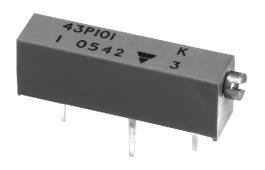
COMPLIANT





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

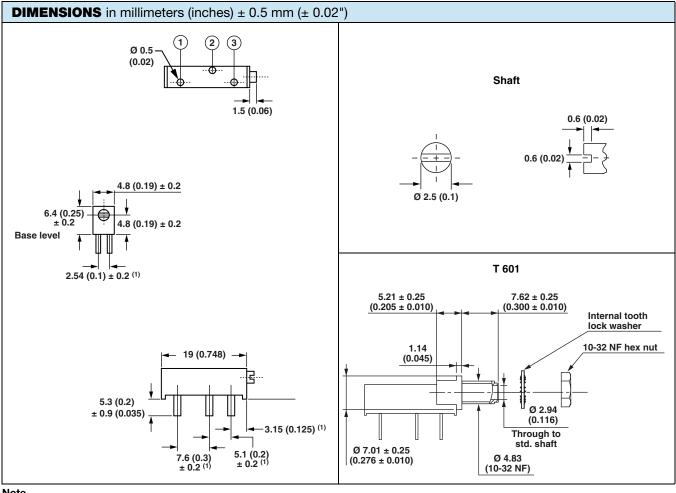


#### **FEATURES**

- 0.75 W at 70 °C
- Wide ohmic value range (10  $\Omega$  to 5 M $\Omega$ )



- 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



Document Number: 57026

Revision: 10-Nov-10

ELECTRICAL SPECIFICATIONS			
Resistive element	Cermet		
Electrical travel	15 turns ± 1		
Resistance range	10 $\Omega$ to 5 M $\Omega$		
Standard series E3	1 - 2 - 5		
Standard	± 10 %		
Tolerance On request	± 5 %		
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}{ccc}                                   $		
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	55/125/56	
Sealing	Fully sealed - IP67	



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

## Vishay Spectrol

PERFORMANCES					
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS			
12313	CONDITIONS	∆R <sub>T</sub> /R <sub>T</sub> (%)	∆R <sub>1-2</sub> /R <sub>1-2</sub> (%)		
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	$\pm3~\%$ Dielectric strength: 1000 $\text{V}_{\text{RMS}}$ Insulation resistance: > 20 $\text{M}\Omega$	± 1 %		
Rapid temperature change	5 cycles - 55 °C to + 125 °C	± 0.5 %	$\Delta V_{1-2}/\Delta V_{1-3} \le \pm 2 \%$		
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 %	$\Delta V_{1-2}/\Delta V_{1-3} \le \pm \ 2 \ \%$		
Rotational life	200 cycles	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-		

STANDARD RESISTANCE ELEMENT DATA					
STANDARD	LINEAR LAW			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:

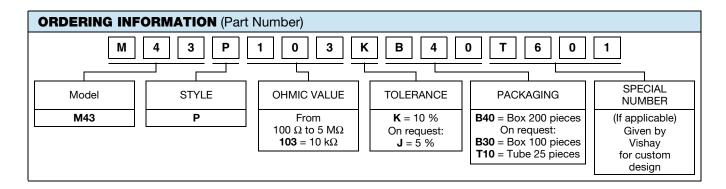
- In box of 100 pieces code B30 (BO100)
- In tube of 25 pieces code T10 (TU25)

## Vishay Spectrol

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



Revision: 10-Nov-10



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



Vishay

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