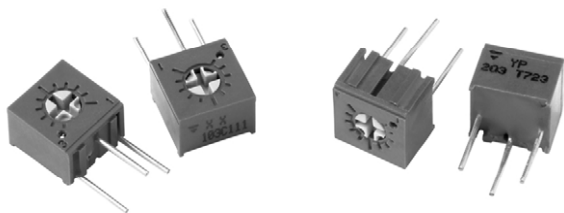


1/4" Square Single-Turn Cermet Sealed Trimmer



FEATURES

- Industrial grade
- Fully sealed
- Miniature package
- Rotor designed for automatic machine adjust interface
- Withstands harsh environments and immersion cleaning process
- Tests according to CECC 41000 or IEC 60393-1
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



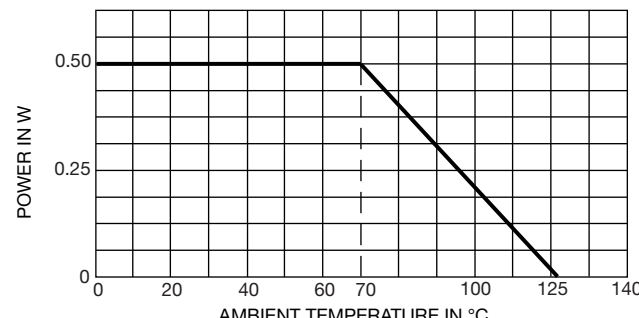
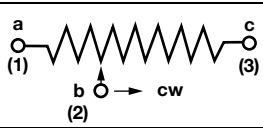
RoHS
COMPLIANT

DESIGN SUPPORT TOOLS

[click logo to get started](#)

3D
Models
Available

| DIMENSIONS in millimeters (± 0.25 mm) | | |
|---|---------------------|---------------------|
| <p>Common dimensions Top adjust T73Y</p> <p>Cruciform slot Ø 3 long 2.77, wide 0.64 - deep 0.89</p> | <p>T73YP</p> | <p>T73YE</p> |
| | <p>T73YU</p> | <p>T73YB</p> |
| <p>Common dimensions Side adjust T73X</p> <p>Cruciform slot Ø 3 long 2.77, wide 0.64 - deep 0.89</p> | <p>T73XX</p> | <p>T73XH</p> |
| | <p>T73XW</p> | <p>T73XF</p> |

| ELECTRICAL SPECIFICATIONS | |
|--|---|
| Resistive element | Cermet |
| Electrical travel | 240° nominal |
| Resistance range | 10 Ω to 2 MΩ |
| Standard series | 1 - 2 - 5 |
| Tolerance standard | 10 % |
| Power rating | linear 0.5 W at +70 °C  |
| Circuit diagram |  |
| Temperature coefficient | ± 100 ppm/°C |
| Limiting element voltage | 300 V |
| Contact resistance variation | 1 % R _n or 3 Ω max. whichever is greater |
| Absolute minimum resistance | 1 % R _n or 2 Ω max. whichever is greater |
| Adjustability | ± 0.05 % voltage ± 0.15 % resistance |
| Resolution | infinite |
| Insulation resistance (500 V _{DC}) | 10 ³ MΩ minimum |
| Dielectric strength | 900 V _{AC} sea level 350 V _{AC} 80 000 feet |

| MECHANICAL SPECIFICATIONS | |
|----------------------------------|-------------------|
| Mechanical travel | 270° |
| Operating torque (max. Ncm) | 2.1 |
| End stop torque (max. Ncm) | 4.9 |
| Unit weight (max. g) | 0.6 |
| Terminals | Pure Sn (code e3) |

| ENVIRONMENTAL SPECIFICATIONS | |
|-------------------------------------|---------------------|
| Temperature range | -55 °C to +125 °C |
| Climatic category | 55/100/56 |
| Sealing | Fully sealed - IP67 |



| PERFORMANCES | | | |
|-----------------|------------------------------|---------------------------|---|
| TESTS | CONDITIONS | TYPICAL VALUES AND DRIFTS | |
| Load life | 1000 h - 0.5 W at +70 °C | $\Delta R_T/R_T$ (%) | CRV < 3 Ω or 3 % whichever is greater |
| Shock | | 3 % | |
| Vibration | 100 g | ± 1 % | $\Delta V/V \leq \pm 1$ % |
| Humidity | 30 g | ± 1 % | $\Delta V/V \leq \pm 1$ % |
| Rotational life | MIL-STD202 method 103 - 96 h | ± 2 % | i.R. 10 M Ω |
| Load life | 200 cycles | ± 4 % | CRV < 3 Ω or 3 % whichever is greater |

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 ppm/°C |
| | MAX. POWER AT 70 °C | MAX. WORKING VOLTAGE | MAX. WIPER CURRENT | |
| Ω | W | V | mA | |
| 10 | 0.50 | 2.2 | 224 | ± 100 |
| 20 | 0.50 | 3.2 | 160 | |
| 50 | 0.50 | 5.0 | 100 | |
| 100 | 0.50 | 7.1 | 70 | |
| 200 | 0.50 | 10.0 | 50 | |
| 500 | 0.50 | 15.8 | 32 | |
| 1K | 0.50 | 22.4 | 22 | |
| 2K | 0.50 | 31.6 | 16 | |
| 5K | 0.50 | 50 | 10 | |
| 10K | 0.50 | 70.7 | 7.1 | |
| 20K | 0.50 | 100 | 5.0 | |
| 50K | 0.50 | 158.1 | 3.2 | |
| 100K | 0.50 | 223.6 | 2.2 | |
| 200K | 0.45 | 300 | 1.5 | |
| 500K | 0.18 | 300 | 0.60 | |
| 1M | 0.09 | 300 | 0.30 | |
| 2M | 0.05 | 300 | 0.15 | |

MARKING

- Vishay trademark
- Resistance code
- Terminal numbers
- Date code
- Model

PACKAGING

- In tube of 50 pieces code T20 (TU50)
- On request: tape and reel for style YU, code R32 (TR750) and style XW code R15 (TR1000)



| ORDERING INFORMATION (part number) | | | | | | | | | | | | | |
|------------------------------------|--|---|---|--|---|---|--|---|---|---|---|---|--|
| T | 7 | 3 | Y | P | 5 | 0 | 4 | K | T | 2 | 0 | | |
| MODEL | STYLE | | | OHMIC VALUE | | | TOLERANCE | | PACKAGING | | | SPECIAL NUMBER | |
| T73 | XF XH XW XX YB YE YM YP YU | | | From 10 Ω to 2.2 MΩ 103 = 10 kΩ | | | K = 10 % on request J = 5 % | | T20 = tube 50 pieces On request: R15 = reel 1000 pieces for style XW R32 = reel 750 for style YU | | | (If applicable) Given by Vishay for custom design | |

| DESCRIPTION (for information only) | | | | | |
|------------------------------------|-------|-------|-----------|-----------|-------------|
| T73 | YP | 500K | 10 % | TU | e3 |
| MODEL | STYLE | VALUE | TOLERANCE | 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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