Vishay Spectrol



# <sup>7</sup>/<sub>8</sub>" (22.2 mm) Conductive Plastic Potentiometer, Bushing Mount Type



#### **FEATURES**





COMPLIANT

- Compact size, advanced design technology
- Offer a cost effective solution to your potentiometer requirements
- Suitable model for all industrial applications
- Compliant to RoHS Directive 2002/95/EC

ELECTRICAL SPECIFICATIONS			
PARAMETER			
Resistance	Standard range, 1 k $\Omega$ to 50 k $\Omega$		
Tolerance	STANDARD ± 20 %	SPECIAL TO ± 10 %	
Linearity (Independent)	STANDARD ± 2.0 %	SPECIAL ± 1.0 %	
Output Smoothness	0.1 % maximum		
CR	± 600 ppm/°C maximum		
Power Rating	1.0 W at 70 °C derated to 0 W at 125 °C		
Electrical Travel	340° ± 3°		
End Voltage	0.5 % maximum		
Pielectric Withstanding Voltage	1000 V <sub>RMS</sub> , 60 Hz		
Insulation Resistance	1000 MΩ, 500 V <sub>DC</sub>		

MECHANICAL SPECIFICATIONS			
PARAMETER			
Rotation	360° continuous (optional mechanical stops 340° ± 3°)		
Mounting	3/8 - 32 UNEF - 2A		
Operating Torque Maximum	Starting and running 3.68 mNm (0.5 oz in)		
Shaft Tolerance Maximum			
Runout	0.13 mm (0.005")		
nd Play 0.25 mm (0.010")			
Radial Play	ay 0.13 mm (0.005")		
Weight	17.5 g (0.62 oz.)		

ORDE	ORDERING INFORMATION/DESCRIPTION								
357	В		0	10K	20 %	Α	BO50	0 P 22	e4
MODEL	STYLE		FEATURES	OHMIC VALUE	TOLERANCE ON OHMIC VALUE	LINEARITY	PACKAGING	SHAFT TYPE	LEAD
	Bushing	0	Non turn pin and continuous rotation				Box of 50 pieces	Shaft diameter <b>0</b> = 6.0 mm or <b>1</b> = 6.35 mm (1/4")	Finish
		1	No non turn pin and continuous rotation	From 1K to 50 K	± 10 % or ± 20 %	X: ± 2 % A: ± 1 %		Shaft type P = Plain S = Slotted FMF (from Mounting face)	
		2	Non turn pin, with stops on rotation		120 /0			Range from 12 mm to 75 mm in 1 mm increments	
		3	No non turn pin with stops on rotation						

		SAP PART NUMBERING GUIDELINES				
357B	2	203	М	Х	B25	1S22
MODEL FE	ATURES O	HMIC VALUE	TOLERANCE ON OHMIC VALUE	LINEARITY	PACKAGING	SHAFT TYPE
		203 = 20K	M: ± 20 %/K: ± 10 %	X: ± 2 %	Box of 50 pieces	

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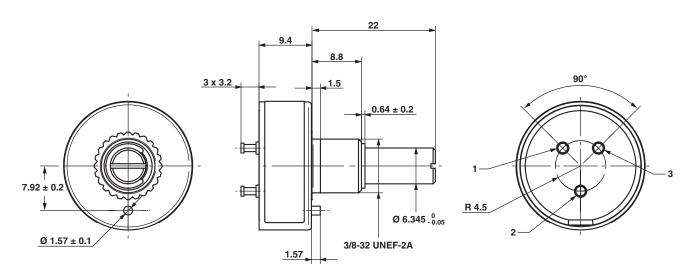
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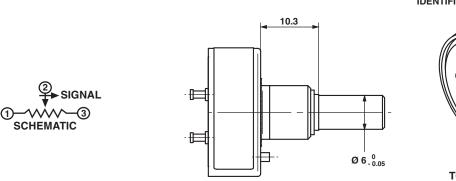


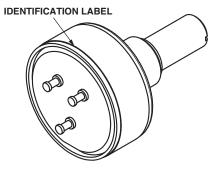
#### **DIMENSIONS** in millimeters

#### Ø 6.35 mm SHAFT VERSION



#### Ø 6.0 mm SHAFT VARIATION: METRIC





TOLERANCES: LINEAR ± 0.50 ANGULAR ± 2°

ENVIRONMENTAL SPECIFICATIONS			
Vibration	15 g, 10 Hz to 2000 Hz		
Shock	50 g		
Load Life	1000 h		
Storage Temperature Range	- 55 °C to + 125 °C		
Life	5 000 000 shaft revolutions		
Materials			
Housing	Thermoplastic housing		
Bushing	Brass, nickel plated		
Rear Lid	Alumina		
Shaft	Stainless steel		
Terminals	Turret type, solder plated		
Bushing Mount Hardware			
Lockwasher Internal Tooth	Steel, nickel plated		
Panel Nut	Brass nickel plated		

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

RESISTANCE VALUE		
Ohms	1K, 2K, 5K, 10K, 20K, 50K	

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