

Miniature Cermet Trimmers



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

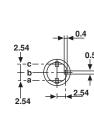
A sealed plastic case protecting a quality cermet track guarantees high performance and proven reliability. Adjustments are made easier by the clear scale readings. Competitively priced, the T7 is ideally suited to all industrial applications.

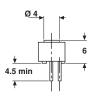
T7 YA

DIMENSIONS in millimeters



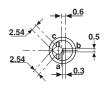
- Industrial grade
- 0.5 Watt at 85°C
- CECC 41100
- High stability
- Low temperature coefficient
- Wide resistance range
- Easy to read scale







T7 YB

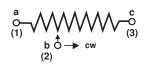






Tolerances unless otherwise specified ± 0.5mm

CIRCUIT DIAGRAM





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

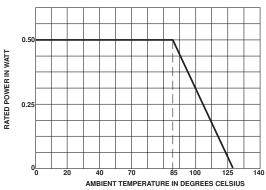
MECHANICAL SPECIFICATIONS

Mechanical Travel	$300^{\circ} \pm 5^{\circ}$
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				
		TYPICAL VALUES AND DRIFTS		
TESTS	CONDITIONS	<u>ΔRT</u> (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$	(%)
Load Life	1000 hours at rated power 90'/30' - ambient temperature 70°C	± 3% Contact resistance variation: < 3%	±4% Rn	
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	\pm 2 % Dielectric strength: 1000 V RMS Insulation resistance: > 10 ⁴ M Ω	±3%	
Rapid Temperature Change	5 cycles - 55°C at + 125°C	±1%	$\frac{\Delta V_{1-2}}{V_{1-3}}$	≤ ± 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 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$	≤±1%
Rotational Life	200 cycles	± 3 % Contact resistance variation: < 3% Rn		



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Vishay Sfernice

STANDARD RESISTANCE ELEMENT DATA						
STANDARD		T.C.				
RESISTANCE	MAX. POWER AT 85°C	MAX. WORKING VOLTAGE	MAX. CUR. THROUGH ELEMENT	-55°C +125°C		
Ω	W	V	mA	ppm/°C		
10	0.5	2.2	224			
22		3.3	150	0		
47		4.8	103	+ 200		
100		7	70			
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	± 100		
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 , k Ω , M Ω)
- manufacturing date
- marking of terminal: 3.

SEALING

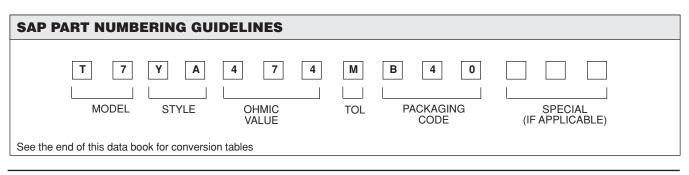
T7 trimming potentiometers are sealed against dust and PC boards cleaning (but not with water).

PACKAGING

- In bulk (box of 200 pieces), code BO200

- On request in Tube, code TU50

T7 YA 470KΩ ± 20% BO200 SERIES STYLE OHMIC VALUE TOLERANCE PACKAGING YA - YB BO200 On request: TU50





Vishay

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