

## 248, 249

**Vishay Spectrol** 

## 1/2" (12.7 mm) Conductive Plastic & Cermet Potentiometers



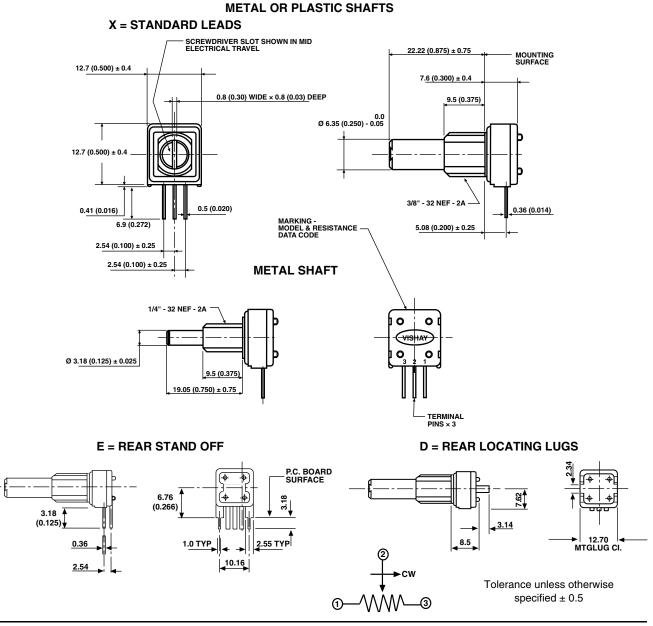
### FEATURES

• Model 248/249 retains the proven high performance characteristics in a more cost effective package



- · Cost effective panel potentiometers
- P.C.B. mounting potentiometers

**DIMENSIONS** in millimeters (inches)



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**Vishay Spectrol** 

### 1/2" (12.7 mm) Conductive Plastic & Cermet **Potentiometers**



ELECTRICAL SPECIFICATIONS					
PARAMETER	MODEL 248	MODEL 249			
Element Type	conductive plastic	cermet			
Total Resistance Range	500 Ω to 1 MΩ				
Resistance Tolerance	± 20 %	± 20 % (on request ± 10 %)			
Power rating	0.5 W at 70 °C	1.0 W at 70 °C			
	Both derated to zero at 125 °C				
Temperature Coefficient of Resistance	± 1000 ppm/°C	± 100 ppm/°C			
Linearity Tolerance	± 5 % Independent				
Contact Resistance Variation	5 % of the Total Resistance				
Insulation Resistance	1000 MΩ minimum, 500 VDC				
Dielectric Strength	750 V <sub>RMS</sub> minimum 50/60 Hz				
End Resistance	$2 \Omega$ maximum each end				
Effective Electrical Angle	265° ± 5°				

#### **MECHANICAL SPECIFICATIONS**

500K, 1M

Rotation  $295^{\circ} \pm 5^{\circ}$ Torque Starting and Running 1.5 to 18.75 mNm **End Stop Torque** 0.35 Nm (50 oz-in) Weight 8.3 g's (0.29 oz) (1/4" × 7/8" FMF metal shaft) Max Tightening Torque 0.50 Nm (1/4" Bush) 0.70 Nm (3/8" Bush) Sealing IP50

**STANDARD RESISTANCE ELEMENT DATA** 

500R, 1K, 2K, 5K, 10K, 25K, 50K, 100K, 250K,

#### **ENVIRONMENTAL SPECIFICATIONS**

Temperature Range	- 55 °C to + 125 °C
Shock	390 meters/sec/sec.
	1000 bumps
Vibrations	98 meters/sec/sec.
	0.75 mm, 10 to 500 Hz
Rotational Life (Electrical)	25 000 cycles
Load Life at 70 °C	1000 hours

PACKAGING

Carton box of 50, code: BO50

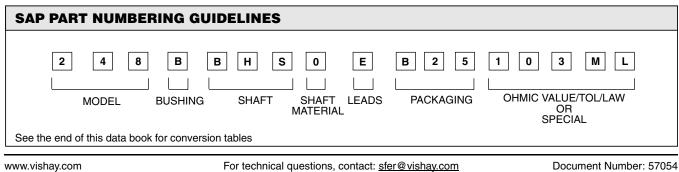
#### MARKING

248/249:

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Unit identification: Manufacturer's name and model number, EIA resistance value coding, tolerance, data code and terminal Identification.

ORDERING INFORMATION							
248 MODEL	JE SPECIAL FEATURES	8 SHAFT OPTIONS	08 FMF SHAFT OPTIONS	103 EIA RESISTANCE CODE	e3 LEAD FINISH		
248/249	D: Rear locating lugs E: Rear stand off J: CW audio taper	7: 6.35 (1/4") plastic 8: 3.18 (1/8") plated brass 9: 6.35 (1/4") plated brass	<b>08:</b> 19.05 (3/4") for 3.18 (1/8") plated brass <b>10:</b> 22.22 (7/8") for 6.35 (1/4") plated brass or plastic versions		e3: pure Sn		
Example: 2	48 - JE - 8 - 08 - 103						



112

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