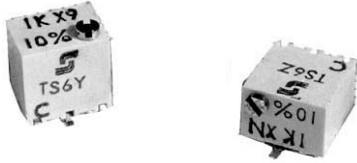


Multiturn Surface Mount Miniature 1/4" Square Cermet Trimmers, Fully Sealed



The TS6 multiturn trimmer has been designed for use in PCB surface mounting applications.

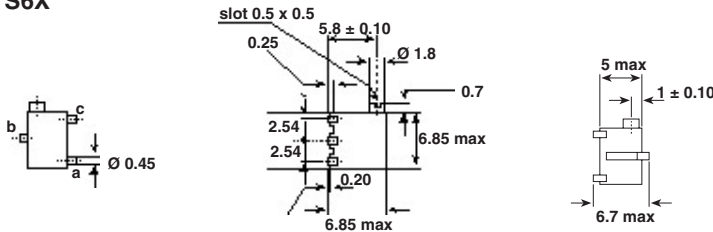
Three variations are available according to the positioning of the control screw and contact positions. The cermet track gives a high stability performance with an extended ohmic capacity of 10Ω to 2MΩ.

FEATURES

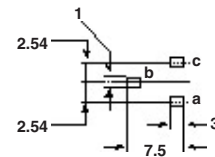
- 0.25 Watt at 85°C
- GAM T1
- Military and Professional Grade
- Multiturn operation
- A low contact resistance variation
- Tight tolerancing
- Low end contact resistance
- Full sealing
- Multifinger wiper contact in precious metal

DIMENSIONS in millimeters

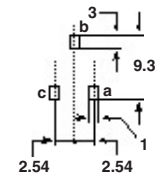
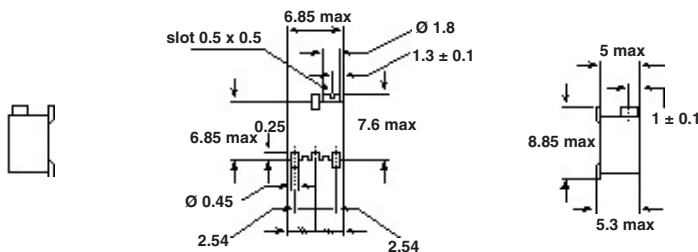
TS6X



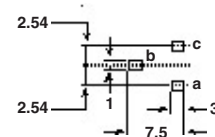
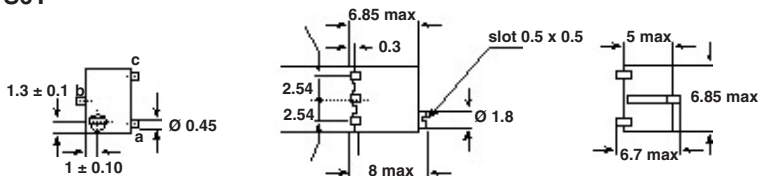
RECOMMENDED SOLDERING AREAS



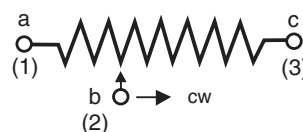
TS6Z



TS6Y



CIRCUIT DIAGRAM





ELECTRICAL SPECIFICATIONS		
Resistive Element		Cermet
Electrical Travel		13 turns ± 2
Resistance Range		10Ω to 2MΩ
Standard Series E3 and Series		1 - 2.2 - 4.7 and 1 - 2 - 5
Tolerance	Standard	±10%
	On request	± 5%
Power Rating Linear		0.25W at 85°C
Temperature Coefficient		See Standard Resistance Element Data
Limiting Element Voltage (Linear Law)		250V
Contact Resistance Variation		2% Rn or 2Ω
End Resistance (Typical)		1Ω
Dielectric Strength (RMS)		1000V
Insulation Resistance		10 ⁶ MΩ

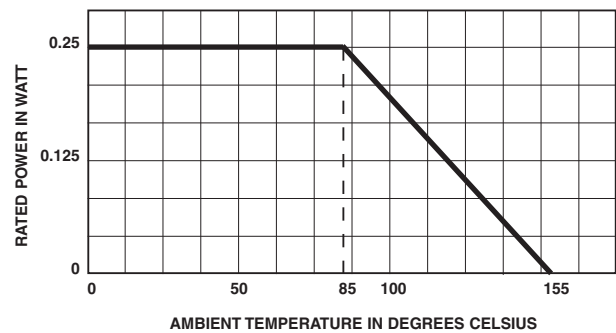
MECHANICAL SPECIFICATIONS

Mechanical Travel	15 turns ± 5
Operating Torque (max. Ncm)	1.5
End Stop Torque	clutch action
Unit Weight (max. g)	0.5

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	- 55°C + 155°C
Climatic Category	55/125/56
Sealing	fully sealed container solder immersion IP67

POWER RATING CHART



PERFORMANCE						
CECC 41100					TYPICAL VALUES AND DRIFTS	
TESTS	CONDITIONS	$\frac{\Delta RT}{RT}$ (%)	REQUIREMENTS	$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)	$\frac{\Delta RT}{RT}$ (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)
Climatic Sequence	Phase A dry heat 125°C Phase B damp heat Phase C cold - 55°C Phase D damp heat 5 cycles	± 2%		± 3%	± 0.5%	± 1%
Long Term Damp Heat	56 days	± 2%		± 3%	± 0.5%	± 1%
Rotational Life (Electrical, Mechanical)	200 cycles at rated power	± 2%		Contact res. variat.: < 3% Rn	± 2%	Contact res. variat.: < 1% Rn
Load Life	1000 h at rated power 90/30' - ambient temp. 85°C	± 2%		± 4%	± 1%	± 2%
Thermal Shock	5 cycles - 55°C to + 125°C	± 1.5%		$\frac{\Delta V_{1-2}}{V_{1-3}}$ ± 1%	± 0.5%	$\frac{\Delta V_{1-2}}{V_{1-3}}$ < ± 1%
Shock	50 g at 11m secs 3 successive shocks in 3 directions	± 1%		± 2%	± 0.1%	± 0.2%
Vibration	10-55Hz 0.75mm or 10 g for 6 hours	± 1%		$\frac{\Delta V_{1-2}}{V_{1-3}}$ ± 2%	± 0.1 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$ < ± 0.2%



Multiturn Surface Mount
Miniature 1/4" Square Cermet Trimmers, Fully Sealed

Vishay Sfernice

STANDARD RESISTANCE ELEMENT DATA				
STANDARD RESISTANCE VALUES	LINEAR LAW			T.C. - 55°C + 125°C
	MAX. POWER AT 85°C	MAX. WORKING VOLTAGE	MAX. CUR. THROUGH ELEMENT	
Ω	W	V	mA	ppm/°C
10	0.25	1.58	158	0 + 200
22		2.34	107	
47		3.43	73	
100	↓	5	50	± 100
220		7.42	34	
470		10.8	23	
1k		15.8	15.8	
2.2k		23.4	10.7	
4.7k		34.3	7.3	
10k		50	5	
22k		74.2	3.37	
47k		108.4	2.31	
100k		158	1.58	
220k	0.25	234	1.97	
470k	0.13	250	0.53	
1M	0.06	250	0.25	
2M	0.03	250	0.125	

MARKING

Printed : VISHAY trademark, series, style, ohmic value (in Ω, kΩ, MΩ), tolerance (in %) only if non standard, manufacturing date, marking of terminal 3.

SOLDERING RECOMMENDATION

Soldering cycle : 2 mn at 215°C or 5 seconds at 260°C or with an IRON 40 W : 3 seconds at 350°C.

Soldering is recommended by reflow and vapor phase.

PACKAGING
<p>– X, Y and Z types : on tape and reel (Dia. 330mm) of 500 pieces: TR – In magazine pack by 50 pieces (Tube) code "TU"</p>

ORDERING INFORMATION				
TS6	Y	470KΩ	± 10%	TU50
SERIES	STYLE	OHMIC VALUE	TOLERANCE	PACKAGING
				TU50: Tube TR500: Tape and reel