306-6204 to 306-6320

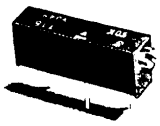
VISHAY SFERNICE

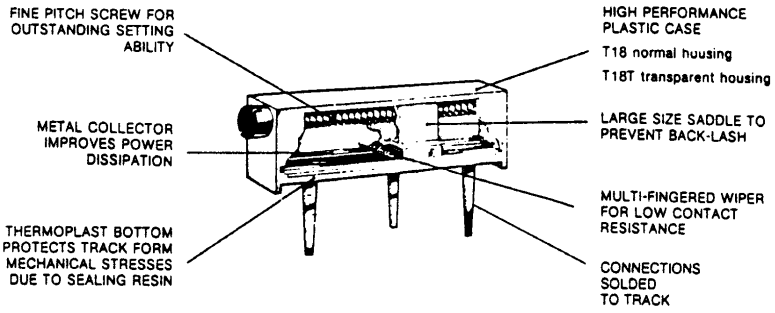
T18 –T

3/4" rectangular multiturn cermet trimmer

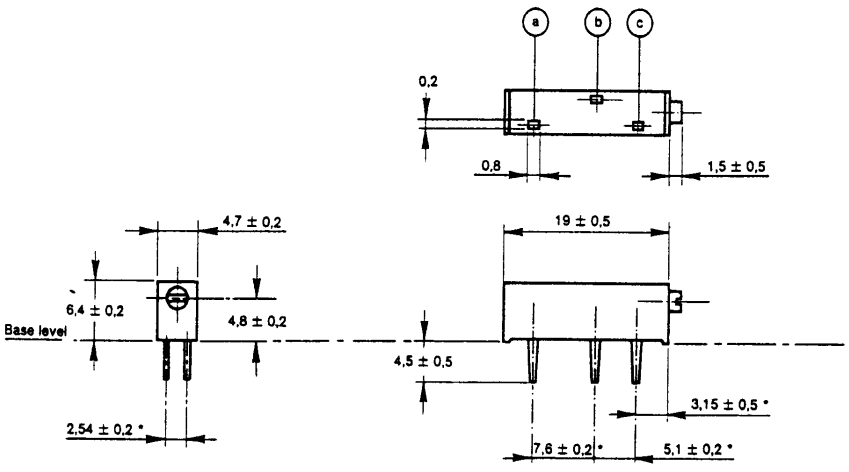
– industrial grade

0,75 W at 70°C
NF C 83-251
MIL-R-22097
CECC 41 100
LNZ



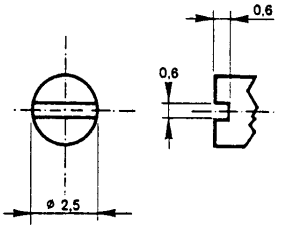


T18

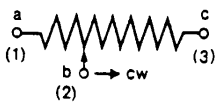


Dimensions in mm.

SHAFT



CIRCUIT DIAGRAM



SPECIFICATIONS

MECHANICAL

MECHANICAL TRAVEL...	18 turns ±5
OPERATING TORQUE (max. Ncm)...	2
END STOP TORQUE...	clutch action
UNIT WEIGHT (max. g)...	1

ENVIRONMENTAL

TEMPERATURE RANGE...	T18 : –55°C +125°C
	T18T : –55°C +105°C
CLIMATIC CATEGORY...	55 / 100 / 56
SEALING...	T18 : fully sealed container IP67
	T18T : enable cleaning IP64

ELECTRICAL

RESISTIVE ELEMENT...	cermet
ELECTRICAL TRAVEL...	15 turns ±1
RESISTANCE RANGE...	10 Ω... 2,2 MΩ
Standard series E3 (1 - 2,2 - 4,7)...	and 1 - 2 - 5
TOLERANCE standard...	±10%
on request...	±5%
POWER RATING linear...	0,75 W at +70°C
logarithmic...	not applicable
TEMPERATURE COEFFICIENT...	see table 2
LIMITING ELEMENT VOLTAGE (linear law)...	250 V
CONTACT RESISTANCE VARIATION ...	2% Rn or 2 Ω
END RESISTANCE (typical)...	1 Ω
DIELECTRIC STRENGTH (RMS)...	1000 V
INSULATION RESISTANCE (500 V DC)...	10^6 MΩ

PERFORMANCES

Table 1

TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS $\frac{\Delta R_T}{R_T}$ (%)	 $\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)
LOAD LIFE	1000 hours at rated power 90'/30' - ambient temperature 70°C	± 1% Contact resistance variation : < ±1% Rn	± 2 %
CLIMATIC SEQUENCE	Phase A dry heat 125°C Phase B damp heat Phase C cold –55°C Phase D damp heat 5 cycles	± 0,5 %	± 1 %
LONG TERM DAMP HEAT	56 days	± 0,5 % Dielectric strength : 1000 V RMS Insulation resistance : > 10^4 MΩ	± 1 %
RAPID TEMPERATURE CHANGE	5 cycles –55°C at +125°C	± 0,5 %	$\frac{\Delta V_{1-2}}{V_{1-3}} \leq \pm 1\%$
SHOCKS	50 g 11 ms 3 successive shocks in 3 directions	± 0,2 %	± 0,3%
VIBRATIONS	10 - 55 Hz 0,75 mm or 10 g during 6 hours	± 0,2 %	$\frac{\Delta V_{1-2}}{V_{1-3}} \leq \pm 0{,}3\%$
ROTATIONAL LIFE	200 cycles	± 1 % Contact resistance variation : < ±2% Rn	

STANDARD RESISTANCE ELEMENT DATA

Table 2

Standard resistance values	LINEAR LAW			T.C. – 55°C + 125°C
	Max. power at +70°C	Max. working voltage	Max. cur. through element	
Ω	W	V	mA	ppm/°C
10	0,75	2,7	270	
22		4,06	184	0
47		5,93	126	+200
100		8,7	87	
220		12,8	58	
470		18,7	40	
1 k		27,4	27	
2,2 k		40,6	18	
4,7 k		59,3	11	
10 k		86,6	9	
22 k		128,4	5,8	±100
47 k	0,75	187	4	
100 k	0,625	250	2,5	
220 k	0,28	250	1,09	
470 k	0,13	250	0,44	
1 M	0,06	250	0,25	
2,2 M		250		

MARKING

Printed :
- SFERNICE trademark
- series
- style
- ohmic value (in Ω, kΩ, MΩ)
- manufacturing date
- marking of terminal 3.

SOLVENTS

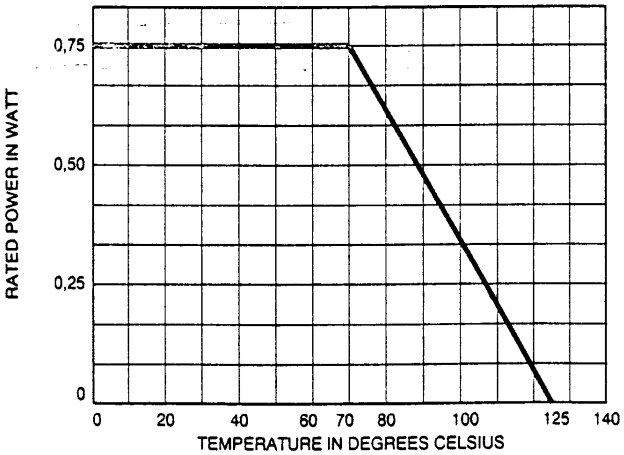
T18T. The material used for body is not compatible with all solvents. A prior test is recommended.

PACKAGING

- In plastic box of 100 pieces, no code
- In tube by 25 pieces code "TU".

POWER RATING CHART

Fig. 2



ORDERING PROCEDURE

	SERIES	OHMIC VALUE	TOLERANCE	PACKAGING
OPAQUE	T18	10 kΩ	± 10 %	TU
TRANSPARENT	T18T			

N.B.: On delivery the wiper is positioned at mid-travel.

TU : Tube