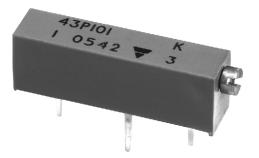


RoHS

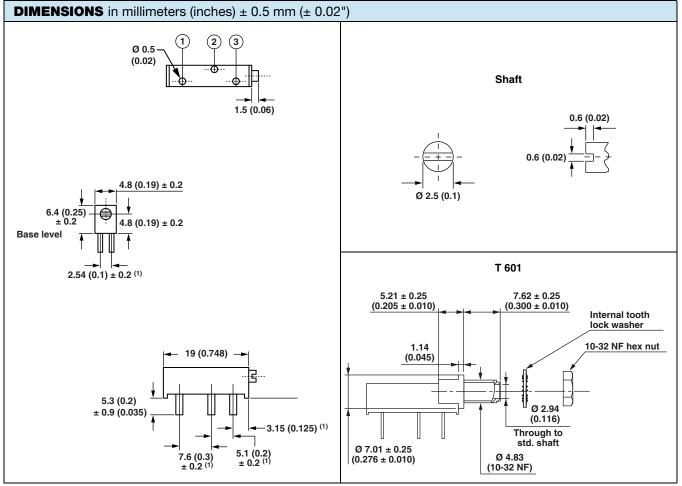
COMPLIANT

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



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
- Compliant to RoHS Directive 2002/95/EC



Note

⁽¹⁾ To be measured at base level

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



ELECTRICAL SPECIFICATIONS Resistive element	Cermet		
Electrical travel	15 turns ± 1		
Resistance range	10 Ω to 5 MΩ		
Standard series E3	1 - 2 - 5		
Standard Series L5			
Tolerance On requ			
	eear 0.75 W at + 70 °C		
Power rating	0.75 0.75 0.50 0.25		
Circuit diagram	$ \begin{array}{c} a \\ O \\ (1) \\ b \\ c \\ (2) \end{array} \begin{array}{c} c \\ C \\ (3) \\ (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 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 %			
Terminals	Pure Sn (code e3)			

ENVIRONMENTAL SPECIFICATIONS			
Temperature range	- 55 °C to + 125 °C		
Climatic category	55/125/56		
Sealing	Fully sealed - IP67		

www.vishay.com 83 For technical questions, contact: <u>sfer@vishay.com</u> See also Application Note: <u>www.vishay.com/doc?51001</u> and <u>www.vishay.com/doc?52029</u>

Document Number: 57026 Revision: 10-Nov-10



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

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PERFORMANCES					
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS			
12515	CONDITIONS	∆ R _T / R _T (%)	∆ R₁₋₂/R₁₋₂ (%)		
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 Ω	± 1 %		
Rapid temperature change	5 cycles - 55 °C to + 125 °C	± 0.5 %	$\Delta V_{1-2}/\Delta V_{1-3} \leq \pm 2$ %		
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 %	$\Delta V_{1-2}/\Delta V_{1-3} \leq \pm 2 \%$		
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	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	0.80		
1M	0.16	400	0.40		
2M	0.08	400	0.20		
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 3/4" Rectangular (19 mm) Multi-Turn Cermet Trimmer



ORDERING INF	ORDERING INFORMATION (Part Number)					
M	M 4 3 P 1 0 3 K B 4 0 T 6 0 1					
Model	STYLE	OHMIC VALUE	TOLERANCE	PACKAGING	SPECIAL NUMBER	
M43	P From 100 Ω to 5 MΩ 103 = 10 kΩ		K = 10 % On request: J = 5 %	B40 = Box 200 pieces On request: B30 = Box 100 pieces	(If applicable) Given by Vishay	
				T10 = Tube 25 pieces	for custom design	

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



Vishay

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