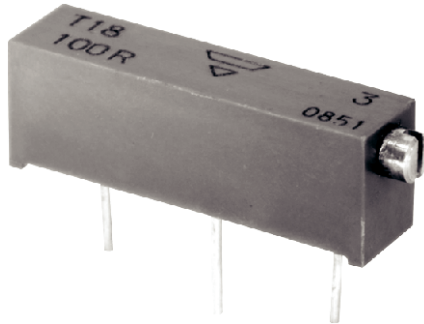


## 3/4" Rectangular Multi-Turn Cermet Trimmer

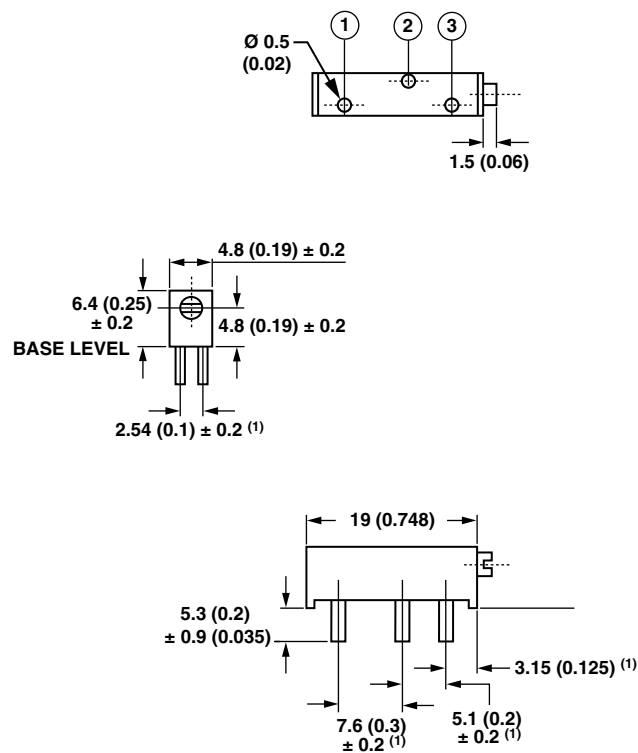


### FEATURES

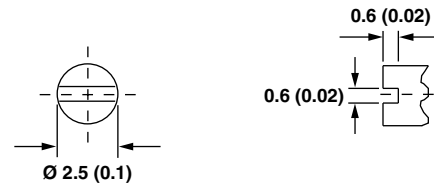
- 0.75 W at 70 °C
- Wide ohmic range (10 Ω to 5 MΩ)
- Multi-finger wiper for better CRV
- Tests according to CECC 41000 or IEC 60393-1
- Industrial grade
- Compliant to RoHS Directive 2002/95/EC


**RoHS**  
COMPLIANT

### DIMENSIONS in millimeters (± 0.5 mm)

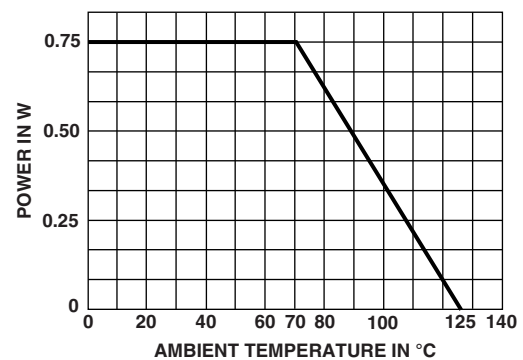
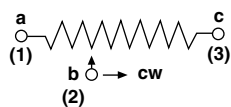


### SHAFT



### Note

(1) To be measured at base level

ELECTRICAL SPECIFICATIONS		
Resistive element	Cermet	
Electrical travel	15 turns $\pm$ 1	
Resistance range	10 $\Omega$ to 5 M $\Omega$	
Standard series E3	1 - 2.2 - 4.7 and 1 - 2 - 5	
Tolerance	Standard	$\pm$ 10 %
	On request	$\pm$ 5 %
Power rating	Linear 0.75 W at + 70 °C 	
Circuit diagram		
Temperature coefficient	See Standard Resistance Element table	
Limiting element voltage (linear law)	400 V	
Contact resistance variation	1 % R <sub>n</sub> or 1 $\Omega$ max.	
End resistance	1 % or 2 $\Omega$	
Dielectric strength (RMS)	1000 V	
Insulation resistance (500 V <sub>DC</sub> )	10 <sup>3</sup> M $\Omega$ min.	

MECHANICAL SPECIFICATIONS	
Mechanical travel	18 turns $\pm$ 5
Operating torque (max. Ncm)	3.5
End stop torque	Clutch action
Net weight (max. g)	1.2
Wiper (actual travel)	Positioned at approx. 50 %
Terminals	e3: Pure Sn

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



PERFORMANCES			
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS	
		$\Delta R_T/R_T$ (%)	$\Delta R_{1-2}/R_{1-2}$ (%)
Load life	1000 h at rated power 90'/30' - ambient temp. 70 °C	± 4 % Contact res. variation: < 3 % Rn	-
Climatic sequence	Phase A dry heat 125 °C Phase B damp heat Phase C cold - 55 °C Phase D damp heat 5 cycles	± 0.5 %	± 1 %
Long term damp heat	56 days	± 3 % Dielectric strength: 1000 V <sub>RMS</sub> Insulation resistance: > 20 MΩ	± 1 %
Rapid temp. change	5 cycles - 55 °C to + 125 °C	± 0.5 %	$\Delta V_{1-2}/\Delta V_{1-3} \leq \pm 2 \%$
Shock	50 g at 11 ms 3 successive shocks in 3 directions	± (2 % + 3 Ω)	± 2 %
Vibration	10 Hz to 55 Hz 0.75 mm or 10 g during 6 h	± 2 %	$\Delta V_{1-2}/\Delta V_{1-3} \leq \pm 2 \%$
Rotational life	200 cycles	± (3 % + 3 Ω) Contact res. variation: < 2 % Rn	-

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 CUR.	
Ω	W	V	mA	
10	0.75	2.74	274	± 100
22	0.75	4.06	185	
47	0.75	5.94	126	
100	0.75	8.66	87	
220	0.75	12.8	58	
470	0.75	18.8	40	
1K	0.75	27.4	27	
2.2K	0.75	40.6	18	
4.7K	0.75	59.4	13	
10K	0.75	86.6	8.7	
22K	0.75	128	5.8	
47K	0.75	188	4.0	
100K	0.75	274	2.7	
220K	0.75	400	1.8	
470K	0.34	400	0.85	
1M	0.16	400	0.40	
2.2M	0.07	400	0.18	
4.7M	0.03	400	0.09	

MARKING
<ul style="list-style-type: none"> <li>Vishay trademark</li> <li>Vishay part number or model and ohmic value (in Ω, kΩ, MΩ)</li> <li>Manufacturing date</li> <li>Marking of terminal 3</li> </ul>

PACKAGING
<ul style="list-style-type: none"> <li>In tube of 25 pieces code T10 (TU25)</li> </ul>



ORDERING INFORMATION (Part Number)												
T	1	8	2	2	4	K	T	1	0			
Model	OHMIC VALUE		TOLERANCE			PACKAGING		SPECIAL NUMBER				
T18	From 10 Ω to 5 MΩ 224 = 220 kΩ		K = 10 % On request J = 5 %			T10 = Tube 25 pieces		(If applicable) Given by Vishay for custom design				

DESCRIPTION (for information only)				
T18	220K	± 10 %	TU25	e3
MODEL	VALUE	TOLERANCE	PACKAGING	LEAD FINISH



## Disclaimer

All product specifications and data are subject to change without notice.

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 herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

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.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.