

# 1/4" Square Single-Turn Cermet Sealed Trimmer

## FEATURES

- Industrial grade
- Fully sealed
- Miniature package
- Rotor designed for automatic machine adjust interface
- Withstands harsh environments and immersion cleaning process
- Tests according to CECC 41000 or IEC 60393-1
- Compliant to RoHS Directive 2002/95/EC


**RoHS**  
COMPLIANT


DIMENSIONS in millimeters ( $\pm 0.25$ mm)		
<b>Common dimensions</b> Top adjust T73Y	<b>T73YP</b>	<b>T73YE</b>
	<b>T73YU</b>	<b>T73YB</b>
<b>Common dimensions</b> Side adjust T73X	<b>T73XX</b>	<b>T73XH</b>
	<b>T73XW</b>	<b>T73XF</b>

ELECTRICAL SPECIFICATIONS	
Resistive element	Cermet
Electrical travel	240° nominal
Resistance range	10 Ω to 2 MΩ
Standard series	1 - 2 - 5
Tolerance standard	10 %
Power rating	linear 0.5 W at + 70 °C 
Circuit diagram	
Temperature coefficient	± 100 ppm/°C
Limiting element voltage	300 V
Contact resistance variation	1 % R <sub>n</sub> or 3 Ω max. whichever is greater
Absolute minimum resistance	1 % R <sub>n</sub> or 2 Ω max. whichever is greater
Adjustability	± 0.05 % voltage ± 0.15 % resistance
Resolution	infinite
Insulation resistance (500 V <sub>DC</sub> )	10 <sup>3</sup> MΩ minimum
Dielectric strength	900 V <sub>AC</sub> sea level 350 V <sub>AC</sub> 80 000 feet

MECHANICAL SPECIFICATIONS	
Mechanical travel	270°
Operating torque (max. Ncm)	2.1
End stop torque (max. Ncm)	4.9
Unit weight (max. g)	0.6
Terminals	Pure Sn (code e3)

ENVIRONMENTAL SPECIFICATIONS	
Temperature range	- 55 °C to + 125 °C
Climatic category	55/100/56
Sealing	Fully sealed - IP67



PERFORMANCES			
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS	
Load life	1000 h - 0.5 W at + 70 °C	$\Delta R_T/R_T$ (%)	CRV < 3 $\Omega$ or 3 % whichever is greater
		3 %	
Shock	100 g	$\pm 1$ %	$\Delta V/V \leq \pm 1$ %
Vibration	30 g	$\pm 1$ %	$\Delta V/V \leq \pm 1$ %
Humidity	MIL-STD202 method 103 - 96 h	$\pm 2$ %	i.R. 10 M $\Omega$
Rotational life	200 cycles	$\pm 4$ %	CRV < 3 $\Omega$ or 3 % whichever is greater

STANDARD RESISTANCE ELEMENT DATA				
STANDARD RESISTANCE VALUES	LINEAR LAW			TYPICAL TCR - 55 °C + 125 °C ppm/°C
	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CURRENT	
$\Omega$	W	V	mA	
10	0.50	2.2	224	± 100
20	0.50	3.2	160	
50	0.50	5.0	100	
100	0.50	7.1	70	
200	0.50	10.0	50	
500	0.50	15.8	32	
1K	0.50	22.4	22	
2K	0.50	31.6	16	
5K	0.50	50	10	
10K	0.50	70.7	7.1	
20K	0.50	100	5.0	
50K	0.50	158.1	3.2	
100K	0.50	223.6	2.2	
200K	0.45	300	1.5	
500K	0.18	300	0.60	
1M	0.09	300	0.30	
2M	0.05	300	0.15	

MARKING
<ul style="list-style-type: none"> <li>• Vishay trademark</li> <li>• Resistance code</li> <li>• Terminal numbers</li> <li>• Date code</li> <li>• Model</li> </ul>

PACKAGING
<ul style="list-style-type: none"> <li>• In tube of 50 pieces code T20 (TU50)</li> <li>• On request: Tape and reel for style YU, code R32 (TR750) and style XW code R15 (TR1000)</li> </ul>



ORDERING INFORMATION (Part Number)															
T	7	3	Y	P	5	0	4	K	T	2	0				
MODEL	STYLE			OHMIC VALUE			TOLERANCE		PACKAGING			SPECIAL NUMBER			
T73	XF XH XW XX YB YE YM YP YU			From 10 Ω to 2.2 MΩ <b>103</b> = 10 kΩ			<b>K</b> = 10 % on request <b>J</b> = 5 %		<b>T20</b> = Tube 50 pieces On request: R15 = reel 1000 pieces for style XW R32 = Reel 750 for style YU			(If applicable) Given by Vishay for custom design			

DESCRIPTION (for information only)					
T73	YP	500K	10 %	TU	e3
MODEL	STYLE	VALUE	TOLERANCE	PACKAGING	LEAD FINISH



## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

## Material Category Policy

**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.**



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.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.