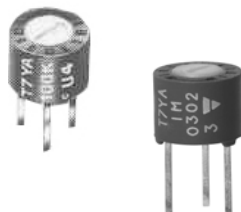


Miniature Cermet Trimmers



FEATURES

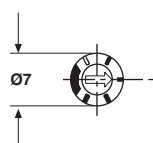
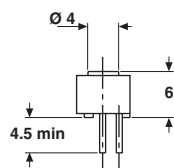
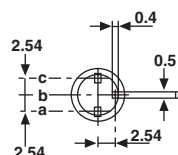
- Industrial grade
- 0.5 Watt at 85 °C
- CECC 41100
- High stability
- Low temperature coefficient
- Wide resistance range
- Easy to read scale

The T7 trimmer is only 7 mm (0.275") in diameter and fits almost anywhere.

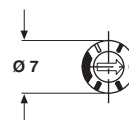
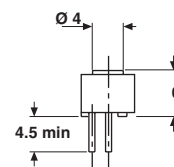
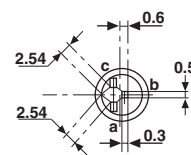
A sealed plastic case protecting a quality cermet track guarantees high performance and proven reliability. Adjustments are made easier by the clear scale readings. Competitively priced, the T7 is ideally suited to all industrial applications.

DIMENSIONS in millimeters

T7 YA

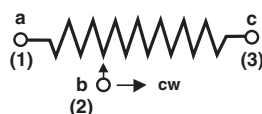


T7 YB



- Tolerances unless otherwise specified ± 0.5 mm

CIRCUIT DIAGRAM



ELECTRICAL SPECIFICATIONS

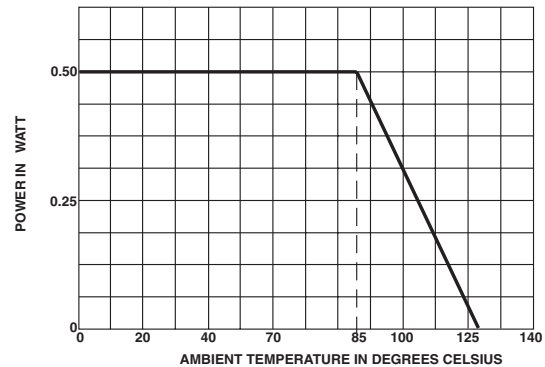
Resistive Element	Cermet
Electrical Travel	270° ± 15°
Resistance Range	10 Ω to 2.2 MΩ
Standard Series E3	1 - 2.2 - 4.7 and on request 1 - 2 - 5
Tolerance Standard	Standard
	On Request
	± 20 %
	± 10 %
Power Rating	Linear
	Logarithmic
	0.5W at 85 °C
	not applicable
Temperature Coefficient	See Standard Resistance Element Data
Limiting Element Voltage (Linear Law)	250 V
Contact Resistance Variation	3 % or 3 Ω
End Resistance (Typical)	1 Ω
Dielectric Strength (RMS)	1000 V
Insulation Resistance	10 ⁶ MΩ

MECHANICAL SPECIFICATIONS

Mechanical Travel	300° ± 5°
Operating Torque (max. Ncm)	2
End Stop Torque (max. Ncm)	4
Unit Weight (max. g)	0.5

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	– 55 °C to + 125 °C
Climatic Category	55 / 100 / 56
Sealing	enables cleaning except with water IP64

POWER RATING CHART**PERFORMANCE**

TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS	
		$\frac{\Delta R T}{R T}$ (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)
Load Life	1000 hours at rated power 90°/30° - ambient temperature 70 °C	± 3 %	± 4 % Contact resistance variation: < 3 % R _n
Climatic Sequence	Phase A dry heat 100 °C Phase B damp heat Phase C cold –55 °C Phase D damp heat 5 cycles	± 2 %	± 3 %
Long Term Damp Heat	56 days	± 2 %	± 3 % Dielectric strength: 1000 V RMS Insulation resistance: > 10 ⁴ MΩ
Rapid Temperature Change	5 cycles – 55 °C at + 125 °C	± 1 %	$\frac{\Delta V_{1-2}}{V_{1-3}} \leq \pm 2 \%$
Shock	50 g 11 ms 3 successive shocks in 3 directions	± 0.5 %	± 1 %
Vibration	10 - 55 Hz 0.75 mm or 10 g during 6 hours	± 0.5 %	$\frac{\Delta V_{1-2}}{V_{1-3}} \leq \pm 1 \%$
Rotational Life	200 cycles	± 3 %	Contact resistance variation: < 3 % R _n

**STANDARD RESISTANCE ELEMENT DATA**

STANDARD RESISTANCE VALUES	LINEAR LAW			T.C. -55 °C +125 °C
	MAX. POWER AT 85 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	
Ω	W	V	mA	ppm/°C
10	0.5	2.2	224	0 + 200
22	↓	3.3	150	
47		4.8	103	
100		7	70	± 100
220		10.5	47	
470		15.3	32	
1k		22.4	22	
2.2k		33.2	15	
4.7k		48.5	10	
10k		70.7	7	
22k		105	4.8	
47k		153	3.2	
100k	0.5	224	2.2	
220k	0.28	250	1.1	
470k	0.13	250	1.53	
1M	0.06	250	0.25	
2.2M	0.028	250	0.11	

MARKING

Printed:

- VISHAY trademark
- series
- YA or YB style
- ohmic value (in Ω, kΩ, MΩ)
- manufacturing date
- marking of terminal: 3.

SEALING

T7 trimming potentiometers are sealed against dust and PC boards cleaning (but not with water).

PACKAGING

- In bulk (box of 200 pieces), code BO200
- On request in Tube, code TU50

ORDERING INFORMATION**T7**
SERIES**YA**
STYLE**470 KΩ**
OHMIC VALUE**± 20 %**
TOLERANCE**BO200**
PACKAGING**e2**
LEAD FINISH

YA - YB

BO200
On request: TU50

e2: SnAg alloy

SAP PART NUMBERING GUIDELINES

T	7	Y	A	4	7	4	M	B	4	0			
MODEL		STYLE		OHMIC VALUE			TOL	PACKAGING CODE			SPECIAL (IF APPLICABLE)		

See the end of this data book for conversion tables



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