

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



#### **FEATURES**

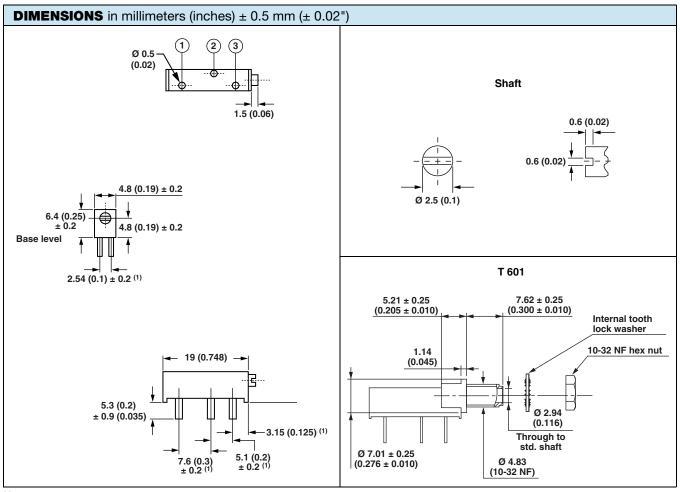
0.75 W at 70 °C





COMPLIANT

- Panel mount available
- Multi-finger wiper for better C.R.V.
- Tests according to CECC 41000 or IEC 60393-1
- Material categorization: For definitions of compliance please see <a href="https://www.vishay.com/doc?99912"><u>www.vishay.com/doc?99912</u></a>



Note

(1) To be measured at base level



# Vishay Spectrol

ELECTRICAL SPECIFICATIONS					
Resistive element	Cermet				
Electrical travel	15 turns ± 1				
Resistance range	10 Ω to 5 MΩ				
Standard series E3	1 - 2 - 5				
Tolerance Standard	± 10 %				
Linear	0.75 W at + 70 °C				
Power rating	0.75  N 0.50  0.25  0 20 40 60 70 80 100 125 140  AMBIENT TEMPERATURE IN °C				
Circuit diagram	$ \begin{array}{c} a \\ \downarrow \\ (1) \\ b \\ \downarrow \\ b \\ \downarrow \\ (2) \end{array} $				
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 (typical)	1 % or 2 Ω				
Dielectric strength (RMS)	1000 V				
Insulation resistance (500 V <sub>DC</sub> )	$10^3~\mathrm{M}\Omega$ min.				

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	Pure Sn (code e3)				

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					
	CONDITIONS	$\Delta R_{T}/R_{T}$ (%)	ΔV <sub>1-2</sub> /V <sub>1-3</sub> (%)	OTHER			
Load life	1000 h at rated power 90'/30' - ambient temp. 70 °C	± 4 %	-	-			
Humidity	4 days	± 3 %	-	Dielectric strength: 1000 $V_{RMS}$ Insulation resistance: > 20 $M\Omega$			
Rapid temperature 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			

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	V	mA	ppm/°C		
10	0.75	2.74	274			
20	0.75	3.87	194			
50	0.75	6.12	122			
100	0.75	8.66	87	± 100		
200	0.75	12.2	61			
500	0.75	19.4	39			
1K	0.75	27.4	27			
2K	0.75	38.7	19			
5K	0.75	61.2	12			
10K	0.75	86.6	8.7	± 100		
20K	0.75	122	6.1			
50K	0.75	194	3.9			
100K	0.75	274	2.7			
200K	0.75	387	1.9			
500K	0.32	400	0.80			
1M	0.16	400	0.40			
2M	0.08	400	0.20			
4M	0.03	400	0.08			

### **PACKAGING**

• In box of 200 pieces code B40 (BO200)

#### On request:

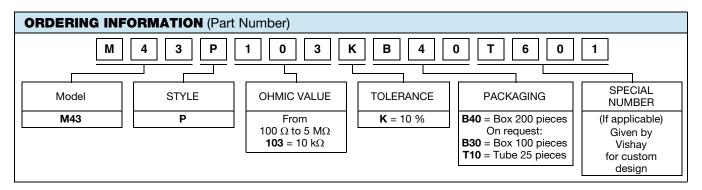
- In box of 100 pieces code B30 (BO100)
- In tube of 25 pieces code T10 (TU25)

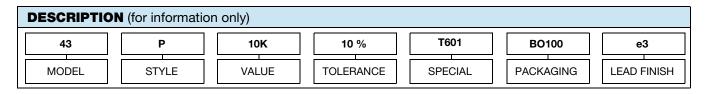
### **MARKING**

- Vishay trademark
- Vishay part number or model, ohmic value code and tolerance code
- Manufacturing date
- Marking of terminals 1 and/or 3



## Vishay Spectrol







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