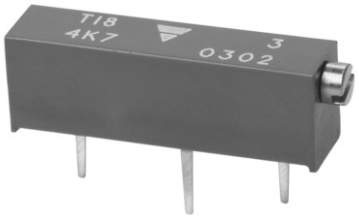
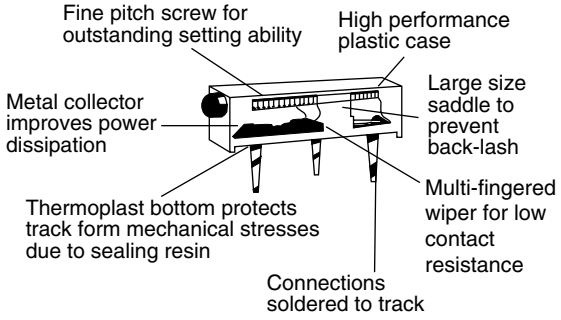
3/4" Rectangular Multi-Turn Cermet Trimmer



FEATURES

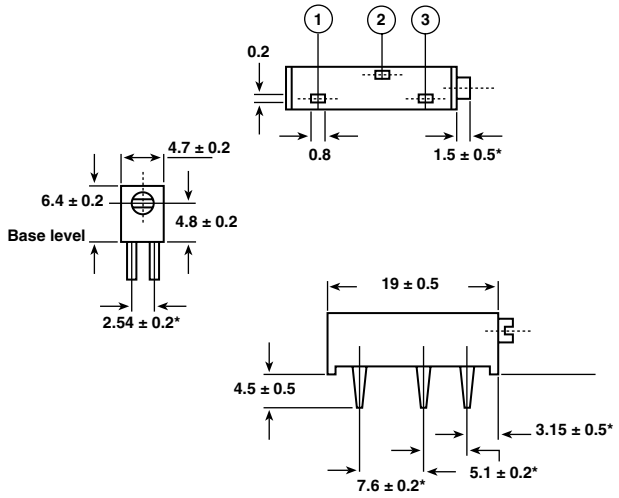
- Industrial Grade
- 0.50 W at 70 °C
- MIL-R-22097
- Tests according to CECC 41 000

RoHS COMPLIANT

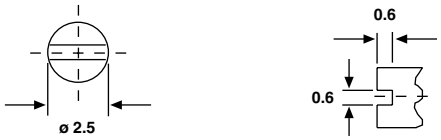


DIMENSIONS in millimeters

T18

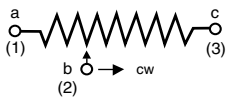


SHAFT



* to be measured at base level

CIRCUIT DIAGRAM



Tolerances unless otherwise specified ± 0.5

ELECTRICAL SPECIFICATIONS		
Resistive Element		cermet
Electrical Travel		15 turns ± 1
Resistance Range		10 Ω to 2.2 MΩ
Standard series E3		1 - 2.2 - 4.7 and 1 - 2 - 5
Tolerance	**Standard**	± 10 %
	On Request	± 5 %
Power Rating	**Linear**	0.50 W at + 70 °C
	Logarithmic	not applicable
Temperature Coefficient		See Standard Resistance Element Table
Limiting Element Voltage (Linear Law)		250 V
Contact Resistance Variation		2 % Rn or 1 Ω
End Resistance (Typical)		1 Ω
Dielectric Strength (RMS)		1000 V
Insulation Resistance (500VDC)		10^6 MΩ

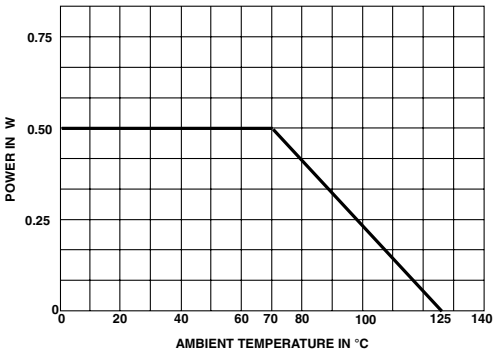
MECHANICAL SPECIFICATIONS

Mechanical Travel	18 turns ± 5
Operating Torque (max. Ncm)	2
End Stop Torque	clutch action
Unit Weight (max. g)	1
Wiper (actual travel)	positioned at approx. 50 %

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	- 55 °C to + 125 °C
Climatic Category	55/125/56
Sealing	fully sealed container IP67

POWER RATING CHART



PERFORMANCE			
TESTS	**CONDITIONS**	**TYPICAL VALUES AND DRIFTS** $\frac{\Delta RT}{RT}$ (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)
Load Life	1000 hours at rated power 90'/30' - ambient temp. 70 °C	± 1 % Contact res. variation: < 3 % Rn	± (3 % + 5 Ω)
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	± 0.5 % Dielectric strength: 1000 V RMS Insulation resistance: > 10^4 MΩ	± 1 %
Rapid Temperature Change	5 cycles - 55 °C at + 125 °C	± 0.5 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 1 %
Shock	50 g at 11m secs 3 successive shocks in 3 directions	± (0.2 % + 3 Ω)	± 0.3 %
Vibration	10 - 55 Hz 0.75 mm or 10 g during 6 hours	± 0.2 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 0.3 %
Rotational Life	200 cycles	± (2 % + 3 Ω) Contact res. variation: < 2 % Rn	

STANDARD RESISTANCE ELEMENT DATA				
STANDARD RESISTANCE VALUES	LINEAR LAW			TYPICAL TCR - 55 °C + 125 °C
	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	
Ω	W	V	mA	ppm/°C
10	0.5	2.24	224	
22	0.5	3.32	151	
47	0.5	4.85	103	
100	0.5	7.07	71	
220	0.5	10.5	48	
470	0.5	15.3	33	
1K	0.5	22.4	22	
2K2	0.5	33.2	15	
4K7	0.5	48.5	10	± 100
10K	0.5	70.7	7.1	
22K	0.5	105	4.8	
47K	0.5	153	3.3	
100K	0.5	224	2.2	
220K	0.28	250	1.1	
470K	0.13	250	0.5	
1M	0.06	250	0.3	

MARKING

Printed :
- VISHAY trademark
- model
- style
- ohmic value (in Ω, kΩ, MΩ)
- manufacturing date
- marking of terminal 3

PACKAGING

- In tube of 25 pieces, code “TU25”

ORDERING INFORMATION

T18	10 kΩ	± 10 %	TU25	e3
SERIES	OHMIC VALUE	TOLERANCE	PACKAGING	LEAD FINISH
			TU25: Tube	e3: pure Sn

SAP PART NUMBERING GUIDELINES

T	1	8	1	0	3	K	T	1	0			
MODEL			OHMIC VALUE			TOL	PACKAGING CODE			SPECIAL (IF APPLICABLE)		

See the end of this data book for conversion tables

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