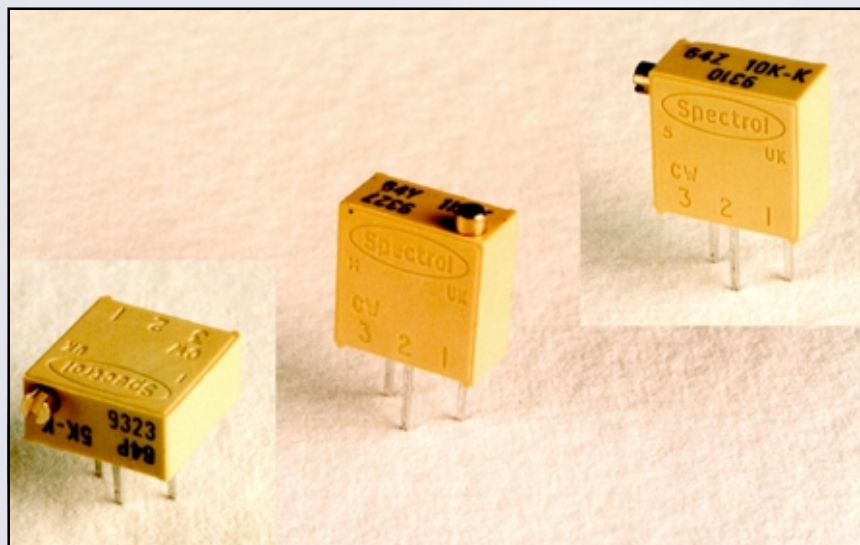


## A 3/8"sq (10mm) Multiturn Cermet Trimmer

# 64



The Model 64 cermet trimmer from Spectrol incorporate improved design features making it one of the most advanced components of its type available in Europe. Giving maximum versatility with a choice of five pin styles and top or side adjustment. Available from 10 ohms to 2 Megohm, the Model 64 has 25 turns nominal travel and a resistance tolerance of  $\pm 10\%$ . Significant design features include the use of two Chevron sealing rings on the shaft, for more consistent torque and improved adjustability and flame retardant housing. A precious metal wiper significantly improves long term stability, making it particularly suitable for telecommunication applications.

### ELECTRICAL

**Effective Travel:**

25 turns nominal

**Resistance Range:**

10 $\Omega$  thru 3megohms

**Resistance Tolerance:**

$\pm 10\%$

**End Resistance:**

less than 2 $\Omega$

**Temperature Coefficient of Resistance:**

100 ppm/ $^{\circ}\text{C}$ . 100 $\Omega$  thru 2 megohms  
0 to +250 ppm/ $^{\circ}\text{C}$ . below 100 $\Omega$

**Power Rating:**

0.5 watts at 70 $^{\circ}\text{C}$ . derated linearly to zero watts at 125 $^{\circ}\text{C}$ . Maximum voltage not to exceed 300 V

**Dielectric Withstanding Voltage:**

1000 VAC at sea level. 250 VAC at 80,000 feet (24,400 meters)

**Insulation Resistance:**

1000 Meg ohms minimum

**Contact Resistance Variation:**

2% or 2 $\Omega$  whichever is greater

### MECHANICAL

**Stop:**

Contact idles at stop

**Operating Torque:**

3mNm nominal

**Weight:**

0.04oz (1.13 grams) maximum

**Resistance Element:**

Cermet

**2 Terminal Adjustability:**

0.05% of RT

**3-terminal Adjustment:**

0.01% of applied voltage

### RESISTANCE VALUES

**Ohms-** 10R, 20R, 50R, 100R, 200R, 500R, 1K, 2K, 5K, 10K, 20K, 25K, 50K, 100K, 200K, 250K, 500K, 1M, 2M

### MARKING

**Unit Identification:**

Manufacturer's name and model number, resistance value and tolerance, linearity specification date code and terminal identification.

### ENVIRONMENTAL

	MAX R	CHANGE Vab Vac	CHANGE		
			1	2	3
Temperature Range: -55 $^{\circ}\text{C}$ to +55 $^{\circ}\text{C}$	2%	1%	(PARA 2.3.6)	TEST NA (IEC 68-2-14)	METHOD 107
Bumps: 390 m $^2$ /4000	1%	-	(PARA 2.3.3)	TEST EB (IEC 68-2-29)	NO EQUIV.
Vibration: 98 m/s $^2$ 10 to 500 Hz	1%	2%	(PARA 2.3.2)	TEST FC (IEC 68-2-6)	METHOD 204
Electrical Endurance: 1000 hour	3%*	-*	(PARA 2.5.16)		NO EQUIV.
Soldering: -	-	-	(PARA 2.3.7)	TEST TB (IEC 68-2-20)	METHOD 208
Resistance to heat:	1%	-	(PARA 2.3.7)	TEST TB (IEC 68-2-20A) METHOD 1A	METHOD 210
Damp heat steady rate: 21 days	3%	-	(PARA 2.1)	TEST C (IEC 68-2-3)	METHOD 103
Sealing: 85 $^{\circ}\text{C}$ for 1 min	-	-	AS IEC	TEST QC (IEC 68-2-17)	METHOD 112
Mechanical Life: 200 cycles	3%	-		METHOD 2	
Terminal strength: 2.2lbs (1kg)	min				

\* Better than 2% changes of wiper resistance with respect to element is achievable with the precious metal wiper

Related documents:

1 Per CECC 41100

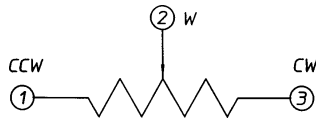
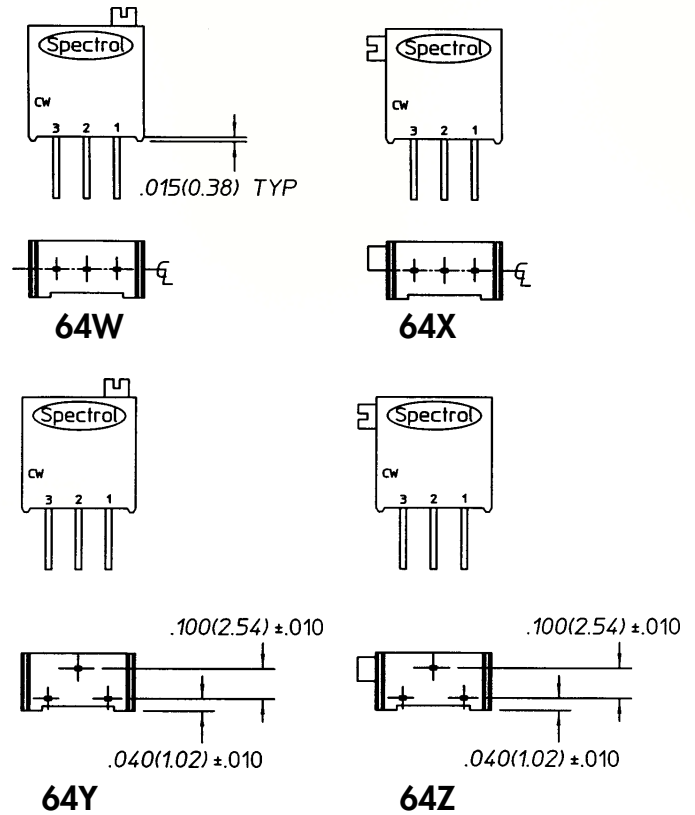
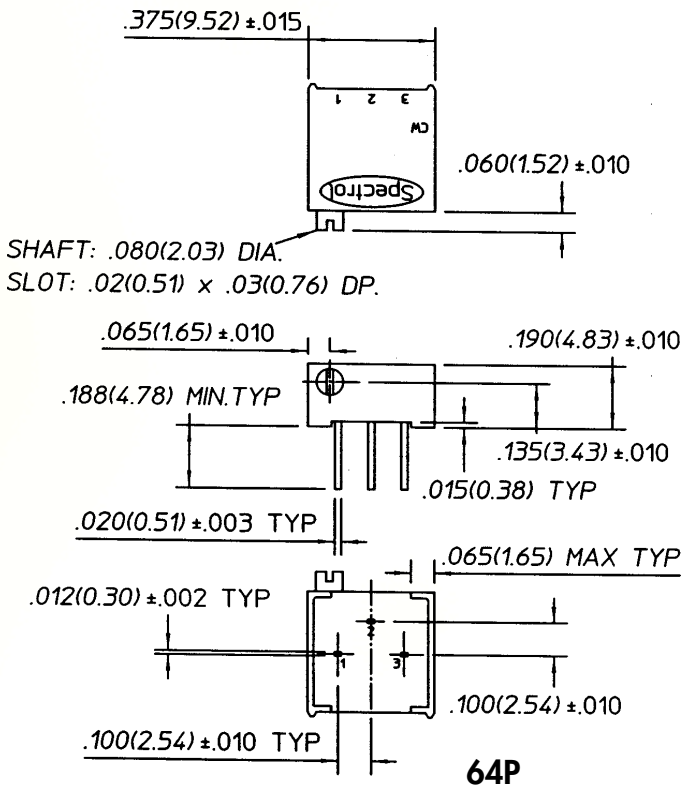
2 Per IEC 68.1 Part 1

3 Per MIL 202F

# Model 64

# A 3/8"sq (10mm) Multiturn Cermet Trimmer **64**

## DIMENSIONS



TOLERANCES:  $\pm .015$  (0.38) except where noted.  
Dimensions; in/(mm).

## ORDERING INFORMATION

**64**

Model Number

**P**

Terminal Style P, W, X  
Y or Z

**XXX**

Resistance Value  
EIA Code

Standard Resistance	
Res. Ohms	Res. Code
10	100
20	200
50	500
100	101
200	201
500	501
1000*	102*
2000*	202*
5000*	502*
10000*	103*
20000*	203*
25000	253
50000	503
100000	104
200000	204
250000	254
500000	504
1000000	105
2000000	205

\*Preferred Range



ISO 9001



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