



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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7/8" (22.2 mm) Precision Industrial Potentiometer, Bushing And Servo Mount Versions, Conductive Plastic



FEATURES

- High quality
- Rugged one piece metal housing
- Long rotational life
- Wide operating temperature range
- Linearities down to $\pm 0.25\%$ special
- Optional sealed construction (bushing mount only)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS COMPLIANT

QUICK REFERENCE DATA	
Sensor type	ROTATIONAL, conductive plastic
Output type	Output by turrets
Market appliance	Industrial
Dimensions	7/8" (22.2 mm)

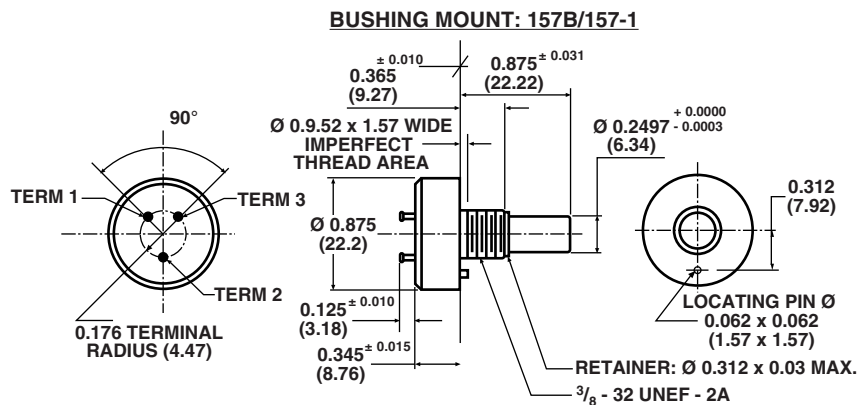
ELECTRICAL SPECIFICATIONS	
PARAMETER	MIL-PRF-39023 TEST PROCEDURES APPLY
Resistance	1 k Ω to 100 k Ω
Resistance Tolerance	$\pm 20\%$
Special to	$\pm 10\%$
Linearity	$\pm 2.0\%$
Special to	$\pm 0.25\%$
Temperature Coefficient of Resistance	± 600 ppm/ $^{\circ}$ C
Power Rating	1.0 W at 40 $^{\circ}$ C ambient
Derated to	0 W at 125 $^{\circ}$ C
Electrical Angle	340 $^{\circ}$ \pm 4 $^{\circ}$
End Voltage	0.5 % maximum
Dielectric Withstanding	1000 V _{RMS} , 60 Hz
Insulation Resistance	100 M Ω minimum, 500 V _{DC}
Output Smoothness	0.1 %

MECHANICAL SPECIFICATIONS		
PARAMETER		
Weight	0.5 oz. maximum (14 g)	
Rotation	360 $^{\circ}$ (continuous)	
Mount	BUSHING	SERVO
Bearing Type	Sleeve bearing	Ball bearing
Operating Torque		
Starting	0.30 oz. - in (21.6 g - cm)	0.25 oz. - in (18 g - cm)
Running	0.25 oz. - in (18 g - cm)	0.15 oz. - in (10.8 g - cm)
Mechanical Tolerance (in/mm) (maximum)		
Shaft Runout (TIR)	0.002" (0.05 mm)	0.002" (0.05 mm)
Pilot Dia Runout (TIR)	-	0.002" (0.05 mm)
Lateral Runout (TIR)	0.005" (0.13 mm)	0.002" (0.05 mm)
Shaft End Play	0.006" (0.15 mm)	0.005" (0.13 mm)
Shaft Radial Play	0.003" (0.08 mm)	0.002" (0.05 mm)

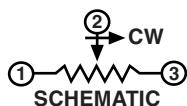
ORDERING INFORMATION											
1	5	7	B	5	0	3	M	C			
MODEL		STYLE		OHMIC VALUE			TOLERANCE ON OHMIC VALUE		LINEARITY		SPECIAL REQUEST
157		B: Bushing S: servo		470 = 47 Ω 222 = 2.200 Ω 103 = 10 kΩ For ohmic value range see electrical specification			M = ± 20 % K = ± 10 %		X = ± 2 % B = ± 0.50 % C = ± 0.25 %		xxxx

PART NUMBER DESCRIPTION (for information only)			
157-	2	503	xxxx
MODEL	STYLE	OHMIC VALUE	SPECIAL
	B: 1 S: 2		

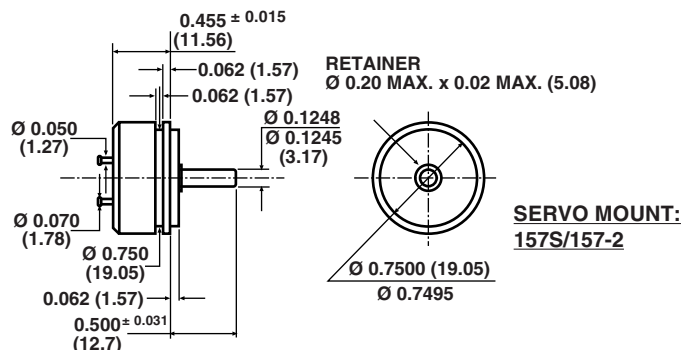
DIMENSIONS in inches (millimeters)



Example of a marking for a standard part:
157-11103



TOLERANCES: UNLESS OTHERWISE NOTED.
DECIMALS ± 0.005 ANGLES ± 2°





MATERIAL SPECIFICATIONS	
Housing/Bushing	Aluminum, anodized
Rear Lid	Ceramic
Shaft	Stainless steel
Terminals	Solderable
Bushing Mount Hardware	Lockwasher, internal tooth steel, nickel plated
Panel Nut	Brass, nickel plated

ENVIRONMENTAL SPECIFICATIONS					
Temperature	-55 °C to +125 °C				
Rotational Life	<table border="1"> <thead> <tr> <th>BUSHING</th> <th>SERVO</th> </tr> </thead> <tbody> <tr> <td>5 million shaft revolutions</td> <td>10 million shaft revolutions</td> </tr> </tbody> </table>	BUSHING	SERVO	5 million shaft revolutions	10 million shaft revolutions
BUSHING	SERVO				
5 million shaft revolutions	10 million shaft revolutions				
Moisture Resistant	Yes				
Vibration	15 g 10 to 2000 Hz				
Shock	50 g				
Salt Spray	96 h				
Load Life	900 h				

Note

- Nothing stated herein shall be construed as a guarantee of quality or durability.



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