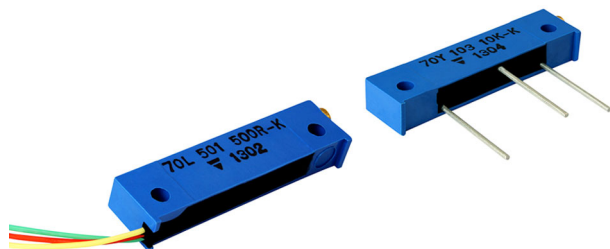


# 1 1/4" Rectangular Multi-Turn Cermet Trimmer



## FEATURES

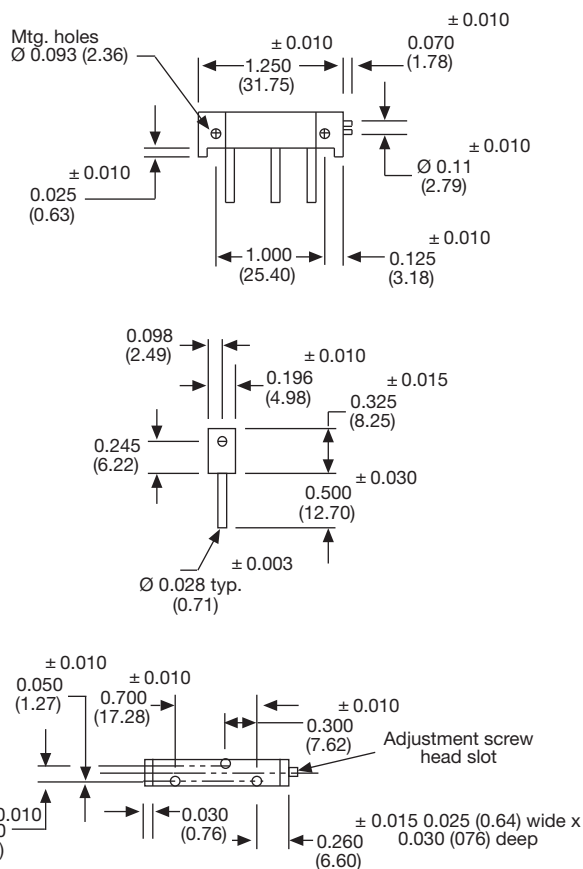
- 0.5 W at 70 °C
- Unique “T” slider block design
- Wire leads available
- CRV of 3 % or 3 Ω
- RT tolerance ± 10 % STD (± 5 % available)
- Tests according to CECC 41000 or IEC 60393-1
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



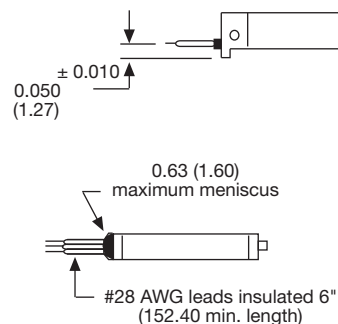
**RoHS**  
COMPLIANT

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

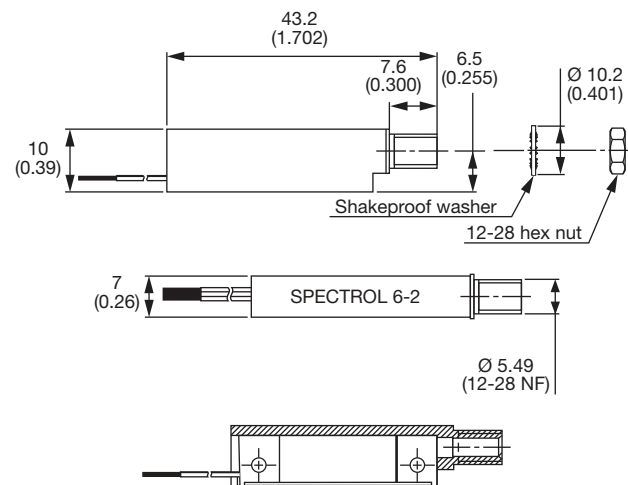
70Y

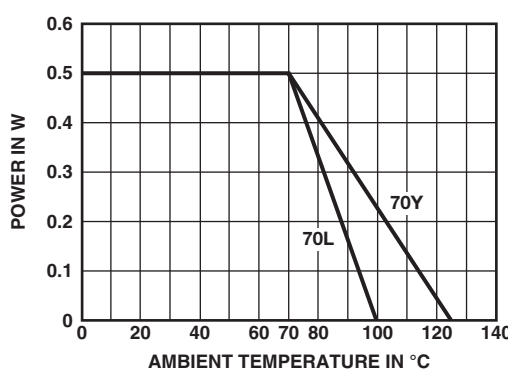
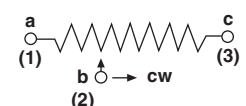


70L



T 601



| ELECTRICAL SPECIFICATIONS                       |                                                                                                          |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Resistance range                                | 10 $\Omega$ thru 2 M $\Omega$                                                                            |
| Standard resistance tolerance                   | 10 %                                                                                                     |
| End resistance                                  | 2 % maximum                                                                                              |
| Actual effective electrical travel              | 20 turns nominal                                                                                         |
| Contact resistance variation                    | 3 % or 3 $\Omega$ , whichever is greater                                                                 |
| Dielectric withstanding voltage                 | 1000 V <sub>AC</sub> at sea level, 350 V <sub>AC</sub> at 80 000 feet (24 400 meters)                    |
| Insulation resistance                           | 1000 M $\Omega$                                                                                          |
| Power rating                                    | <p>0.5 W at 70 °C</p>  |
| Circuit diagram                                 |                       |
| Limiting element voltage                        | 350 V                                                                                                    |
| Temperature coefficient of resistance (typical) | $\pm 100$ ppm/°C                                                                                         |

| MECHANICAL SPECIFICATIONS |                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------|
| Operating torque          | 5 oz. in (3.60 Ncm) maximum                                                                                   |
| Rotational life           | 200 cycles with loaded circuit, maximum change in resistance 2 % or 500 cycles without discontinuity unloaded |
| Weight                    | 0.116 oz. (3.3 g) maximum                                                                                     |
| Terminals                 | Pure Sn (code e3)                                                                                             |

**Note**

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

| ENVIRONMENTAL SPECIFICATIONS |                                                                  |
|------------------------------|------------------------------------------------------------------|
| Operating temperature range  | -55 °C to +125 °C (100 °C for leadwire style)                    |
| Terminal strength            | 2 lbs (9 N) minimum push/pull                                    |
| Sealed                       | All units sealed to permit cleaning in common solvents immersion |
| Climatic category            | M70Y: 55/125/21<br>M70L: 55/100/21                               |

| PERFORMANCES              |                                                            |                           |                              |
|---------------------------|------------------------------------------------------------|---------------------------|------------------------------|
| TESTS                     | CONDITIONS                                                 | TYPICAL VALUES AND DRIFTS |                              |
|                           |                                                            | $\Delta R_T/R_T$ (%)      | $\Delta R_{1-2}/R_{1-2}$ (%) |
| Thermal shock             | -55 °C to +125 °C, 5 cycles<br>(100 °C for leadwire style) | 1 %                       | 1 %                          |
| Shock                     | 50 g at 11 ms, 3 successive shocks in 3 directions         | 1 %                       | 1 %                          |
| Vibration                 | 10 Hz to 55 Hz 0.75 mm or 10 g for 6 h                     | 1 %                       | 1 %                          |
| Load life                 | 1000 h at rated power 90°/30°                              | 1 %                       | 5 %                          |
| High temperature exposure | +125 °C (100 °C for leadwire style)                        | 1 %                       | 5 %                          |
| Resistance to solder heat | 350 °C for 3 s                                             | 1 %                       | -                            |

**MARKING**

- Model
- Ohmic value
- Tolerance
- Circuit diagram
- Manufacturing date

**PACKAGING**

In box of 50 pieces code B25 (BO50)

**ORDERING INFORMATION** (part number)

|       |                                          |   |   |                                                  |   |   |                                    |                     |   |   |                                                         |  |  |  |
|-------|------------------------------------------|---|---|--------------------------------------------------|---|---|------------------------------------|---------------------|---|---|---------------------------------------------------------|--|--|--|
| M     | 7                                        | 0 | L | 1                                                | 0 | 3 | K                                  | B                   | 2 | 5 |                                                         |  |  |  |
| MODEL | STYLE                                    |   |   | OHMIC VALUE                                      |   |   | TOLERANCE                          | PACKAGING CODE      |   |   | SPECIAL NUMBER                                          |  |  |  |
| M70   | L = leadwire<br>Y = printed circuit pins |   |   | From 10 $\Omega$<br>to 2 M $\Omega$<br>103 = 10K |   |   | K = 10 %<br>On request:<br>J = 5 % | B25 = box 50 pieces |   |   | (If applicable)<br>Given by Vishay for<br>custom design |  |  |  |

**DESCRIPTION** (for information only)

|       |       |       |           |         |           |                |
|-------|-------|-------|-----------|---------|-----------|----------------|
| 70    | L     | 10K   | 10 %      |         | BO50      | e3             |
| MODEL | STYLE | VALUE | TOLERANCE | SPECIAL | PACKAGING | LEAD (Pb)-FREE |

**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> |
| Selector guide                                                    | <a href="http://www.vishay.com/doc?49286">www.vishay.com/doc?49286</a> |

**ACCESSORIES**

|                                    |                                                                        |
|------------------------------------|------------------------------------------------------------------------|
| Screwdrivers (to order separately) | <a href="http://www.vishay.com/doc?57015">www.vishay.com/doc?57015</a> |
|------------------------------------|------------------------------------------------------------------------|



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