## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

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#### Vishay Spectrol



3/8" Square (10 mm) Multi-Turn Cermet Trimmer

# 84 K 34 0728 34 0710 34

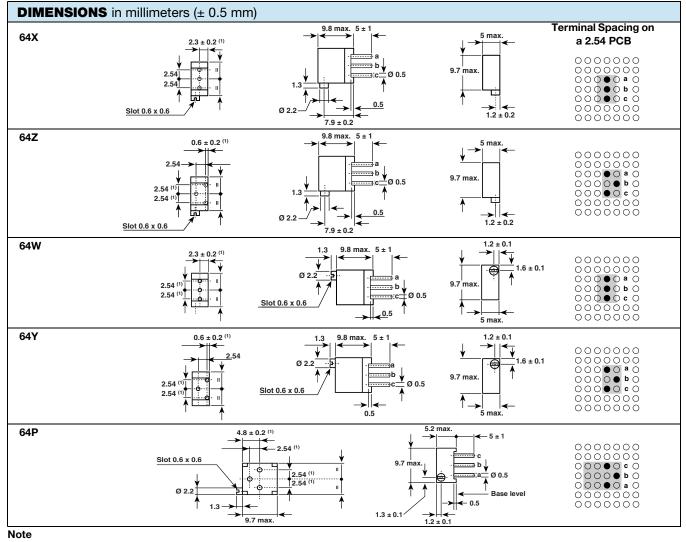
The Model 64 is a small size trimmer -  $3/8" \times 3/8" \times 3/16"$  answering PC board mounting requirements. Five versions are available which differ by the position of the control screw in relation to the PC board plane and by the spacing of the terminals. Excellent operational stability is provided by the use of a cermet element.

#### FEATURES

• Industrial grade



- Tests according to CECC 41000 or IEC 60393-1
- Contact resistance variation < 2 %
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>



#### <sup>(1)</sup> To be measured at base level

Revision: 09-Sep-16

**1** s. contact: sferr Pb

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Vishay Spectrol

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Resistive element		Cermet			
Electrical travel		21 turns ± 2			
Resistance range		10 Ω to 2.2 MΩ			
Standard series E3		1 - 2 - 2.5 - 5			
Standard		10 %			
Tolerance	On request	5 %			
	linear	0.5 W at +70 °C			
Power rating		0.5 MI O O O O O O O O O O O O O O O O O O			
Circuit diagram		$ \begin{array}{c} a \\ c \\ (1) \\ b \\ c \\ (2) \end{array} $			
Temperature coefficient		See Standard Resistance Element table			
Limiting element voltage (linear law)		250 V			
Contact resistance variation		2 % Rn or 2 Ω			
End resistance (typical)		1 Ω			
Dielectric strength (RMS)		1000 V			
Insulation resistance (500 V <sub>DC</sub> )		10 <sup>6</sup> ΜΩ			

MECHANICAL SPECIFICATIONS			
Mechanical travel	23 turns ± 5		
Operating torque (max. Ncm)	1.5		
End stop torque	Clutch action		
Net weight	Approx. 0.82 g		
Wiper (actual travel)	Positioned at approx. 50 %		
Terminals	Pure Sn (code e3)		

ENVIRONMENTAL SPECIFICATIONS		
Temperature range	-55 °C to +155 °C	
Climatic category	55/125/56	
Sealing	Fully sealed - IP67	

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STANDARD RESISTANCE ELEMENT DATA				
STANDARD		TYPICAL		
RESISTANCE VALUES	MAX. POWER MAX. WORKING AT 70 °C VOLTAGE		MAX. CURRENT THROUGH WIPER	TCR -55 °C +125 °C
Ω	W	V	mA	ppm/°C
10 20 50 100 200 250 500 1K 2K 2.5K 5K 10K 20K 25K 50K 100K 200K 250K 500K 100K 250K	$\begin{array}{c} 0.5\\ 0.5\\ 0.5\\ 0.5\\ 0.5\\ 0.5\\ 0.5\\ 0.5\\$	$\begin{array}{c} 2.2\\ 3.2\\ 5\\ 7.1\\ 10\\ 11.2\\ 15.8\\ 22.4\\ 31.6\\ 35.4\\ 50\\ 70.7\\ 100\\ 112\\ 158\\ 224\\ 250\\ 250\\ 250\\ 250\\ 250\\ 250\\ 250\\ 250$	$\begin{array}{c} 224 \\ 158 \\ 100 \\ 71 \\ 50 \\ 45 \\ 32 \\ 22 \\ 16 \\ 14 \\ 10 \\ 7.1 \\ 5 \\ 4.5 \\ 3.2 \\ 2.2 \\ 1.3 \\ 1 \\ 0.5 \\ 0.25 \\ 0.13 \end{array}$	± 100

PERFORMANCES				
TEOTO		TYPICAL VALUES AND DRIFTS		
TESTS	CONDITIONS	∆ <b>R<sub>T</sub>/R<sub>T</sub> (%)</b>	∆ <b>R<sub>1-2</sub>/R<sub>1-2</sub> (%)</b>	
Load life	1000 h at rated power 90'/30' - ambient temp. 70 °C	± 1 % Contact res. variation: < 1 % Rn	±2 %	
Climatic sequence	Phase A dry heat 125 °C - 30 % Pr Phase B damp heat Phase C cold -55 °C Phase D damp heat 5 cycles	± 0.5 %	±1%	
Long term damp heat	56 days 40 °C, 93 % RH	$\pm$ 0.5 % Dielectric strength: 1000 $V_{RMS}$ Insulation resistance: $>10^4~M\Omega$	±1 %	
Rapid temperature change	5 cycles -55 °C to +125 °C	± 0.5 %	$\Delta V_{1-2}/\Delta V_{1-3} \le \pm 1$ %	
Shock	50 g at 11 ms 3 successive shocks in 3 directions	± 0.1 %	± 0.2 %	
Vibration	10 Hz to 55 Hz 0.75 mm or 10 g during 6 h	± 0.1 %	$\Delta V_{1\text{-}2}/\Delta V_{1\text{-}3} \leq \pm \ 0.2$ %	
Rotational life	200 cycles	± 4 % Contact res. variation: < 1 % Rn		

Note

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

#### MARKING

- Vishay trademark
- Model
- Style
- Ohmic value (in  $\Omega,\,k\Omega,\,M\Omega)$
- Tolerance (in %)
- Manufacturing date
- Marking of terminal 3

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Document Number: 57028

For technical questions, contact: <u>sferpottrimmers@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u> www.vishay.com

**Vishay Spectrol** 

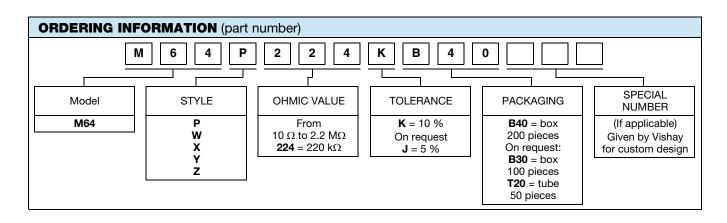
#### PACKAGING

**ISHAY** 

• In box of 200 pieces code B40 (BO200) On request:

•In box of 100 pieces code B30 (BO100)

•In tube of 50 pieces code T20 (TU50)



DESCRIPTIO	N (for informatio	n only)				
64	Р	220K	10 %		BO200	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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