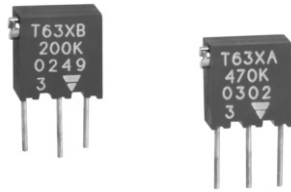


1/4" Multi-Turn Fully Sealed Container Cermet Trimmers



FEATURES

- 0.25 W at 70 °C
- Industrial grade
- Tests according to CECC 41 000
- Multi-turn operation
- Low contact resistance variation 1 % typical



Due to their square shape and small size (6.8 x 6.8 x 5 mm), the multi-turn trimmers of the T63 series are ideally suited for PCB use, enabling high density board mounting with reduced space requirement between cards.

Six versions are available differing by the top or side position of the adjustment screw and by PC pins configuration.

The use of cermet for the resistive track ensures an excellent stability of nominal specifications throughout life.

DIMENSIONS in millimeters (± 0.5 mm)			
T63XA 		Terminal Spacing on a 2.54 PCB	
T63XB 			
T63YA 			
T63YB 			
T63ZA 			
T63ZB 			



ELECTRICAL SPECIFICATIONS										
Resistive Element	Cermet									
Electrical Travel	13 turns \pm 2									
Resistance Range	10 Ω to 2.2 M Ω									
Standard Series and an Request Series E3	1 - 2 - 5 (1 - 2.2 - 4.7)									
Tolerance	standard \pm 10 %									
	on request \pm 5 %									
Power Rating	linear 0.25 W at + 70 °C									
	<p>CIRCUIT DIAGRAM</p> <p>POWER RATING GRAPH</p> <table border="1"> <caption>Power Rating Data</caption> <thead> <tr> <th>Ambient Temperature (°C)</th> <th>Power (W)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0.25</td> </tr> <tr> <td>70</td> <td>0.25</td> </tr> <tr> <td>125</td> <td>0.125</td> </tr> <tr> <td>155</td> <td>0</td> </tr> </tbody> </table>	Ambient Temperature (°C)	Power (W)	0	0.25	70	0.25	125	0.125	155
Ambient Temperature (°C)	Power (W)									
0	0.25									
70	0.25									
125	0.125									
155	0									
Temperature Coefficient	see Standard Resistance Element Table									
Limiting Element Voltage (Linear Law)	250 V									
Contact Resistance Variation	2 % Rn or 2 Ω									
End Resistance (Typical)	1 Ω									
Dielectric Strength (RMS)	1000 V									
Insulation Resistance (500 VDC)	10 ⁶ M Ω									

MECHANICAL SPECIFICATIONS	
Mechanical Travel	15 turns \pm 5
Operating Torque (Max. Ncm)	1.5
End Stop Torque	Clutch action
Unit Weight (Max. g)	0.5
Wiper (Actual Travel)	Positioned at approx. 50 %

ENVIRONMENTAL SPECIFICATIONS	
Temperature Range	- 55 °C to + 155 °C
Climatic Category	55/125/56
Sealing	Fully sealed - Container IP67



1/4" Multi-Turn Fully Sealed Container
Cermet Trimmers

Vishay Sfernice

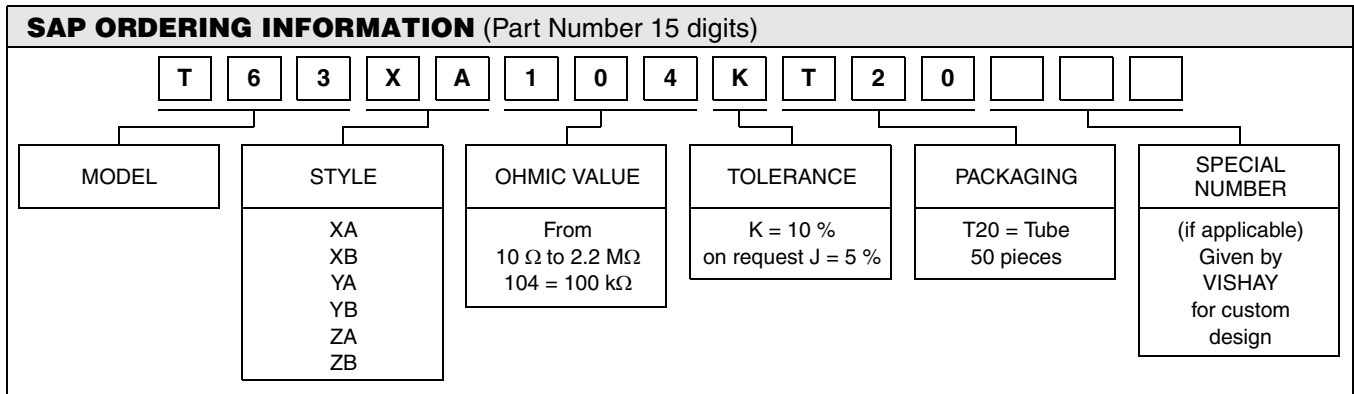
STANDARD RESISTANCE ELEMENT DATA				
STANDARD RESISTANCE VALUES	LINEAR LAW			TYPICAL TCR - 55 °C + 125 °C
	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	
Ω	W	V	mA	ppm/°C
10	0.25	1.58	158	± 100
20	↓	2.23	112	
50		3.5	77	
100		35	50	
200		7.07	35	
500		11.2	22	
1K		15.8	15.8	
2K		22.3	11.2	
5K		35.3	7.1	
10K		50	5	
20K		70.7	3.5	
25K	79	3.2		
50K	112	2.2		
100K	↓	158	1.6	
200K		0.25	1.1	
250K		0.25	1.1	
500K		0.13	0.50	
1M	0.06	0.25		
2.2M	0.03	0.125		

MARKING
Printed: <ul style="list-style-type: none"> • VISHAY trademark • Model • Style • Ohmic value (in Ω, kΩ, MΩ) • Tolerance (in %) only if non standard • Manufacturing date • Marking of terminal 3

PACKAGING
<ul style="list-style-type: none"> • In magazine pack (tube) by 50 pieces code TU50



PERFORMANCES			
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS	
		$\Delta R_T/R_T$ (%)	$\Delta R_{1-2}/R_{1-2}$ (%)
Load Life	1000 h at rated power 90/30' - ambient temp. 70 °C	$\pm 1\%$ Contact res. variation: < 1 % Rn	$\pm 2\%$
Climatic Sequence	Phase A dry heat 125 °C - 30 % Pr Phase B damp heat Phase C cold - 55 °C Phase D damp heat 5 cycles	$\pm 0.5\%$	$\pm 1\%$
Long Term Damp Heat	56 days 40 °C, 93 % RH	$\pm 0.5\%$ Dielectric strength: 1000 V _{RMS} Insulation resistance: > 10 ⁴ M Ω	$\pm 1\%$
Rapid Temperature Change	5 cycles - 55 °C to + 125 °C	$\pm 0.5\%$	$\Delta V_{1-2}/\Delta V_{1-3} \leq \pm 1\%$
Shock	50 g at 11 ms 3 successive shocks in 3 directions	$\pm 0.1\%$	$\pm 0.2\%$
Vibration	10 to 55 Hz 0.75 mm or 10 g during 6 h	$\pm 0.1\%$	$\Delta V_{1-2}/\Delta V_{1-3} \leq \pm 0.2\%$
Rotational Life	200 cycles	$\pm (2\% + 3\%)$ Contact res. variation: < 1 % Rn	-



PART NUMBER DESCRIPTION (for information only)

T63	XA	100K	10 %		TU	e3
MODEL	VERSION	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD (Pb)-FREE



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