Vishay Spectrol



3/4" Rectangular (19 mm) **Multi-Turn Cermet Trimmer**

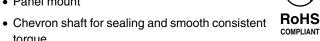


The Model 43 is manufactured to the highest international standards. This product, sealed to 85 °C for 1 minute (IEC. 68-2-17) has an effective travel of 18 turns nominal and a resistance range of 10 Ω to 2 M Ω .

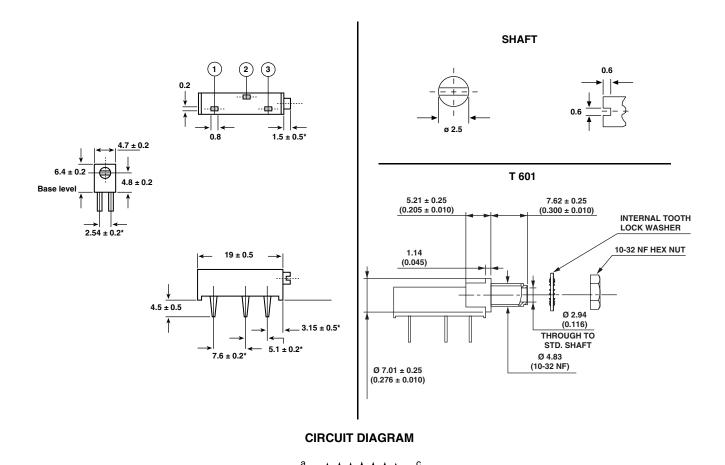
DIMENSIONS in inches (millimeters)

FEATURES

Panel mount



- Solder terminations for improved reliability
- Multi-finger wiper for better C.R.V.



Tolerance unless otherwise specified ± 0.5

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ELECTRICAL SPE	CIFICATIONS		
Resistive Element		cermet	
Electrical Travel		15 turns ± 1	
Resistance Range		10 Ω to 2.2 M Ω	
Standard series E3		1 - 2.2 - 4.7 and 1 - 2 - 5	
Tolerance	Standard	± 10 %	
	On Request	± 5 %	
Power Rating	Linear	0.50 W at + 70 °C	
	Logarithmic	not applicable	
Temperature Coefficient		See Standard Resistance Element Table	
Limiting Element Voltage (Linear Law)		250 V	
Contact Resistance Variation		2 % Rn or 1 Ω	
End Resistance (Typical)		1 Ω	
Dielectric Strength (RMS)		1000 V	
Insulation Resistance (500 VDC)		10 ⁶ MΩ	

MECHANICAL SPECIFICATIONS

Mechanical Travel 18 turns \pm 5

Operating Torque (max. Ncm) 2

End Stop Torque clutch action

Unit Weight (max. g)

Wiper (actual travel) positioned at approx. 50 %

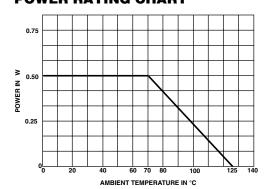
Environmental specifications

Temperature Range - 55 °C to + 125 °C

Climatic Category 55/125/56 Sealing fully sealed

container IP67

POWER RATING CHART



PERFORMANCE				
		TYPICAL VALUES AND DRIFTS		
TESTS	CONDITIONS	$\frac{\Delta RT}{RT}$ (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$	
Load Life	1000 hours at rated power 90'/30' - ambient temp. 70 °C	± 1 % Contact res. variation: < 3 % Rn	± (3 % ± 5 Ω)	
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	\pm 0.5 % Dielectric strength: 1000 V _{RMS} Insulation resistance: > $10^4 \text{M}\Omega$	± 1 %	
Rapid Temperature Change	5 cycles - 55 °C at + 125 °C	$\pm 0.5 \%$ $\frac{\Delta^{\prime}}{}$	$\frac{\sqrt{1-2}}{\sqrt{1-3}} \le \pm 1 \%$	
Shock	50 g at 11 m seconds 3 successive shocks in 3 directions	± 0.2 %	± 0.3 %	
Vibration	10 - 55 Hz 0.75 mm or 10 g during 6 hours	± 0.2 %	$\frac{\sqrt{1-2}}{\sqrt{1-3}} \le \pm 0.3 \%$	
Rotational Life	200 cycles	\pm (2 % + 3 Ω) Contact res. variation: < 2 % Rn		

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Document Number: 57026 Revision: 12-Sep-07



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STANDARD RESISTANCE ELEMENT DATA				
STANDARD		TYPICAL		
RESISTANCE VALUES	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	TCR - 55 °C + 125 °C
Ω	W	٧	mA	ppm/°C
10	0.5	2.24	224	
22	0.5	3.32	151	
47	0.5	4.85	103	
100	0.5	7.07	71	
220	0.5	10.5	48	
470	0.5	15.3	33	
1K	0.5	22.4	22	
2K2	0.5	33.2	15	400
4K7	0.5	48.5	10	± 100
10K	0.5	70.7	7.1	
22K	0.5	105	4.8	
47K	0.5	153	3.3	
100K	0.5	224	2.2	
220K	0.28	250	1.1	
470K	0.13	250	0.5	
1M	0.06	250	0.3	

MARKING

Printed:

- VISHAY trademark
- model
- ohmic value
- manufacturing date
- marking of terminal 3

PACKAGING

- In box of 200 pieces, code BO200
- In tube by 25 pieces, code "TU25"

ORDERING INFORMATION				
43P MODEL AND PIN STYLE	103 EIA RESISTANCE VALUE	T000 SPECIAL (omit if standard)	BO200 PACKAGING	e3 LEAD FINISH
		T601 - Panel mount	on request: TU25	e3: pure Sn

SAP PART NUMBERING GUIDELINES				
M 4 3 P 1	0 3	K	B 4 0	
MODEL	OHMIC VALUE	TOL.	PACKAGING CODE	SPECIAL (IF APPLICABLE)
See the end of this data book for conversion tables				



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Revision: 18-Jul-08

Document Number: 91000 www.vishay.com