VISHAY.

43 Vishay Spectrol

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



FEATURES

- 0.75 W at 70 °C
- Wide ohmic value range (10 Ω to 5 M $\Omega)$
- Panel mount available
- Chevron shaft for sealing and smooth consistent torque
- Solder terminations for improved reliability
- Multi-finger wiper for better C.R.V.
- Compliant to RoHS directive 2002/95/EC since date code 0506



Note

⁽¹⁾ To be measured at base level

Vishay Spectrol

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



ELECTRICAL SPECI	FICATIONS				
Resistive Element		Cermet			
Electrical Travel		15 turns ± 1			
Resistance Range		10 Ω to 5 MΩ			
Standard Series E3		1 - 2 - 5			
Televence	standard	± 10 %			
Iolerance	on request	± 5 %			
	linear	0.75 W at + 70 °C			
	logarithmic	Not applicable			
Power Rating		CIRCUIT DIAGRAM $a \longrightarrow b & b & c \\ (1) & b & b & c \\ (2) & & & & & & & & & & & & & & & & & & &$			
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 (Typical)		1 % or 2 Ω			
Dielectric Strength (RMS)		1000 V			
Insulation Resistance (500 V _{DC})		10 ³ MΩ 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 %			
Lead Finish	e3: Pure Sn			

ENVIRONMENTAL SPECIFICATIONS					
Temperature Range	- 55 °C to + 125 °C				
Climatic Category	55/125/56				
Sealing	Fully sealed - container IP67				



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

43

PERFORMANCE					
TEOTO		TYPICAL VALUES AND DRIFTS			
12515	CONDITIONS	∆ R_T/R_T (%)	∆ R ₁₋₂ / R ₁₋₂ (%)		
Load Life 1000 h at rated power 90'/30' - ambient temp. 70 °C		± 4 % Contact res. variation: < 3 % Rn			
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 3 % Dielectric strength: 1000 V_{RMS} Insulation resistance: > 20 $M\Omega$	±1%		
Rapid Temperature Change 5 cycles - 55 °C at + 125 °C - 55 °C		± 0.5 %	$\Delta V_{1-2}/V_{1-3} \le \pm 2 \%$		
Shock50 g at 11 msShock3 successive shocks in 3 directions		±2%	±2%		
10 Hz to 55 HzVibration0.75 mm or 10 g during 6 h		±2%	$\Delta V_{1-2}/V_{1-3} \le \pm 2 \%$		
Rotational Life 200 cycles		\pm (3 % + 3 Ω) Contact res. variation: < 2 % 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		3.87	194			
50		6.12	122			
100		8.66	87			
200		12.2	61			
500		19.4	39			
1K		27.4	27			
2K		38.7	19			
5K		61.2	12	. 100		
10K		86.6	8.7	± 100		
20K		122	6.1			
50K	•	194	3.9			
100K	V	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			

MARKING

Printed:

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

PACKAGING

- In box of 200 pieces code B40 (BO200)
- In box of 100 pieces code B30 (BO100)
- In tube by 25 pieces code T10 (TU25)

Vishay Spectrol

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



ORDERING INFORMATION (part number 15 digits)						
Μ	4 3 P		КВ	4 0 T 6		
MODEL	STYLE	OHMIC VALUE	TOLERANCE	PACKAGING	SPECIAL NUMBER	
M43	Р	From 100 Ω to 5 MΩ	K = 10 % On request:	B40 = Box 200 pieces On request:	(If applicable) Given by Vishay for	
		103 = 10 kΩ	J = 5 %	B30 = Box 100 pieces T10 = Tube 25 pieces	custom design	

PART NUMBER DESCRIPTION (for information only)						
43 P 10K			10 %	T601	BO100	e3
MODEL	STYLE	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD FINISH



Vishay

Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.