Vishay Sfernice



1/4" Square Single-Turn Cermet Sealed Trimmers

FEATURES





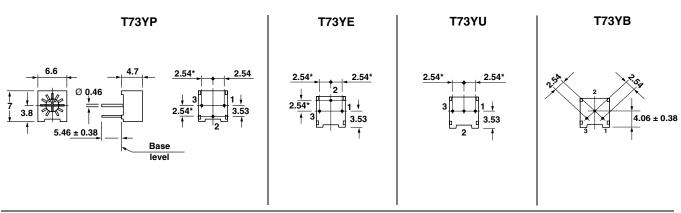


- · Miniature package
- Rotor designed for automatic machine adjust interface
- Withstands harsh environments and immersion cleaning process

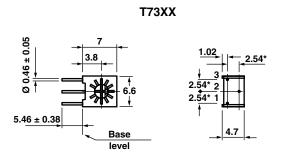


DIMENSIONS in millimeters

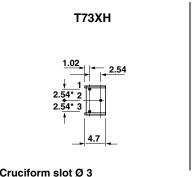
T73Y Top adjust



T73X Side adjust

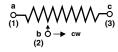


Tolerances unless otherwise specified \pm 0.25 mm

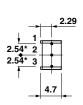


Cruciform slot Ø 3 long 2.77, wide 0.64 - deep 0.89

CIRCUIT DIAGRAM



T73XW







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| ELECTRICAL SP | ECIFICATIONS | | | |
|--------------------------|--------------|---|--|--|
| Resistive Element | | Cermet | | |
| Electrical Travel | | 240° nominal | | |
| Resistance Range | | 10 Ω to 2 M Ω | | |
| Standard Series | | 1 - 2 - 5 | | |
| Tolerance Standard | | ± 10 % | | |
| Power Rating | Linear | 0.5 W at 70 °C | | |
| | Logarithmic | not applicable | | |
| Temperature Coefficier | nt | ± 100 ppm/°C | | |
| Limiting Element Voltage | ge | 300 V | | |
| Contact Resistance Va | riation | 1 % or 3 Ω max. whichever is greater | | |
| Absolute Minimum Res | sistance | 1 % or 2 Ω max. whichever is greater | | |
| Adjustability | | ± 0.05 % voltage ± 0.15 % resistance | | |
| Resolution | | infinite | | |
| Insulation Resistance (| (500 V DC) | $10^3\mathrm{M}\Omega$ minimum | | |
| Dielectric Strength | | 900 Vac sea level 350 Vac 80 000 feet | | |

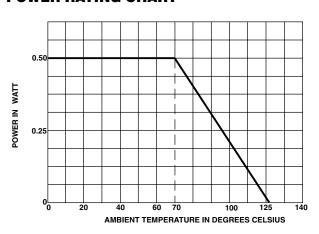
MECHANICAL SPECIFICATIONS

Mechanical Travel 270° **Operating Torque (max. Ncm)** 2.1 **End Stop Torque (max. Ncm)** 4.9 Unit Weight (max. g) 0.6

ENVIRONMENTAL SPECIFICATIONS

Temperature Range - 55 °C to + 125 °C **Climatic Category** 55/100/56 **Seal Test** 85 °C Fluorinert** **Flammability UL 94-VO** ** Fluorinert is a registered trademark of 3M Co.

POWER RATING CHART



| PERFORMANCE | | | | |
|-----------------|----------------------------------|--|--|--|
| TESTS | CONDITIONS | TYPICAL VALUES AND DRIFTS | | |
| Load Life | 1000 hours - 0.5 W at + 70 °C | $\frac{\Delta R}{R} \leq 3 \ \% \\ \text{CRV} \\ \text{whichever is } \\ \text{greater}$ | | |
| Shock | 100 g | $\frac{\Delta R}{R} < \pm 1 \% \qquad \frac{\Delta V}{V} < \pm 1 \%$ | | |
| Vibration | 30 g | $\frac{\Delta R}{R} < \pm 1 \% \qquad \frac{\Delta V}{V} \leq \pm 1 \%$ | | |
| Humidity | Mil-STD202 method 103 - 96 hours | $\frac{\Delta R}{R}$ < ± 2 % i.R. 10 M Ω | | |
| Rotational Life | 200 cycles | $\frac{\Delta R}{R} < \pm 4 \% \qquad \begin{array}{c} \text{CRV} < 3 \Omega \text{or}3 \% \\ \text{whichever is} \\ \text{greater} \end{array}$ | | |

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| STANDARD RESISTANCE ELEMENT DATA | | | | | |
|----------------------------------|---------------------------|----------------------------|-----------------------|---------------------|--|
| STANDARD | | TCR | | | |
| RESISTANCE VALUES | MAX. POWER AT 70 °C | MAX. WORKING VOLTAGE | MAX. WIPER CUR. | - 55 °C + 125 °C | |
| Ω | W | V | mA | ppm/°C | |
| 10 | 0.5 | 2.2 | 224 | | |
| 20 | 1 | 3.2 | 160 | | |
| 50 | | 5 | 100 | | |
| 100 | | 7.1 | 70 | | |
| 200 | | 10 | 50 | | |
| 500 | | 15.8 | 32 | | |
| 1K | | 22.4 | 22 | | |
| 2K | | 31.6 | 16 | ± 100 | |
| 5K | | 50 | 10 | | |
| 10K | | 70.7 | 7.1 | | |
| 20K | ↓ | 100 | 5 | | |
| 50K | ▼ | 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

Printed: VISHAY trademark, resistance code, terminal numbers, date code, manufacturer's model number and style

PACKAGING

- In tube by 50 pieces, code TU50
- Tape and reel for model YU, code TR750 and XW, code TR100

| ORDERING INFORMATION | | | | | | | |
|----------------------|-------------------|----------------------|----------------------------|---------------------|-------------------------------------|-------------------|--|
| T73 SERIES | Y I STY | | 500 k Ω OHMIC VALUE | ± 10 % TOLERANCE | TU50 PACKAGING | e3 LEAD FINISH | |
| | XX XH XW | YP YE YU YB | | | TU50 On request: TR750 TR1000 | e3: pure Sn | |

| SAP PART NUMBERING GUIDELINES | | | | | | |
|---|-------|----------------|----------|-------------------|----------------------------|--|
| T 7 3 | Y P | 5 0 4 | K | T 2 0 | | |
| MODEL | STYLE | OHMIC VALUE | TOL | PACKAGING CODE | SPECIAL (IF APPLICABLE) | |
| See the end of this data book for conversion tables | | | | | | |



Vishay

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