

Miniature Cermet Trimmers



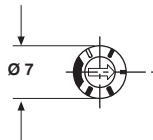
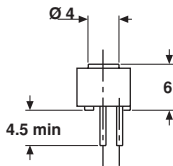
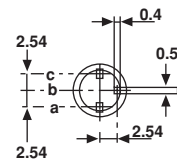
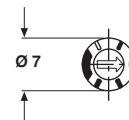
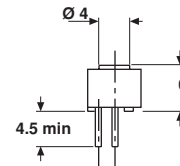
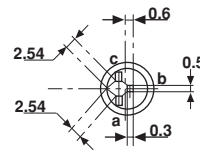
The T7 trimmer is only 7 mm (0.275") in diameter and fits almost anywhere.

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.

FEATURES

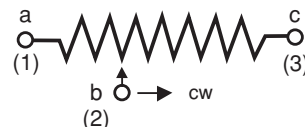
- Industrial grade
- 0.5 Watt at 85°C
- CECC 41100
- High stability
- Low temperature coefficient
- Wide resistance range

DIMENSIONS in millimeters

T7 YA

T7 YB


• Tolerances unless otherwise specified $\pm 0.5\text{mm}$

CIRCUIT DIAGRAM



ELECTRICAL SPECIFICATIONS

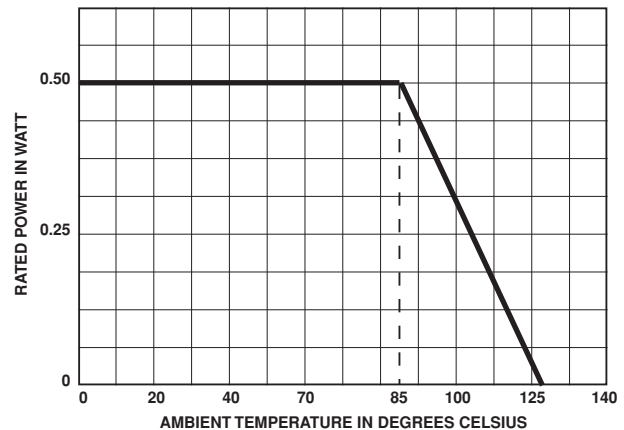
Resistive Element	Cermet	
Electrical Travel	270° ± 15°	
Resistance Range	10Ω to 2.2MΩ	
Standard Series E3	1 - 2.2 - 4.7 and on request 1 - 2 - 5	
Tolerance	Standard	± 20%
	On Request	± 10%
Power Rating	Linear	0.5W at 85°C
	Logarithmic	not applicable
Temperature Coefficient	See Standard Resistance Element 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 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 + 125°C
Climatic Category	55/100/56
Sealing	enables cleaning except with water IP64

POWER RATING CHART**PERFORMANCE**

TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS	
		$\frac{\Delta RT}{RT}$ (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)
Load Life	1000 hours at rated power 90'/30' - ambient temperature 70°C	± 3% Contact resistance variation : < 3% Rn	± 4 %
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 % Dielectric strength : 1000 V _{RMS} Insulation resistance : > 10 ⁴ MΩ	± 3 %
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% Rn	



STANDARD RESISTANCE ELEMENT DATA				
STANDARD RESISTANCE VALUES	LINEAR LAW			T.C. - 55°C + 125°C ppm/°C
	MAX. POWER AT 85°C	MAX. WORKING VOLTAGE	MAX. CUR. THROUGH ELEMENT	
Ω	W	V	mA	
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	
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	YA	470KΩ	± 20%	BO200
SERIES	STYLE YA - YB	OHMIC VALUE	TOLERANCE	PACKAGING BO200 TU50