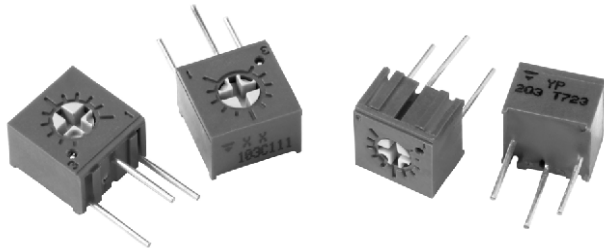


# 1/4" Square Single-Turn Cermet Sealed Trimmers

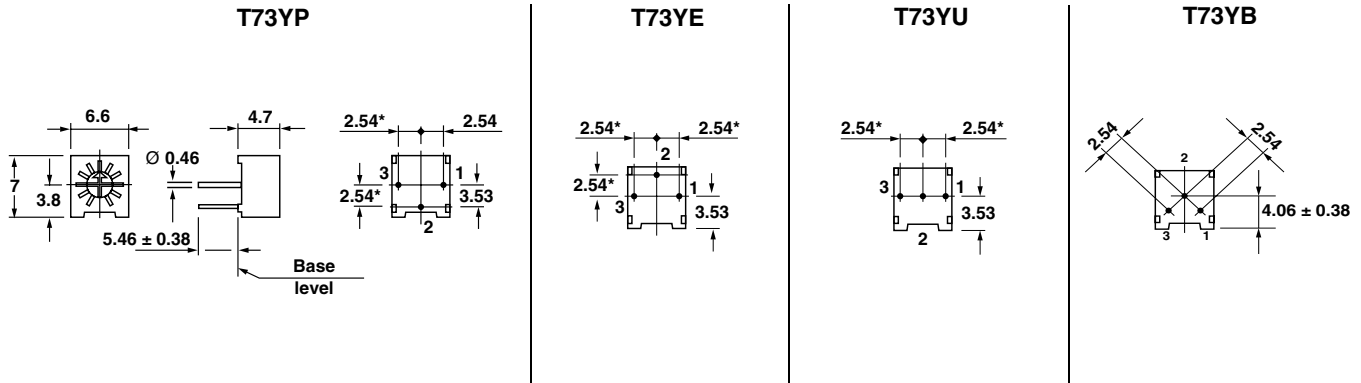
## FEATURES

- Industrial grade
- Fully sealed
- Miniature package
- Rotor designed for automatic machine adjust interface
- Withstands harsh environments and immersion cleaning process

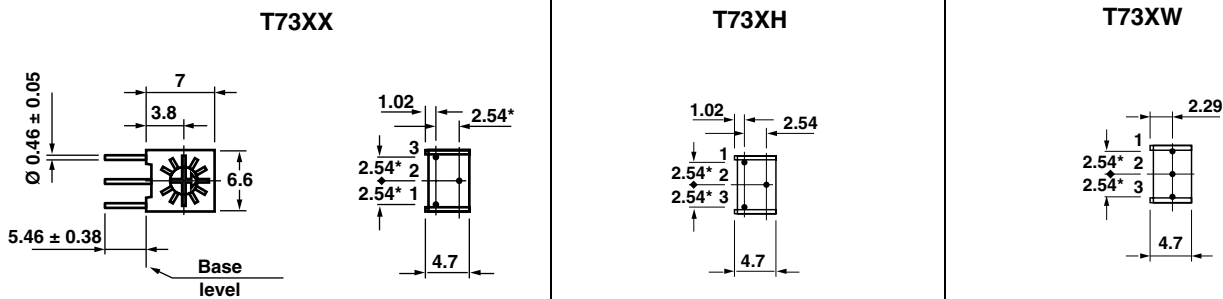


## DIMENSIONS in millimeters

### T73Y Top adjust



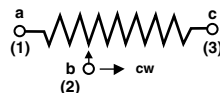
### T73X Side adjust



Tolerances unless otherwise specified  $\pm 0.25$  mm

Cruciform slot  $\varnothing 3$   
long 2.77, wide 0.64 - deep 0.89

## CIRCUIT DIAGRAM





1/4" Square Single-Turn  
Cermet Sealed Trimmers

Vishay Sfernice

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 Logarithmic
	0.5 W at 70 °C not applicable
Temperature Coefficient	± 100 ppm/°C
Limiting Element Voltage	300 V
Contact Resistance Variation	1 % or 3 Ω max. whichever is greater
Absolute Minimum Resistance	1 % or 2 Ω max. whichever is greater
Adjustability	± 0.05 % voltage ± 0.15 % resistance
Resolution	infinite
Insulation Resistance (500 V DC)	10 <sup>3</sup> MΩ minimum
Dielectric Strength	900 Vac sea level 350 Vac 80 000 feet

**MECHANICAL SPECIFICATIONS**

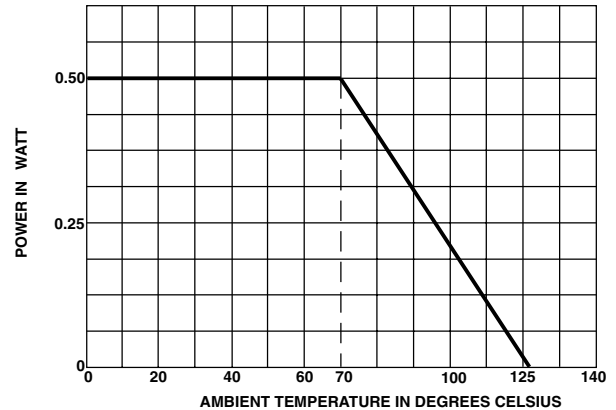
Mechanical Travel	270°
Operating Torque (max. Ncm)	2.1
End Stop Torque (max. Ncm)	4.9
Unit Weight (max. g)	0.6

**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	$\frac{\Delta R}{R} \leq 3 \%$ CRV < 3 Ω or 3 % whichever is greater
Shock	100 g	$\frac{\Delta R}{R} < \pm 1 \%$ $\frac{\Delta V}{V} < \pm 1 \%$
Vibration	30 g	$\frac{\Delta R}{R} < \pm 1 \%$ $\frac{\Delta V}{V} \leq \pm 1 \%$
Humidity	Mil-STD202 method 103 - 96 hours	$\frac{\Delta R}{R} < \pm 2 \%$ i.R. 10 MΩ
Rotational Life	200 cycles	$\frac{\Delta R}{R} < \pm 4 \%$ CRV < 3 Ω or 3 % whichever is greater



STANDARD RESISTANCE ELEMENT DATA				
STANDARD RESISTANCE VALUES	LINEAR LAW			TCR - 55 °C + 125 °C
	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	
Ω	W	V	mA	ppm/°C
10	0.5	2.2	224	± 100
20	↓	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	
5K		50	10	
10K		70.7	7.1	
20K		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	YP STYLE	500 kΩ OHMIC VALUE	± 10 % TOLERANCE	TU50 PACKAGING	e3 LEAD FINISH
	XX YP XH YE XW YU YB			TU50 On request: TR750 TR1000	e3: pure Sn

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



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