



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

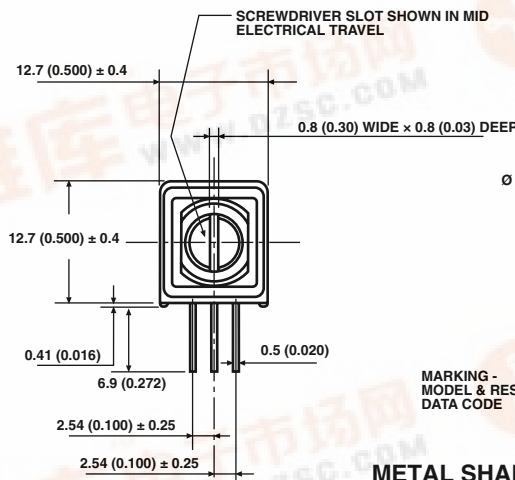


RoHS
COMPLIANT

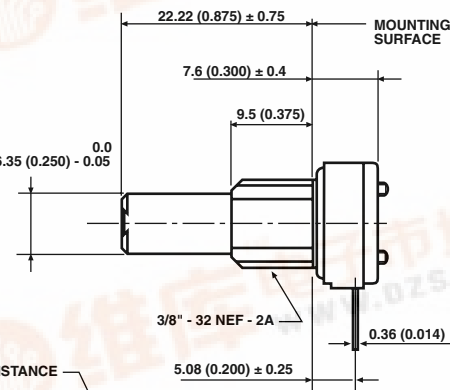
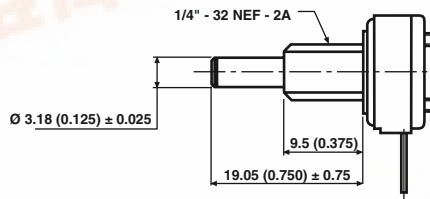
DIMENSIONS in millimeters (inches)

METAL OR PLASTIC SHAFTS

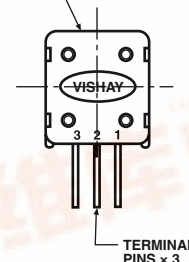
X = STANDARD LEADS



METAL SHAFT

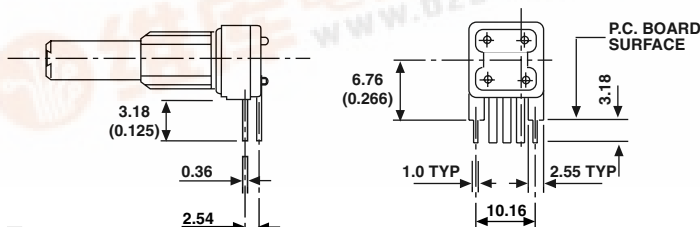


MARKING -
MODEL & RESISTANCE
DATA CODE

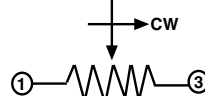
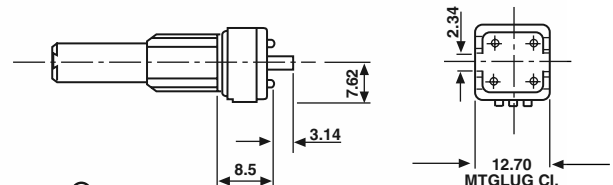


TERMINAL
PINS × 3

E = REAR STAND OFF



D = REAR LOCATING LUGS



Tolerance unless otherwise
specified ± 0.5

248, 249

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 M Ω	
Resistance Tolerance	$\pm 20\%$	$\pm 20\%$ (on request $\pm 10\%$)
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	$\pm 5\%$ Independent	
Contact Resistance Variation	5 % of the Total Resistance	
Insulation Resistance	1000 M Ω minimum, 500 VDC	
Dielectric Strength	750 V _{RMS} minimum 50/60 Hz	
End Resistance	2 Ω maximum each end	
Effective Electrical Angle	265° $\pm 5^\circ$	

MECHANICAL SPECIFICATIONS

Rotation	295° $\pm 5^\circ$
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" \times 7/8" FMF metal shaft)
Max Tightening Torque	0.50 Nm (1/4" Bush) 0.70 Nm (3/8" Bush)
Sealing	IP50

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

STANDARD RESISTANCE ELEMENT DATA	
Ω 248/249:	500R, 1K, 2K, 5K, 10K, 25K, 50K, 100K, 250K, 500K, 1M

PACKAGING
Carton box of 50, code: BO50

MARKING

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

ORDERING INFORMATION					
248	JE	8	08	103	e3
MODEL	SPECIAL FEATURES	SHAFT OPTIONS	FMF SHAFT OPTIONS	EIA RESISTANCE CODE	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	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		e3: pure Sn
Example: 248 - JE - 8 - 08 - 103					

SAP PART NUMBERING GUIDELINES																
2	4	8	B	B	H	S	0	E	B	2	5	1	0	3	M	L
MODEL			BUSHING	SHAFT			SHAFT MATERIAL	LEADS	PACKAGING			OHMIC VALUE/TOL/LAW OR SPECIAL				
See the end of this data book for conversion tables																



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.