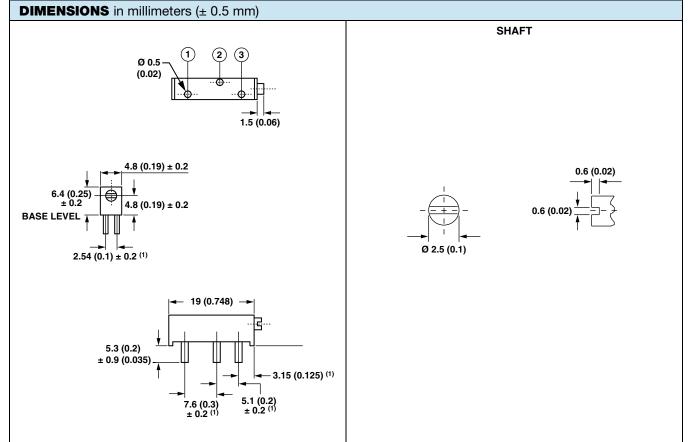
Vishay Sfernice

3/4" Rectangular Multi-Turn Cermet Trimmer



- 0.75 W at 70 °C
- Wide ohmic range (10 Ω to 5 M Ω)
- Multi-finger wiper for better CRV
- Tests according to CECC 41000 or IEC 60393-1
- Industrial grade
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>



Note

⁽¹⁾ To be measured at base level

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For technical questions, contact: <u>sferpottrimmers@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>

T18





Vishay Sfernice

T18

ELECTRICAL SPECIFICATIONS Resistive element Cermet **Electrical travel** 15 turns ± 1 10 Ω to 5 M Ω **Resistance range** Standard series E3 1 - 2.2 - 4.7 and 1 - 2 - 5 Tolerance Standard ± 10 % 0.75 W at +70 °C Linear 0.75 POWER IN W 0.50 **Power rating** 0.25 0 60 70 80 20 40 125 140 0 100 AMBIENT TEMPERATURE IN °C a O-(1) **Circuit diagram** ЪÔ (2) Temperature coefficient See Standard Resistance Element table Limiting element voltage (linear law) 400 V **Contact resistance variation** 1 % Rn or 1 Ω max. End resistance 1 % or 2 Ω **Dielectric strength (RMS)** 1000 V $10^3 M\Omega$ min. Insulation resistance (500 V_{DC})

MECHANICAL SPECIFICATIONS			
Mechanical travel	18 turns ± 5		
Operating torque (max. Ncm)	3.5		
End stop torque	Clutch action		
Net weight (max. g)	1.2		
Wiper (actual travel)	Positioned at approx. 50 %		
Terminals	e3: Pure Sn		

ENVIRONMENTAL SPECIFICATIONS	
Temperature range	-55 °C to +125 °C
Climatic category	55/125/4
Sealing	Fully sealed - IP67

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PERFORMANCES				
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS		
12313	CONDITIONS	∆ R _T / R _T (%)	ΔV ₁₋₂ /V ₁₋₃ (%)	OTHER
Load life	1000 h at rated power 90'/30' - ambient temp. 70 °C	±4 %	-	-
Damp heat steady state	4 days	± 3 %	-	Dielectric strength: 1000 V_{RMS} Insulation resistance: > 20 $M\Omega$
Rapid temp. change	5 cycles -55 °C to +125 °C	± 0.5 %	±2 %	-
Shock	50 g at 11 ms 3 successive shocks in 3 directions	± 2 %	±2 %	-
Vibration	10 Hz to 55 Hz 0.75 mm or 10 g during 6 h	±2 %	± 2 %	-
Rotational life	200 cycles	± (3 % + 1 Ω)	-	Contact res. variation: < 1 % Rn

Note

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

STANDARD RESISTANCE ELEMENT DATA				
STANDARD LINEAR LAW			W	TYPICAL
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CURRENT	TCR -55 °C to +125 °C
Ω	w	V	mA	ppm/°C
10	0.75	2.74	274	
22	0.75	4.06	185	
47	0.75	5.94	126	
100	0.75	8.66	87	
220	0.75	12.8	58	
470	0.75	18.8	40	
1K	0.75	27.4	27	
2.2K	0.75	40.6	18	
4.7K	0.75	59.4	13	. 100
10K	0.75	86.6	8.7	± 100
22K	0.75	128	5.8	
47K	0.75	188	4	
100K	0.75	274	2.7	
220K	0.75	400	1.8	
470K	0.34	400	0.85	
1M	0.16	400	0.4	
2.2M	0.07	400	0.18	
4.7M	0.03	400	0.09	

MARKING

• Vishay trademark

• Vishay part number or model and ohmic value (in $\Omega,\,k\Omega,\,M\Omega)$

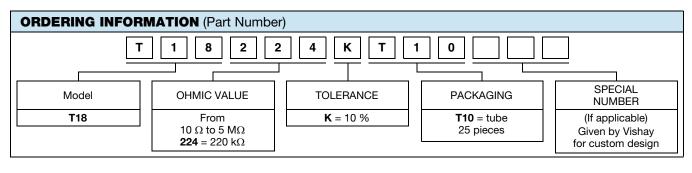
- Manufacturing date
- Marking of terminal 3

PACKAGING

• In tube of 25 pieces code T10 (TU25)



Vishay Sfernice



DESCRIPTION (for information only)				
T18	220K	± 10 %	TU25	e3
MODEL	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	



Vishay

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