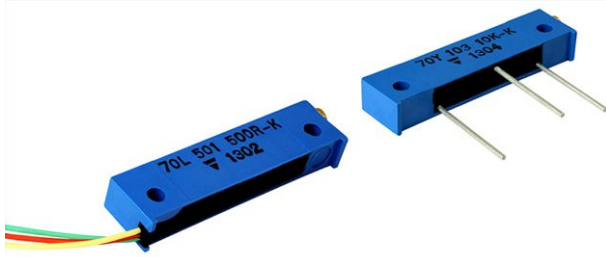


# 1 1/4" Rectangular Multi-Turn Cermet Trimmer

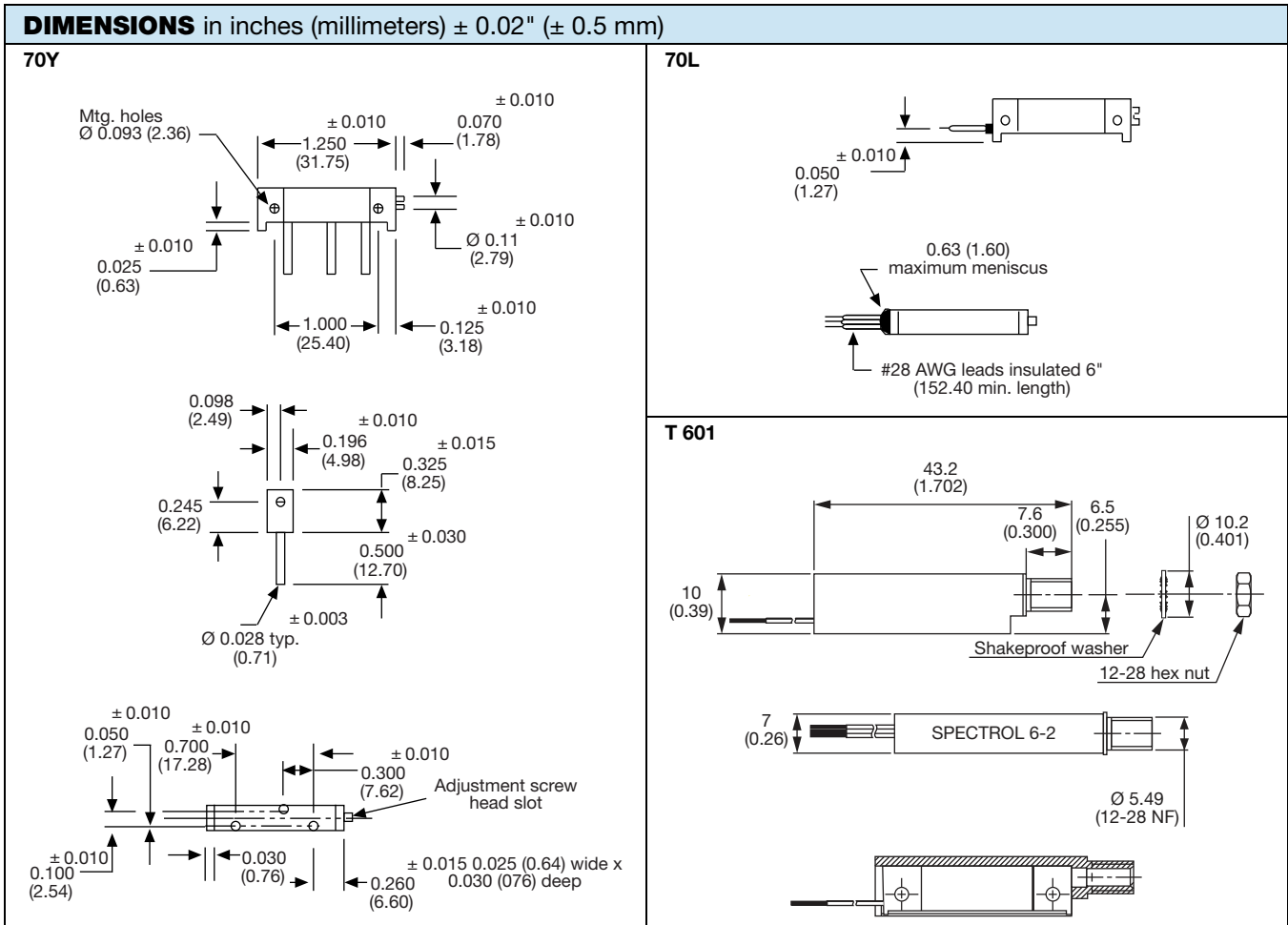


## FEATURES

- 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



<b>ELECTRICAL SPECIFICATIONS</b>																																								
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> <table border="1"> <caption>Power Rating vs Ambient Temperature</caption> <thead> <tr> <th>Ambient Temperature (°C)</th> <th>70L Power (W)</th> <th>70Y Power (W)</th> </tr> </thead> <tbody> <tr><td>0</td><td>0.5</td><td>0.5</td></tr> <tr><td>20</td><td>0.5</td><td>0.5</td></tr> <tr><td>40</td><td>0.5</td><td>0.5</td></tr> <tr><td>60</td><td>0.5</td><td>0.5</td></tr> <tr><td>70</td><td>0.5</td><td>0.5</td></tr> <tr><td>80</td><td>0.33</td><td>0.4</td></tr> <tr><td>90</td><td>0.17</td><td>0.27</td></tr> <tr><td>100</td><td>0</td><td>0.13</td></tr> <tr><td>110</td><td>-</td><td>0</td></tr> <tr><td>120</td><td>-</td><td>0</td></tr> <tr><td>125</td><td>-</td><td>0</td></tr> <tr><td>140</td><td>-</td><td>0</td></tr> </tbody> </table>	Ambient Temperature (°C)	70L Power (W)	70Y Power (W)	0	0.5	0.5	20	0.5	0.5	40	0.5	0.5	60	0.5	0.5	70	0.5	0.5	80	0.33	0.4	90	0.17	0.27	100	0	0.13	110	-	0	120	-	0	125	-	0	140	-	0
Ambient Temperature (°C)	70L Power (W)	70Y Power (W)																																						
0	0.5	0.5																																						
20	0.5	0.5																																						
40	0.5	0.5																																						
60	0.5	0.5																																						
70	0.5	0.5																																						
80	0.33	0.4																																						
90	0.17	0.27																																						
100	0	0.13																																						
110	-	0																																						
120	-	0																																						
125	-	0																																						
140	-	0																																						
Circuit diagram																																								
Limiting element voltage	350 V																																							
Temperature coefficient of resistance (typical)	$\pm$ 100 ppm/°C																																							

<b>MECHANICAL SPECIFICATIONS</b>	
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)

<b>ENVIRONMENTAL SPECIFICATIONS</b>	
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 M70L: 55/100/21

<b>PERFORMANCES</b>			
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 (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 rater 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
<ul style="list-style-type: none"> <li>• Model</li> <li>• Ohmic value</li> <li>• Tolerance</li> <li>• Circuit diagram</li> <li>• Manufacturing date</li> </ul>

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 Y = Printed circuit pins		From 10 Ω to 2 MΩ 103 = 10K		K = 10 % On request: J = 5 %		B25 = Box 50 pieces		(If applicable) Given by Vishay for custom design					

DESCRIPTION (for information only)						
70	L	10K	10 %		BO50	e3
MODEL	STYLE	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD (Pb)-FREE



## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

## Material Category Policy

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.**

**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.**