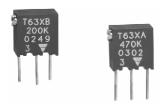
COMPLIANT





## 1/4" Multi-Turn Fully Sealed Container Cermet Trimmer



Due to their square shape and small size (6.8 mm x 6.8 mm 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

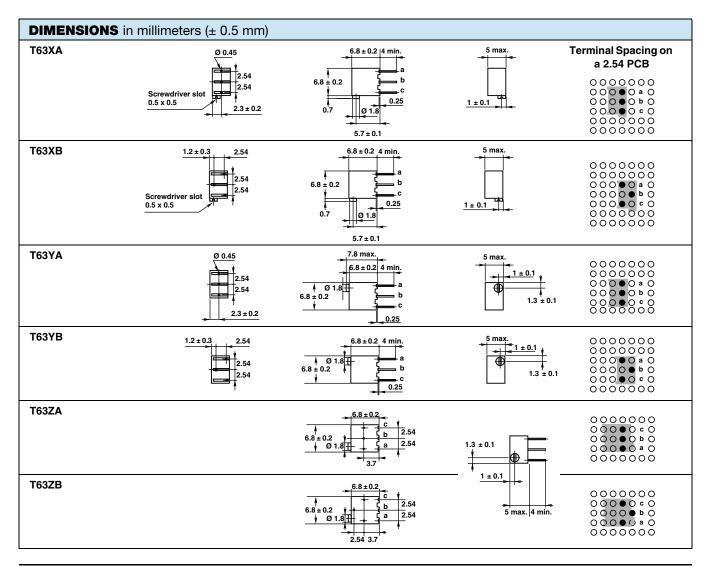
of the adjustment screw and by PC pins configuration. The use of cermet for the resistive track ensures an excellent stability of nominal specifications throughout life.

### **FEATURES**

- 0.25 W at 70 °C
- · Industrial grade



- Multi-turn operation
- Low contact resistance variation 1 % typical
- Compliant to RoHS directive 2002/95/EC



# Vishay Sfernice

## 1/4" Multi-Turn Fully Sealed Container Cermet Trimmer



Resistive element		Cermet					
Electrical travel		14 turns ± 2					
Resistance range		10 Ω to 2.2 MΩ					
Standard series and on requ	est series E3	1 - 2 - 5 (1 - 2.2 - 4.7)					
	Standard	± 10 %					
Tolerance	On request	± 5 %					
	Linear	0.25 W at + 70 °C					
Power rating		0.25 N I I I I I I I I I I I I I I I I I I I					
Circuit diagram		$ \begin{array}{c} \overset{a}{\bigcirc} \longrightarrow & & \overset{c}{\bigcirc} \\ (1) & \overset{b}{\bigcirc} \longrightarrow & cw \\ (2) & & & & & \\ \end{array} $					
Temperature coefficient		See Standard Resistance Element table					
Limiting element voltage (lin		250 V					
Contact resistance variation	1	2 % Rn or 2 Ω					
End resistance (typical)		1 Ω					
Dielectric strength (RMS)		1000 V					
Insulation resistance (500 V	oc)	$10^6\mathrm{M}\Omega$					

MECHANICAL SPECIFICATIONS			
Mechanical travel	15 turns ± 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 %		
Terminals	Pure Sn (code e3)		

ENVIRONMENTAL SPECIFICATIONS			
Temperature range	- 55 °C to + 155 °C		
Climatic category	55/125/56		
Sealing	Fully sealed - IP67		



### 1/4" Multi-Turn Fully Sealed Container Cermet Trimmer

## Vishay Sfernice

PERFORMANCES					
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS			
12313	CONDITIONS	ΔR <sub>T</sub> /R <sub>T</sub> (%)	$\Delta R_{1-2}/R_{1-2}$ (%)		
Load life	1000 h at rated power 90'/30' - ambient temp. 70 °C	± 1 % Contact res. variation: < 1 % Rn	± 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	± 0.5 %	± 1 %		
Long term damp heat	56 days 40 °C, 93 % RH	$\pm~0.5~\%$ Dielectric strength: 1000 $V_{RMS}$ Insulation resistance: $>10^4~M\Omega$	± 1 %		
Rapid temperature change	5 cycles - 55 °C to + 125 °C	± 0.5 %	$\Delta V_{1-2}/\Delta V_{1-3} \le \pm 1 \%$		
Shock	50 g at 11 ms 3 successive shocks in 3 directions	± 0.1 %	± 0.2 %		
Vibration	10 Hz to 55 Hz 0.75 mm or 10 g during 6 h	± 0.1 %	$\Delta V_{1-2}/\Delta V_{1-3} \le \pm \ 0.2 \%$		
Rotational life	200 cycles	$\pm (2 \% + 3 \Omega)$ Contact res. variation: < 1 % Rn	-		

STANDARD RESISTANCE ELEMENT DATA					
STANDARD		TYPICAL			
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	TCR - 55 °C + 125 °C	
Ω	W	V	mA	ppm/°C	
10	0.25	1.58	158		
20	0.25	2.23	112		
50	0.25	3.5	77		
100	0.25	35	50		
200	0.25	7.07	35		
500	0.25	11.2	22		
1K	0.25	15.8	15.8		
2K	0.25	22.3	11.2	± 100	
5K	0.25	35.3	7.1		
10K	0.25	50	5		
20K	0.25	70.7	3.5		
25K	0.25	79	3.2		
50K	0.25	112	2.2		
100K	0.25	158	1.6		
200K	0.25	224	1.1		
250K	0.25	250	1.1		
500K	0.13	250	0.50		
1M	0.06	250	0.25		
2.2M	0.03	250	0.125		

### **MARKING**

- Vishay trademark
- Model
- Style
- Ohmic value (in Ω, kΩ, MΩ)
- Tolerance (in %) only if non standard
- Manufacturing date
- Marking of terminal 3

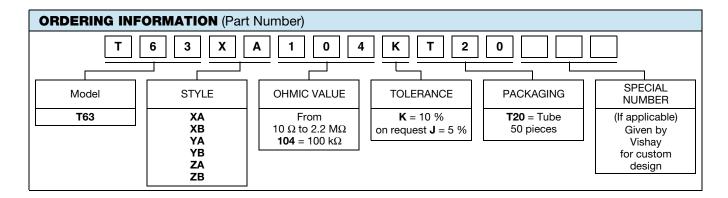
### **PACKAGING**

• In tube of 50 pieces code T20 (TU50)

## Vishay Sfernice

### 1/4" Multi-Turn Fully Sealed Container Cermet Trimmer





DESCRIPTION (for information only)						
T63	XA	100K	10 %		TU	e3
MODEL	STYLE	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD FINISH



## **Legal Disclaimer Notice**

Vishay

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Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

Revision: 02-Oct-12 Document Number: 91000



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

#### Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов:
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001:
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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