 0.53 | |
| 1M | 0.06 | 250 | 0.25 | |
| 2.2M | 0.028 | 250 | 0.11 | |

MARKING

Printed:

- VISHAY trademark
- series
- style
- ohmic value (in Ω, kΩ, MΩ)
- tolerance (in %)
- manufacturing date
- marking of terminal 3

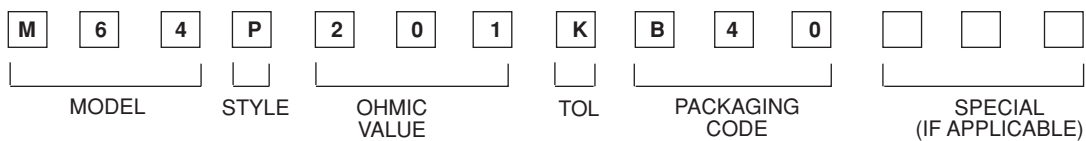
PACKAGING

- In bulk (box of 200 pieces), code B0200
- On request in tube

ORDERING INFORMATION64
MODELP
TERMINAL STYLE201
EIA
RESISTANCE CODE

P, W, X, Y or Z

NB. On delivery the wiper is positioned at mid-travel.

SAP PART NUMBERING GUIDELINES

See the end of this data book for conversion tables