RoHS COMPLIANT

Vishay Spectrol

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



click logo to get started

DESIGN SUPPORT TOOLS

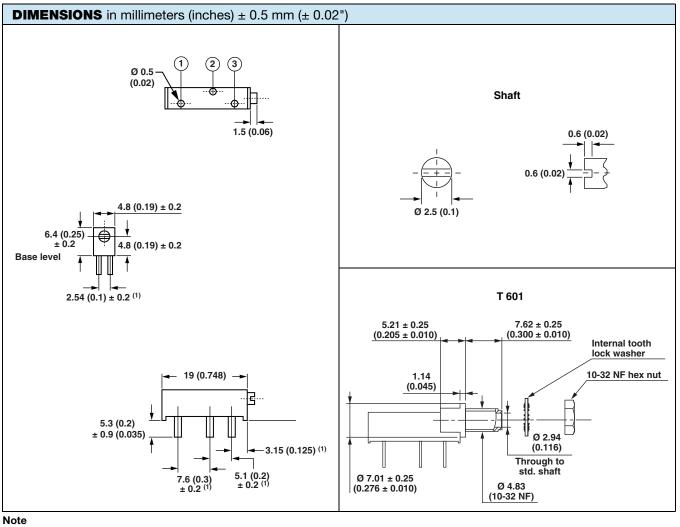
Models Available

www.vishay.com

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FEATURES

- 0.75 W at 70 °C
- Wide ohmic value range (10 Ω to 5 MΩ)
- · 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 www.vishay.com/doc?99912



⁽¹⁾ To be measured at base level

Revision: 31-Aug-2018

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For technical questions, contact: sferpottrimmers@vishay.com

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Resistive element		Cermet		
Electrical travel		15 turns ± 1		
Resistance range		10 Ω to 5 MΩ		
Standard series E3		1 - 2 - 5		
Tolerance S	tandard	± 10 %		
	Linear	0.75 W at +70 °C		
Power rating		0.75 0.50 0.25 0.25 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.25		
Circuit diagram		$ \begin{array}{c} a \\ c \\ (1) \\ b \\ (2) \end{array} \begin{array}{c} c \\ c \\ (3) \\ c \\ (3) \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 _{DC})		$10^3 M\Omega$ 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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TEOTO		TYPICAL VALUES AND DRIFTS			
TESTS	CONDITIONS	∆ R⊺/R⊺ (%)	∆V ₁₋₂ /V ₁₋₃ (%)	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	

Note

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

STANDARD RESISTANCE ELEMENT DATA					
STANDARD		TYPICAL			
RESISTANCE	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		
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	± 100	
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	0.8		
1M	0.16	400	0.4		
2M	0.08	400	0.2		
4M	0.03	400	0.08		

MARKING

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

PACKAGING

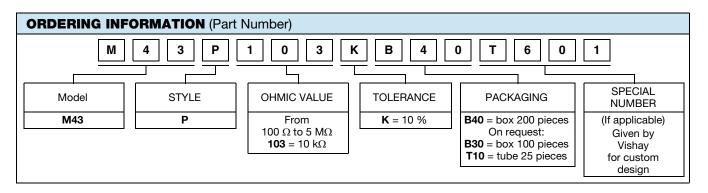
• In box of 200 pieces code B40 (BO200)

On request:

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



Vishay Spectrol



DESCRIPTION (for information only)						
43	Р	10K	10 %	T601	BO100	e3
MODEL	STYLE	VALUE	TOLERANCE	SPECIAL	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			



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