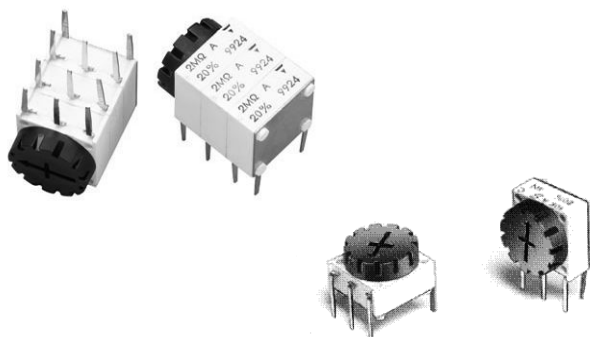


# 12.5 mm Square Modular Single-Turn Cermet Trimmer



## FEATURES

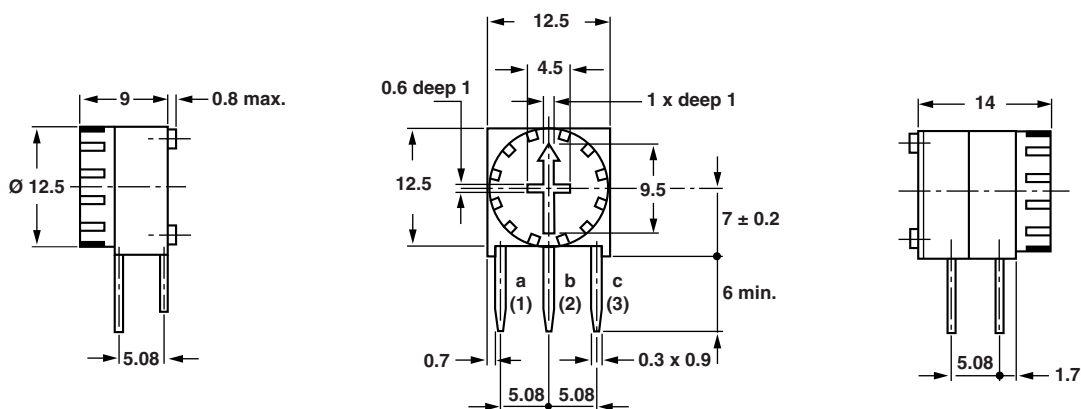
- Knob included
- 0.5 W at 70 °C
- Industrial grade
- Up to 5 modules
- Switches and detents available
- Tests according to CECC 41000 or IEC 60393-1
- Available in conductive plastic
- High rotational life up to 2000 cycles
- X and Y styles
- Material categorization: for definitions of compliance please see [www.vishay.com/doc299912](http://www.vishay.com/doc299912)



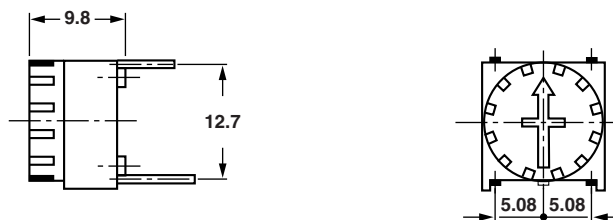
**RoHS**  
COMPLIANT

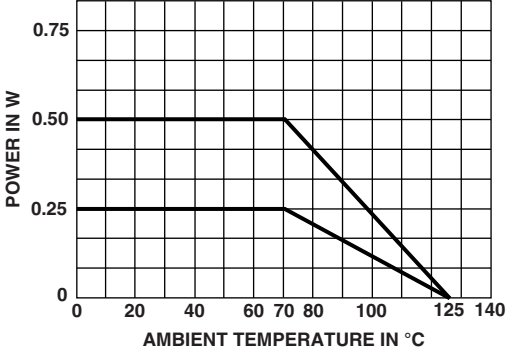
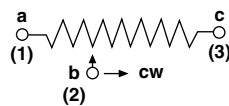
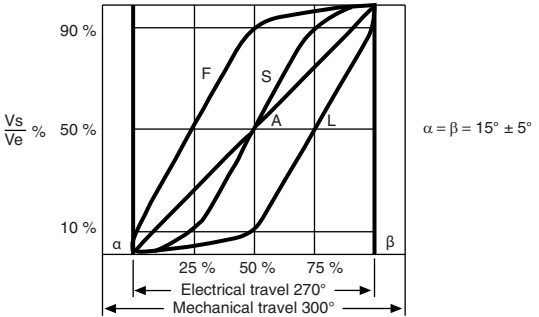
## DIMENSIONS in millimeters ( $\pm 0.5$ mm)

### T11X



### T11Y



| ELECTRICAL SPECIFICATIONS                                      |                                                                                      |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Resistive element                                              | Cermet                                                                               |
| Electrical travel                                              | $270^\circ \pm 10^\circ$                                                             |
| Resistance range                                               | $22 \Omega$ to $4.7 \text{ M}\Omega$                                                 |
| Standard series E3                                             | 1 - 2.2 - 4.7 and on request 1 - 2 - 5                                               |
| Tolerance                                                      | Standard                                                                             |
|                                                                | $\pm 20 \%$                                                                          |
| On request                                                     |                                                                                      |
|                                                                | $\pm 5 \%$ or $\pm 10 \%$                                                            |
| Power rating                                                   | Linear                                                                               |
|                                                                | $0.5 \text{ W at } +70^\circ \text{C}$                                               |
| Logarithmic laws, L, F, or S and ganged elements               | $0.25 \text{ W at } +70^\circ \text{C}$                                              |
| Power rating chart                                             |    |
| Circuit diagram                                                |   |
| Resistance laws                                                |  |
| Temperature coefficient (for $R_n \geq 100 \Omega$ ) (typical) | $\pm 100 \text{ ppm}/^\circ\text{C}$                                                 |
| Limiting element voltage                                       | 350 V                                                                                |
| Contact resistance variation                                   | 2 % $R_n$ or $3 \Omega$ (linear law)                                                 |
| End resistance (typical)                                       | $2 \Omega$                                                                           |
| Independent linearity (typical)                                | $\pm 3 \%$ (linear law)                                                              |
| Middle keying point (C V1M typical)                            | $\pm 3 \%$                                                                           |
| Insulation resistance                                          | $10^6 \text{ M}\Omega$ (500 V <sub>DC</sub> )                                        |
| Dielectric strength (RMS)                                      | 1500 V <sub>RMS</sub>                                                                |

| MECHANICAL SPECIFICATIONS  |                         |
|----------------------------|-------------------------|
| Mechanical travel          | $300^\circ \pm 5^\circ$ |
| End stop torque (max. Ncm) | 35                      |
| Mechanical life            | 2000 cycles             |
| Terminals                  | Pure Sn (code e3)       |

**Note**

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

**ENVIRONMENTAL SPECIFICATIONS**

|                   |                       |
|-------------------|-----------------------|
| Temperature range | -55 °C to +125 °C     |
| Climatic category | 55/125/56             |
| Sealing           | Enables cleaning IP64 |

**MARKING**

- Vishay trademark
- Model
- SAP code of ohmic value
- Tolerance (in %)
- Manufacturing date (4 digits)
- Marking of terminal 3

**PACKAGING****Style Y**

- Carton box of 45 pieces, code B24/BO45

**Style X**

- Carton box of 80 pieces, code B28/BO80

**ORDERING INFORMATION (part number)**

|       |        |   |                                       |   |                                               |   |                  |   |                                                                  |   |   |   |                                                               |  |  |  |
|-------|--------|---|---------------------------------------|---|-----------------------------------------------|---|------------------|---|------------------------------------------------------------------|---|---|---|---------------------------------------------------------------|--|--|--|
|       | T      | 1 | 1                                     | X | 4                                             | 7 | 0                | M | A                                                                | B | 2 | 8 |                                                               |  |  |  |
| Model | STYLE  |   | OHMIC VALUE                           |   | TOLERANCE                                     |   | TAPER            |   | PACKAGING                                                        |   |   |   | SPECIAL NUMBER                                                |  |  |  |
| T11   | X<br>Y |   | From<br>22 Ω to 4.7 MΩ<br>103 = 10 kΩ |   | M = 20 %<br>On request<br>K = 10 %<br>J = 5 % |   | A<br>L<br>F<br>S |   | Style X<br>B28 = box 80 pieces<br>Style Y<br>B24 = box 45 pieces |   |   |   | (If applicable)<br>Given by<br>Vishay<br>for custom<br>design |  |  |  |

**DESCRIPTION (for information only)**

|       |       |       |           |       |         |           |             |
|-------|-------|-------|-----------|-------|---------|-----------|-------------|
| T11   | X     | 470U  | 20 %      | A     |         | BO        | e3          |
| MODEL | STYLE | VALUE | TOLERANCE | TAPER | SPECIAL | PACKAGING | LEAD FINISH |

**RELATED DOCUMENTS****APPLICATION NOTES**

|                                                                   |                                                                        |
|-------------------------------------------------------------------|------------------------------------------------------------------------|
| Potentiometers and Trimmers                                       | <a href="http://www.vishay.com/doc?51001">www.vishay.com/doc?51001</a> |
| Guidelines for Vishay Sfernice Resistive and Inductive Components | <a href="http://www.vishay.com/doc?52029">www.vishay.com/doc?52029</a> |



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