

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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



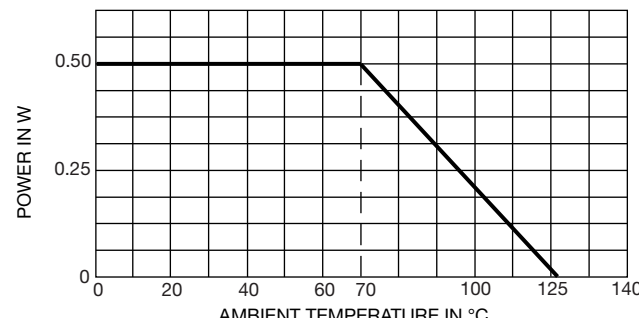
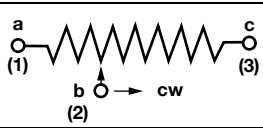
RoHS
COMPLIANT

DESIGN SUPPORT TOOLS

[click logo to get started](#)

3D
Models
Available

DIMENSIONS in millimeters (± 0.25 mm)		
<p>Common dimensions Top adjust T73Y</p> <p>Cruciform slot Ø 3 long 2.77, wide 0.64 - deep 0.89</p>	<p>T73YP</p>	<p>T73YE</p>
	<p>T73YU</p>	<p>T73YB</p>
<p>Common dimensions Side adjust T73X</p> <p>Cruciform slot Ø 3 long 2.77, wide 0.64 - deep 0.89</p>	<p>T73XX</p>	<p>T73XH</p>
	<p>T73XW</p>	<p>T73XF</p>

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 _n or 3 Ω max. whichever is greater
Absolute minimum resistance	1 % R _n or 2 Ω max. whichever is greater
Adjustability	± 0.05 % voltage ± 0.15 % resistance
Resolution	infinite
Insulation resistance (500 V _{DC})	10 ³ MΩ minimum
Dielectric strength	900 V _{AC} sea level 350 V _{AC} 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 Ω or 3 % whichever is greater
Shock		3 %	
Vibration	100 g	± 1 %	$\Delta V/V \leq \pm 1$ %
Humidity	30 g	± 1 %	$\Delta V/V \leq \pm 1$ %
Rotational life	MIL-STD202 method 103 - 96 h	± 2 %	i.R. 10 M Ω
Load life	200 cycles	± 4 %	CRV < 3 Ω or 3 % whichever is greater

Note

- Nothing stated herein shall be construed as a guarantee of quality or durability

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	
Ω	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"> • Vishay trademark • Resistance code • Terminal numbers • Date code • Model

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



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 103 = 10 kΩ			K = 10 % on request J = 5 %		T20 = 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

RELATED DOCUMENTS	
APPLICATION NOTES	
Potentiometers and Trimmers	www.vishay.com/doc?51001
Guidelines for Vishay Sfernice Resistive and Inductive Components	www.vishay.com/doc?52029



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.