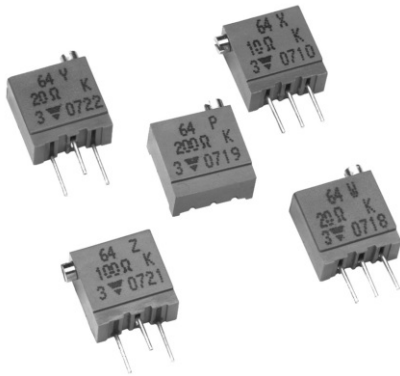


## 3/8" Square (10 mm) Multi-Turn Cermet Trimmer



### FEATURES

- Industrial Grade
- 0.5 W at 70 °C
- Tests according to CECC 41 000
- Contact resistance variation < 1 % typical

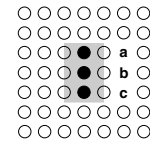
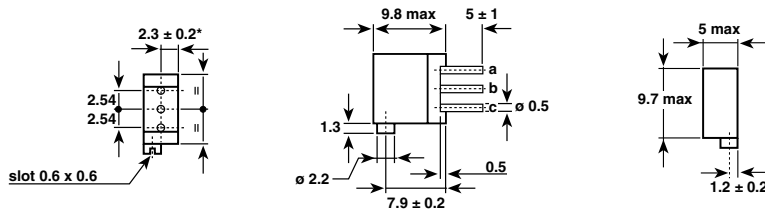


The Model 64 is a small size trimmer - 3/8" x 3/8" x 3/16" - answering PC board mounting requirements. Five versions are available which differ by the position of the control screw in relation to the PC board plane and by the spacing of the terminals. Excellent operational stability is provided by the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

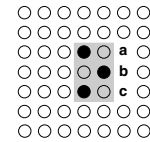
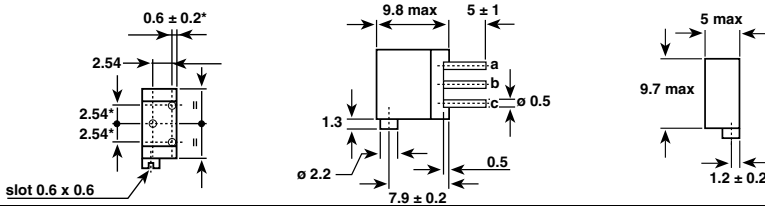
### DIMENSIONS in millimeters

### Terminal Spacing on a 2.54 PCB

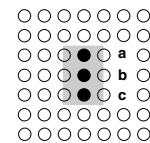
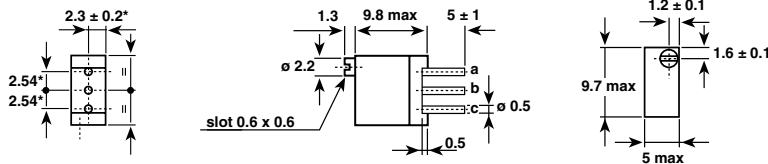
64X



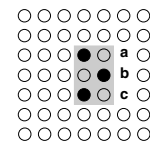
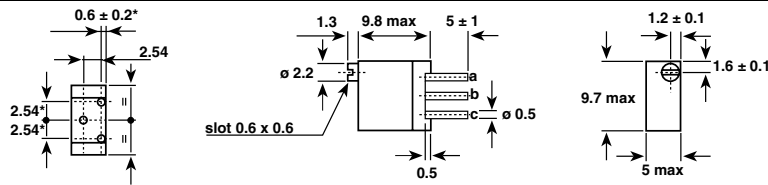
64Z



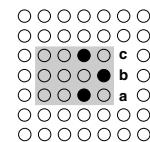
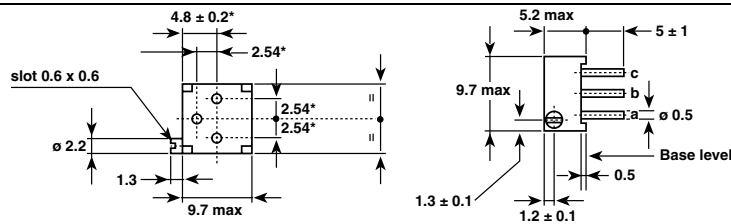
64W



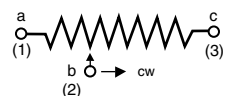
64Y



64P



### CIRCUIT DIAGRAM



\* to be measured at base level

Tolerance unless otherwise specified ± 0.5



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

Vishay Spectrol

ELECTRICAL SPECIFICATIONS		
Resistive Element		cermet
Electrical Travel		21 turns ± 2
Resistance Range		10 Ω to 2.2 MΩ
Standard series e3		1 - 2 - 2.5 - 5
Tolerance	Standard	± 10 %
	On Request	± 5 %
Power Rating	Linear	0.5 W at + 70 °C
	Logarithmic	not applicable
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 VDC)		10 <sup>6</sup> MΩ

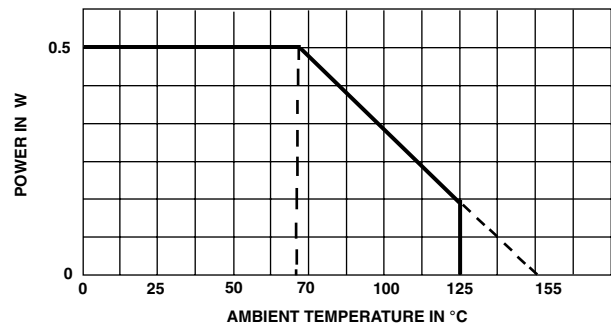
**MECHANICAL SPECIFICATIONS**

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 %

**ENVIRONMENTAL SPECIFICATIONS**

Temperature Range	- 55 °C to + 155 °C
Climatic Category	55/125/56
Sealing	fully sealed container IP67

**POWER RATING CHART**



PERFORMANCE			
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS	
		$\frac{\Delta RT}{RT}$ (%)	$\frac{\Delta R_{1-2}}{R_{1-2}}$ (%)
Load Life	1000 hours 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	± 0.5 % Dielectric strength: 1000 V <sub>RMS</sub> Insulation resistance: > 10 <sup>4</sup> MΩ	± 1 %
Rapid Temperature Change	5 cycles - 55 °C at + 125 °C	± 0.5 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 1 %
Shock	50 g at 11 m seconds 3 successive shocks in 3 directions	± 0.1 %	± 0.2 %
Vibration	10 - 55 Hz 0.75 mm or 10 g during 6 hours	± 0.1 %	$\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 0.2 %
Rotational Life	200 cycles	± 4 % 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. CUR. THROUGH WIPER	
Ω	W	V	mA	ppm/°C
10	0.5	2.2	224	± 100
20	↓	3.2	158	
50		5	100	
100		7.1	71	
200		10	50	
250		11.2	45	
500		15.8	32	
1K		22.4	22	
2K		31.6	16	
2.5K		35.4	14	
5K		50	10	
10K	70.7	7.1		
20K	100	5		
25K	112	4.5		
50K	158	3.2		
100K	0.5	224	2.2	
200K	0.31	250	1.3	
250K	0.25	250	1	
500K	0.125	250	0.5	
1M	0.063	250	0.25	
2M	0.031	250	0.13	

**MARKING**

Printed:

- VISHAY trademark
- model
- style
- ohmic value (in Ω, kΩ, MΩ)
- tolerance (in %)
- manufacturing date
- marking of terminal 3

LEAD FINISH

Pure Sn. Code e3

**PACKAGING**

- In bulk (box of 200 pieces), code B0200
- On request in tube

**ORDERING INFORMATION**64  
MODELP  
TERMINAL STYLE201  
EIA  
RESISTANCE CODEe3  
LEAD FINISH

P, W, X, Y or Z

e3: pure Sn

**SAP PART NUMBERING GUIDELINES**

M	6	4	P	2	0	1	K	B	4	0			
MODEL			STYLE	OHMIC VALUE			TOL	PACKAGING CODE			SPECIAL (IF APPLICABLE)		

See the end of this data book for conversion tables



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