

248, 249

Vishay Spectrol

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

METAL OR PLASTIC SHAFTS



FEATURES

- Model 248/249 Retains the Proven High performance characteristics in a more cost effective package
- · This model is destined to become the first choice when seeking high quality
- Cost Effective Panel Potentiometers
- P.C.B. Mounting Potentiometers

SCREWDRIVER SLOT SHOWN IN MID ELECTRICAL TRAVEL 22.22 (0.875) ± 0.75 MOUNTING SURFACE 12.7 (0.500) ± 0.4 7.<u>6 (0.300) ± 0.4</u> 0.8 (0.30) WIDE X 0.8 (0.03) DEEP 9.5 (0.375) 0.0 Ø 6.35 (0.250) - 0.05 12.7 (0.500) ± 0.4 3/8" - 32 NEF - 2A 0.41 (0.016) METAL SHAFT 6.9 (0.272) MODEL & RESISTANCE 5.08 (0.200) ± 0.25 0.5 (0.020) 2.54 (0.100) ± 0.25 0.36 (0.014) 2.54 (0.100) ± 0.25 1/4" - 32 NEF - 2A 0 0 VISHAY 0 Ø 3.<u>18 (0.125) ± 0.025</u> 9.5 (0.375) 19.05 (0.750) ± 0.75 TERMINAL PINS X 3 **TYPE 1 & 2 REAR STAND OFFS** P.C. BOARD SURFACE 3.18 2.62 2.55 TYP 1.0 TYP 0.36 3.14 10.16 ► 12.70 4 MTGLUG CI. 8.5 2.54 **B** DIM A DIM TYPE SUPPORT PLATE TERMINAL 1 6.76 (0.266") 3.18 (0.125") 2 9.52 (3.18") 6.35 (1/4")

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DIMENSIONS in millimeters (inches)

REAR LOCATING LUNGS

Vishay Spectrol

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ELECTRICAL SPECIFICATIONS					
PARAMETER	MODEL 248	MODEL 249			
Element Type	Conductive Plastic	Cermet			
Total Resistance Range	500Ω to 500KΩ				
Resistance Tolerance	± 20%	± 10%			
Power rating	0.5 watts at 70°C	1.0 watts at 70°C			
	Both derated to zero at 125°C				
Temperature Coefficient of Resistance	± 1000ppm/°C	± 100ppm/°C			
Linearity Tolerance	± 5% Independent				
Contact Resistance Variation	Both 3% of the Total Resistance				
Insulation Resistance	1000MΩ minimum, 500VDC				
Dielectric Strength	750V _{RMS} minimum 50/60Hz				
End Resistance	2Ω maximum each end				
Effective Electrical Angle	265° ± 5°				

MECHANICAL SPECIFICATIONS

Rotation Torque **End Stop Torque** Weight

 $295^{\circ} \pm 5^{\circ}$ Starting and Running 1.5 to 18.75mNm 0.35Nm (50 oz-in) 8.3q's (0.29 oz) (1/4" x 7/8" FMF metal shaft)

0.50Nm (1/4" Bush)

0.70Nm (3/8" Bush)

Max Tightening Torque

STANDARD RESISTANCE ELEMENT DATA

Ohms 248/249: 500K, 1M

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

MARKING

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

ENVIRONMENTAL SPECIFICATIONS Temperature Range

Shock

Vibrations

Rotational Life (Electrical) 248: 249: Load Life at 70°C Materials Shaft: Housing & Rear Lid: Terminals:

Mounting Hardware

- 55°C to + 125°C 390 meters/sec/sec, 1000 bumps 98 meters/sec/sec. 0.75mm, 10 to 500Hz

50,000 cycles 25,000 cycles 1000 hours

Plated brass or plastic Plastic flame retardant Phosphor bronze, solder plated Lockwasher: Steel, nickel plated Panel nut: Brass, nickel plated

PACKAGING

Carton box of 50, code: BO50

ORDERIN	G INFORMATION			
248		8		103
MODEL	SPECIAL FEATURES	SHAFT OPTIONS	FMF SHAFT OPTIONS	EIIA RESISTANCE CODE
248/249	D: Rear locating lugs E: Type 1 rear stand offs F: Type 2 rear stand offs J: CW audio taper	7: 6.35 (1/4") plastic 8: 3.18 (1/8") plated brass 9: 6.35 (1/4") plated brass	08: 19.05 (3/4") for 3.18 (1/8") plated brass 10: 22.22 (7/8") for 6.35 (1/4") plated brass or plastic versions	
Example: 248 - JE - 8 - 08 - 103				



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