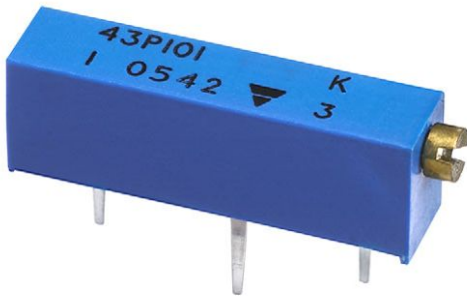


3/4" Rectangular (19 mm) Multi-Turn Cermet Trimmer



FEATURES

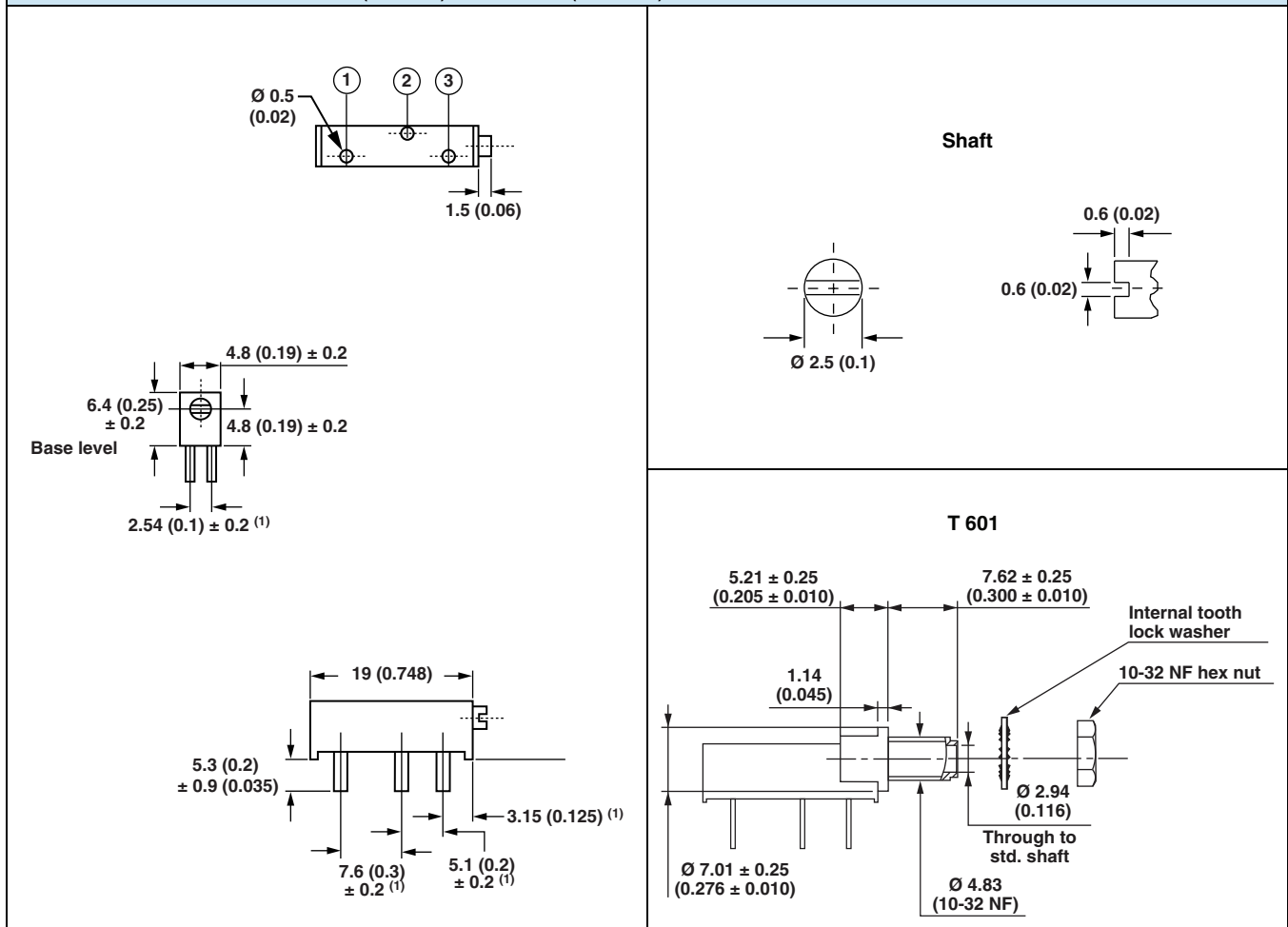
- 0.75 W at 70 °C
- Wide ohmic value range (10 Ω to 5 MΩ)
- Panel mount available
- Multi-finger wiper for better C.R.V.
- Tests according to CECC 41000 or IEC 60393-1
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

DESIGN SUPPORT TOOLS

[click logo to get started](#)
3D
Models
Available

DIMENSIONS in millimeters (inches) ± 0.5 mm (± 0.02")


Note

(1) To be measured at base level

| ELECTRICAL SPECIFICATIONS | |
|--|---------------------------------------|
| Resistive element | Cermet |
| Electrical travel | 15 turns \pm 1 |
| Resistance range | 10 Ω to 5 M Ω |
| Standard series E3 | 1 - 2 - 5 |
| Tolerance | Standard \pm 10 % |
| Power rating | Linear 0.75 W at +70 °C |
| Circuit diagram | |
| Temperature coefficient | See Standard Resistance Element table |
| Limiting element voltage (linear law) | 400 V |
| Contact resistance variation | 1 % R _n or 1 Ω max. |
| End resistance (typical) | 1 % or 2 Ω |
| Dielectric strength (RMS) | 1000 V |
| Insulation resistance (500 V _{DC}) | 10 ³ M Ω min. |

| MECHANICAL SPECIFICATIONS | |
|----------------------------------|----------------------------|
| Mechanical travel | 18 turns \pm 5 |
| Operating torque (max. Ncm) | 3.5 |
| End stop torque | Clutch action |
| Net weight (max. g) | 1.2 |
| Wiper (actual travel) | Positioned at approx. 50 % |
| Terminals | Pure Sn (code e3) |

| ENVIRONMENTAL SPECIFICATIONS | |
|-------------------------------------|---------------------|
| Temperature range | -55 °C to +125 °C |
| Climatic category | 55/125/4 |
| Sealing | Fully sealed - IP67 |



| PERFORMANCES | | | | |
|--------------------------|---|---------------------------|------------------------------|--|
| TESTS | CONDITIONS | TYPICAL VALUES AND DRIFTS | | |
| | | $\Delta R_T/R_T$ (%) | $\Delta V_{1-2}/V_{1-3}$ (%) | OTHER |
| Load life | 1000 h at rated power 90'/30' - ambient temp. 70 °C | ± 4 % | - | - |
| Humidity | 4 days | ± 3 % | - | Dielectric strength: 1000 V _{RMS} Insulation resistance: > 20 MΩ |
| Rapid temperature change | 5 cycles -55 °C to +125 °C | ± 0.5 % | ± 2 % | - |
| Shock | 50 g at 11 ms 3 successive shocks in 3 directions | ± 2 % | ± 2 % | - |
| Vibration | 10 Hz to 55 Hz 0.75 mm or 10 g during 6 h | ± 2 % | ± 2 % | - |
| Rotational life | 200 cycles | ± (3 % + 1 Ω) | - | Contact res. variation: < 1 % Rn |

Note

- Nothing stated herein shall be construed as a guarantee of quality or durability

| 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 | 0.75 | 2.74 | 274 | ± 100 |
| 20 | 0.75 | 3.87 | 194 | |
| 50 | 0.75 | 6.12 | 122 | |
| 100 | 0.75 | 8.66 | 87 | |
| 200 | 0.75 | 12.2 | 61 | |
| 500 | 0.75 | 19.4 | 39 | |
| 1K | 0.75 | 27.4 | 27 | |
| 2K | 0.75 | 38.7 | 19 | |
| 5K | 0.75 | 61.2 | 12 | |
| 10K | 0.75 | 86.6 | 8.7 | |
| 20K | 0.75 | 122 | 6.1 | |
| 50K | 0.75 | 194 | 3.9 | |
| 100K | 0.75 | 274 | 2.7 | |
| 200K | 0.75 | 387 | 1.9 | |
| 500K | 0.32 | 400 | 0.8 | |
| 1M | 0.16 | 400 | 0.4 | |
| 2M | 0.08 | 400 | 0.2 | |
| 4M | 0.03 | 400 | 0.08 | |

| MARKING |
|---|
| <ul style="list-style-type: none"> • Vishay trademark • Vishay part number or model, ohmic value code and tolerance code • Manufacturing date • Marking of terminals 1 and/or 3 |

| PACKAGING |
|--|
| <ul style="list-style-type: none"> • In box of 200 pieces code B40 (BO200) <p>On request:</p> <ul style="list-style-type: none"> • In box of 100 pieces code B30 (BO100) • In tube of 25 pieces code T10 (TU25) |



| ORDERING INFORMATION (Part Number) | | | | | | | | | | | | | | |
|------------------------------------|-------|---|--------------------------------------|---|---|---|-----------|---|---|---|---|---|---|---|
| M | 4 | 3 | P | 1 | 0 | 3 | K | B | 4 | 0 | T | 6 | 0 | 1 |
| Model | STYLE | | OHMIC VALUE | | | | TOLERANCE | | PACKAGING | | | SPECIAL NUMBER | | |
| M43 | P | | From 100 Ω to 5 MΩ 103 = 10 kΩ | | | | K = 10 % | | B40 = box 200 pieces On request: B30 = box 100 pieces T10 = tube 25 pieces | | | (If applicable) Given by Vishay for custom design | | |

| DESCRIPTION (for information only) | | | | | | |
|------------------------------------|-------|-------|-----------|---------|-----------|-------------|
| 43 | P | 10K | 10 % | T601 | BO100 | e3 |
| MODEL | STYLE | VALUE | TOLERANCE | SPECIAL | PACKAGING | LEAD FINISH |

| RELATED DOCUMENTS | |
|---|--|
| APPLICATION NOTES | |
| Potentiometers and Trimmers | www.vishay.com/doc?51001 |
| Guidelines for Vishay Sfernice Resistive and Inductive Components | www.vishay.com/doc?52029 |



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