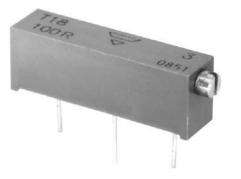
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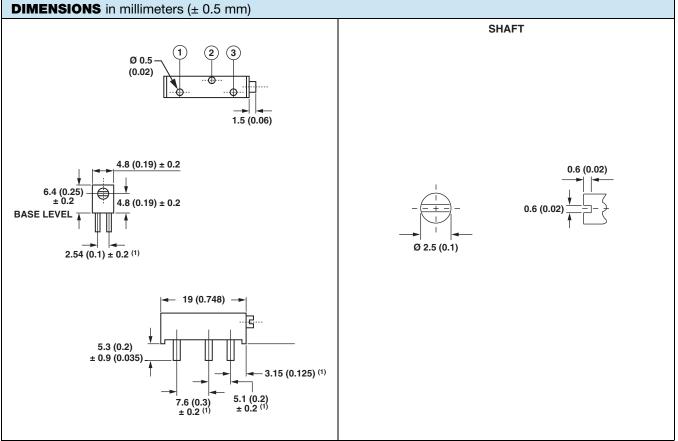
3/4" Rectangular Multi-Turn Cermet Trimmer



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FEATURES

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



Note

⁽¹⁾ To be measured at base level



For technical questions, contact: <u>sfer@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT

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Tolerance

Power rating

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T18

ELECTRICAL SPECIFICATIONS Resistive element Cermet **Electrical travel** 15 turns ± 1 10 Ω to 5 $M\Omega$ **Resistance range** 1 - 2.2 - 4.7 and 1 - 2 - 5 Standard series E3 Standard ± 10 % 0.75 W at + 70 °C Linear 0.75 POWER IN W 0.50 0.25

	0 0 20 40 60 70 80 100 125 140 AMBIENT TEMPERATURE IN °C		
Circuit diagram	$ \begin{array}{c} a \\ (1) \\ b \\ (2) \end{array} \begin{array}{c} c \\ (3) \\ (3) \end{array} $		
Temperature coefficient	See Standard Resistance Element table		
Limiting element voltage (linear law)	400 V		
Contact resistance variation	1 % Rn or 1 Ω max.		
End resistance	1 % or 2 Ω		
Dielectric strength (RMS)	1000 V		
Insulation resistance (500 V _{DC})	$10^3 M\Omega$ min.		

MECHANICAL SPECIFICATIONS		
Mechanical travel	18 turns ± 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	



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PERFORMANCES				
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS		
12313		Δ R _T / R _T (%)	∆ 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	\pm 3 % Dielectric strength: 1000 V_{RMS} Insulation resistance: > 20 $M\Omega$	±1%	
Rapid temp. change	5 cycles - 55 °C to + 125 °C	± 0.5 %	$\Delta V_{1\text{-}2}/\Delta V_{1\text{-}3} \leq \pm 2 \%$	
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 %	$\Delta V_{12}/\Delta V_{13} \leq \pm 2 \%$	
Rotational life	200 cycles	\pm (3 % + 3 Ω) Contact res. variation: < 2 % Rn	-	

STANDARD RESISTANCE ELEMENT DATA				
STANDARD	LINEAR LAW			TYPICAL
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	TCR - 55 °C + 125 °C
Ω	w	V	mA	ppm/°C
10	0.75	2.74	274	
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	± 100
10K	0.75	86.6	8.7	± 100
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

- Vishay trademark
- Vishay part number or model and ohmic value (in Ω , k Ω , M Ω)
- Manufacturing date
- Marking of terminal 3

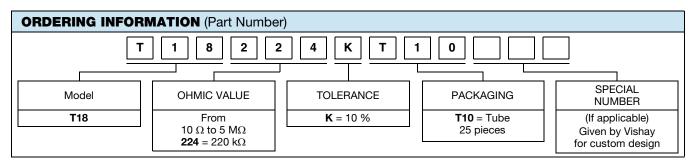
PACKAGING

• In tube of 25 pieces code T10 (TU25)

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



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