



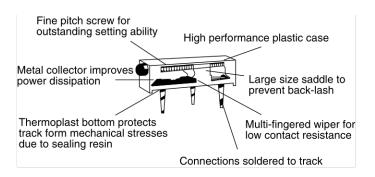
# 3/4" Rectangular Multi-Turn Cermet Trimmer



#### **FEATURES**

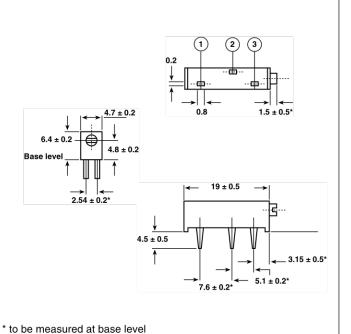
- Industrial Grade
- 0.50 Watt at 70 °C
- MIL-R-22097
- Tests according to CECC 41 000





#### **DIMENSIONS** in millimeters



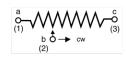


#### SHAFT





### CIRCUIT DIAGRAM



Tolerances unless otherwise specified ± 0.5

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# Vishay Sfernice

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



ELECTRICAL SPE	ECIFICATIONS	
Resistive Element		cermet
Electrical Travel		15 turns ± 1
Resistance Range		10 $\Omega$ to 2.2 M $\Omega$
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)		$10^6\mathrm{M}\Omega$

#### **MECHANICAL SPECIFICATIONS**

**Mechanical Travel** 18 turns ± 5

Operating Torque (max. Ncm) 2

**End Stop Torque** clutch action

Unit Weight (max. g)

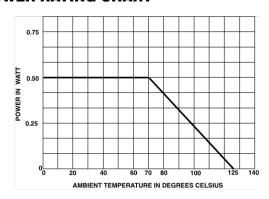
Wiper (actual travel) positioned at approx. 50 %

#### **ENVIRONMENTAL SPECIFICATIONS**

**Temperature Range** - 55 °C to + 125 °C **Climatic Category** 55/125/56

Sealing fully sealed container IP67

#### **POWER RATING CHART**



PERFORMANCE					
		TYPICAL VALUES AND DRIFTS			
TESTS	CONDITIONS	$\frac{\Delta RT}{RT}$ (%)		$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)	
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	$\pm$ 0.5 % Dielectric strength: 1000 V RMS Insulation resistance: > $10^4  \text{M}\Omega$		± 1 %	
Rapid Temperature Change	5 cycles - 55 °C at + 125 °C	± 0.5 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$	≤ <b>± 1</b> %	
Shock	50 g at 11m secs 3 successive shocks in 3 directions	± 0.2 %		± 0.3 %	
Vibration	10 - 55 Hz 0.75 mm or 10 g during 6 hours	± 0.2 %	<u>ΔV1-2</u> V1-3	≤ ± 0.3 %	
Rotational Life	200 cycles	± 2 % Contact res. variation: < 2 % Rn			

80



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

STANDARD RESISTANCE ELEMENT DATA						
STANDARD	LINEAR LAW			TCR		
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	- 55 °C + 125 °C		
Ω	W	V	mA	ppm/°C		
10	0.5	2.24	224			
22	0.5	3.32	151	0		
47	0.5	4.85	103	+ 200		
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			
10K	0.5	70.7	7.1	± 100		
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  $\Omega$ ,  $k\Omega$ ,  $M\Omega$ )
- manufacturing date
- marking of terminal 3

PA	CI	KΑ	GI	Ν	G
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- In tube of 25 pieces, code "TU25"

#### **ORDERING INFORMATION**

T18 10 k $\Omega$  ± 10 % TU25 e3 SERIES OHMIC VALUE TOLERANCE PACKAGING LEAD FINISH TU25: Tube e3: pure Sn

#### **SAP PART NUMBERING GUIDELINES**

See the end of this data book for conversion tables

## **Legal Disclaimer Notice**



Vishay

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