## Vishay Sfernice



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

#### **FEATURES**





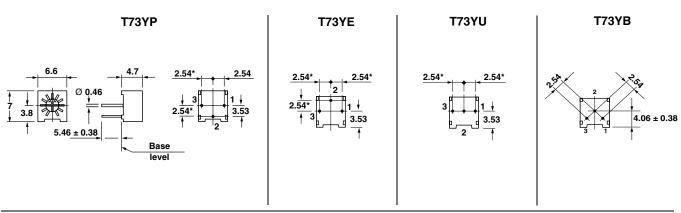


- · Miniature package
- Rotor designed for automatic machine adjust interface
- Withstands harsh environments and immersion cleaning process

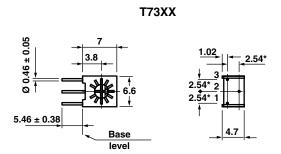


#### **DIMENSIONS** in millimeters

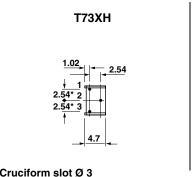
#### T73Y Top adjust



#### T73X Side adjust

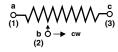


Tolerances unless otherwise specified  $\pm$  0.25 mm

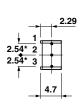


Cruciform slot Ø 3 long 2.77, wide 0.64 - deep 0.89

#### **CIRCUIT DIAGRAM**



**T73XW** 







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ELECTRICAL SP	ECIFICATIONS			
Resistive Element		Cermet		
Electrical Travel		240° nominal		
Resistance Range		10 $\Omega$ to 2 M $\Omega$		
Standard Series		1 - 2 - 5		
Tolerance Standard		± 10 %		
Power Rating	Linear	0.5 W at 70 °C		
	Logarithmic	not applicable		
Temperature Coefficier	nt	± 100 ppm/°C		
Limiting Element Voltage	ge	300 V		
Contact Resistance Va	riation	1 % or 3 $\Omega$ max. whichever is greater		
Absolute Minimum Res	sistance	1 % or 2 $\Omega$ max. whichever is greater		
Adjustability		± 0.05 % voltage ± 0.15 % resistance		
Resolution		infinite		
Insulation Resistance (	(500 V DC)	$10^3\mathrm{M}\Omega$ minimum		
Dielectric Strength		900 Vac sea level 350 Vac 80 000 feet		

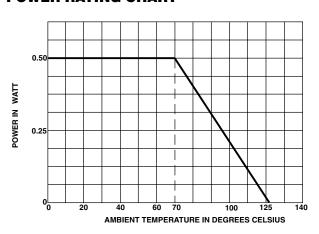
#### **MECHANICAL SPECIFICATIONS**

**Mechanical Travel** 270° **Operating Torque (max. Ncm)** 2.1 **End Stop Torque (max. Ncm)** 4.9 Unit Weight (max. g) 0.6

#### **ENVIRONMENTAL SPECIFICATIONS**

**Temperature Range** - 55 °C to + 125 °C **Climatic Category** 55/100/56 **Seal Test** 85 °C Fluorinert\*\* **Flammability UL 94-VO** \*\* Fluorinert is a registered trademark of 3M Co.

#### **POWER RATING CHART**



PERFORMANCE				
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS		
Load Life	1000 hours - 0.5 W at + 70 °C	$\frac{\Delta R}{R} \leq 3 \ \% \\ \text{CRV} \\ \text{whichever is } \\ \text{greater}$		
Shock	100 g	$\frac{\Delta R}{R} < \pm 1 \% \qquad \frac{\Delta V}{V} < \pm 1 \%$		
Vibration	30 g	$\frac{\Delta R}{R} < \pm 1 \% \qquad \frac{\Delta V}{V} \leq \pm 1 \%$		
Humidity	Mil-STD202 method 103 - 96 hours	$\frac{\Delta R}{R}$ < ± 2 % i.R. 10 M $\Omega$		
Rotational Life	200 cycles	$\frac{\Delta R}{R} < \pm 4 \% \qquad \begin{array}{c} \text{CRV} < 3 \Omega \text{or}3 \% \\ \text{whichever is} \\ \text{greater} \end{array}$		

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STANDARD RESISTANCE ELEMENT DATA					
STANDARD		TCR			
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	- 55 °C + 125 °C	
Ω	W	V	mA	ppm/°C	
10	0.5	2.2	224		
20	1	3.2	160		
50		5	100		
100		7.1	70		
200		10	50		
500		15.8	32		
1K		22.4	22		
2K		31.6	16	± 100	
5K		50	10		
10K		70.7	7.1		
20K	<b>↓</b>	100	5		
50K	▼	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**

Printed: VISHAY trademark, resistance code, terminal numbers, date code, manufacturer's model number and style

#### **PACKAGING**

- In tube by 50 pieces, code TU50
- Tape and reel for model YU, code TR750 and XW, code TR100

ORDERING INFORMATION							
T73 SERIES	<b>Y</b> I STY		<b>500 k</b> Ω OHMIC VALUE	± 10 % TOLERANCE	<b>TU50</b> PACKAGING	e3 LEAD FINISH	
	XX XH XW	YP YE YU YB			TU50 On request: TR750 TR1000	e3: pure Sn	

SAP PART NUMBERING GUIDELINES						
T 7 3	Y P	5 0 4	<b>K</b>	T 2 0		
MODEL	STYLE	OHMIC VALUE	TOL	PACKAGING CODE	SPECIAL (IF APPLICABLE)	
See the end of this data book for conversion tables						



Vishay

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