

# 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 2011/65/EU



**RoHS**  
COMPLIANT

## DIMENSIONS in millimeters (inches) ± 0.5 mm (± 0.02")



**Note**  
(1) To be measured at base level

<b>ELECTRICAL SPECIFICATIONS</b>	
Resistive element	Cermet
Electrical travel	15 turns $\pm$ 1
Resistance range	10 $\Omega$ to 5 M $\Omega$
Standard series E3	1 - 2 - 5
Tolerance	$\pm$ 10 %
Power rating	0.75 W at + 70 °C 
Circuit diagram	
Temperature coefficient	See Standard Resistance Element table
Limiting element voltage (linear law)	400 V
Contact resistance variation	1 % R <sub>n</sub> or 1 $\Omega$ max.
End resistance (typical)	1 % or 2 $\Omega$
Dielectric strength (RMS)	1000 V
Insulation resistance (500 V <sub>DC</sub> )	10 <sup>3</sup> M $\Omega$ min.

<b>MECHANICAL SPECIFICATIONS</b>	
Mechanical travel	18 turns $\pm$ 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)

<b>ENVIRONMENTAL SPECIFICATIONS</b>	
Temperature range	- 55 °C to + 125 °C
Climatic category	55/125/4
Sealing	Fully sealed - IP67



PERFORMANCES				
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS		
		$\Delta R_T/R_T$ (%)	$\Delta V_{1-2}/V_{1-3}$ (%)	OTHER
Load life	1000 h at rated power 90'/30' - ambient temp. 70 °C	± 4 %	-	-
Humidity	4 days	± 3 %	-	Dielectric strength: 1000 V <sub>RMS</sub> Insulation resistance: > 20 MΩ
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 RESISTANCE VALUES	LINEAR LAW			TYPICAL TCR - 55 °C + 125 °C
	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. WIPER CUR.	
Ω	W	V	mA	ppm/°C
10	0.75	2.74	274	± 100
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	
10K	0.75	86.6	8.7	
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
<ul style="list-style-type: none"> <li>In box of 200 pieces code B40 (BO200)</li> </ul> <p>On request:</p> <ul style="list-style-type: none"> <li>In box of 100 pieces code B30 (BO100)</li> <li>In tube of 25 pieces code T10 (TU25)</li> </ul>

MARKING
<ul style="list-style-type: none"> <li>Vishay trademark</li> <li>Vishay part number or model, ohmic value code and tolerance code</li> <li>Manufacturing date</li> <li>Marking of terminals 1 and/or 3</li> </ul>



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

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



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**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.**

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