

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



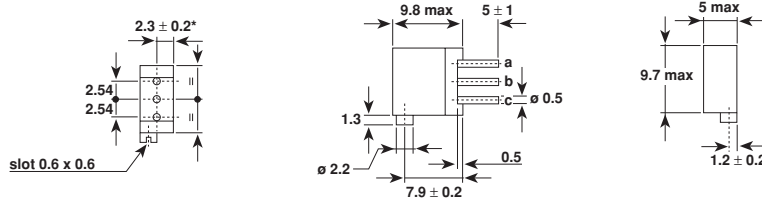
### FEATURES

- Industrial Grade
- 0.5 Watt at 70°C
- CECC 41 100
- MIL-R-22097
- Good stability
- Contact resistance variation < 1% typical
- Meets MIL-R-22097 specifications

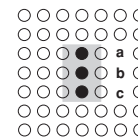
The Model 64 is a small size trimmer - 3/8" x 3/8" x 3/16" - answering PC board mounting requirements. Five versions are available which differ by the position of the control screw in relation to the PC board plane and by the spacing of the terminals. Excellent operational stability is provided by the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

### DIMENSIONS in millimeters

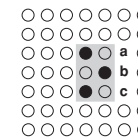
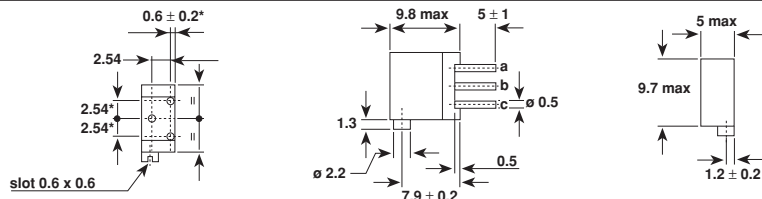
64X



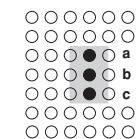
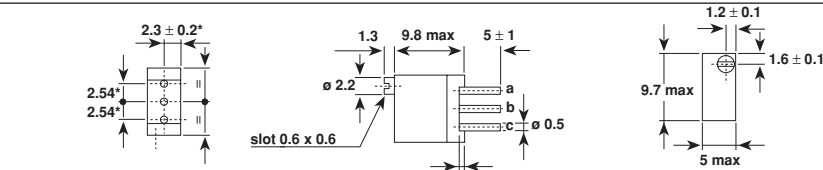
### Terminal Spacing on a 2.54 PCB



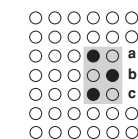
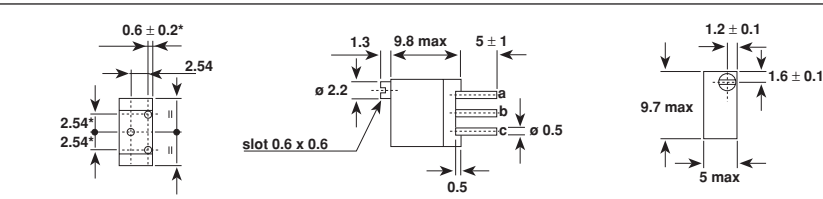
64Z



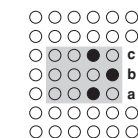
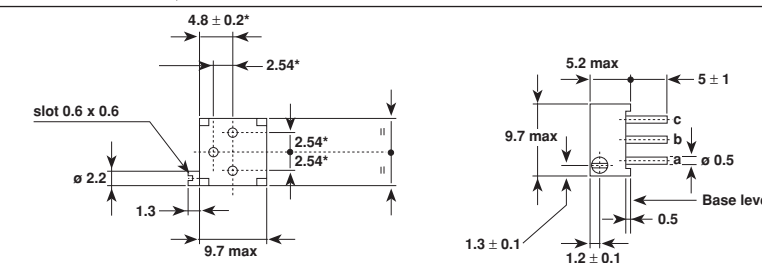
64W



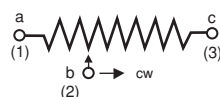
64Y



64P



### CIRCUIT DIAGRAM



\*to be measured at base level



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

Vishay Spectrol

ELECTRICAL SPECIFICATIONS		
Resistive Element		cermet
Electrical Travel		19 turns ± 2
Resistance Range		10Ω to 2.2MΩ
Standard series E3		1 - 2 - 2.5 - 5
Tolerance	Standard	± 10%
	On Request	± 5%
Power Rating	Linear	0.5W at + 70°C
	Logarithmic	not applicable
Temperature Coefficient		See Standard Resistance Element Table
Limiting Element Voltage (Linear Law)		250V
Contact Resistance Variation		2% Rn or 2Ω
End Resistance (Typical)		1Ω
Dielectric Strength (RMS)		1000V
Insulation Resistance (500VDC)		10 <sup>6</sup> MΩ

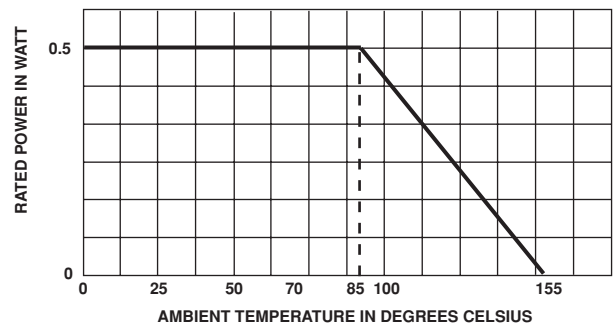
**MECHANICAL SPECIFICATIONS**

Mechanical Travel	22 turns ± 5
Operating Torque (max. Ncm)	1.5
End Stop Torque	clutch action
Unit Weight (max. g)	1.2

**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	± 0.5% Dielectric strength: 1000V RMS 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 11m secs 3 successive shocks in 3 directions	± 0.1%	± 0.2%
Vibration	10-55 Hz 0.75mm or 10 g during 6 hours	± 0.1%	$\frac{\Delta V_{1-2}}{V_{1-3}}$ ≤ ± 0.2%
Rotational Life	200 cycles	± 2% Contact res. variation: < 1% Rn	

**STANDARD RESISTANCE ELEMENT DATA**

STANDARD RESISTANCE VALUES	LINEAR LAW			T.C. -55°C +125°C
	MAX. POWER AT 85°C	MAX. WORKING VOLTAGE	MAX. CUR. THROUGH ELEMENT	
Ω	W	V	mA	ppm/°C
10	0.5	2.2	224	0
22	↓	3.3	150	
47		4.8	103	
100		7	70	± 100
220		10.5	47	
470		15.3	32	
1k		22.4	22	
2.2k		33.2	15	
4.7k		48.5	10	
10k		70.7	7	
22k		105	4.8	
47k	↓	153	3.2	
100k	0.5	224	2.2	
220k	0.28	250	1.1	
470k	0.13	250	0.53	
1M	0.06	250	0.25	
2.2M	0.028	250	0.11	

**MARKING**

Printed:

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

**PACKAGING**

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

**ORDERING INFORMATION**

<b>64</b> MODEL	<b>P</b> TERMINAL STYLE  P, W, X, Y or Z	<b>201</b> EIA RESISTANCE CODE
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NB. On delivery the wiper is positioned at mid-travel.

**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