

Resistors & Potentiometers

2W Multi Precision Potentiometers (Wirewound)

Detailed product specifications are available on: us.100y.com.tw



Environmental Characteristics ¹	
Moisture Resistance (MIL-STD-202, Method 103, Condition B) Total Resistance Shift	±2 % maximum
IP Rating	IP 65

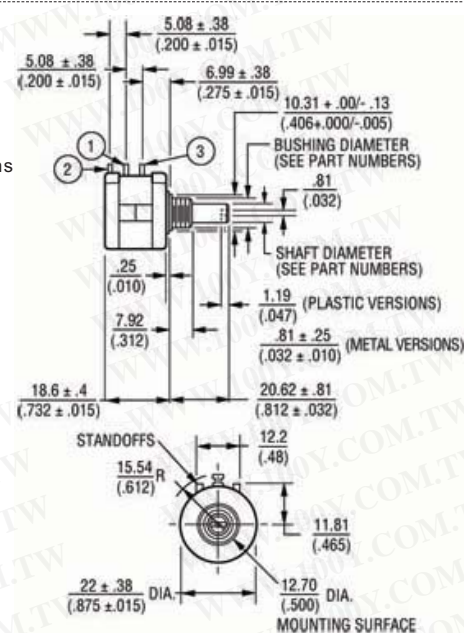
Mechanical Characteristics ¹	
Soldering Condition Manual Soldering Wave Soldering Wash processes	96.5Sn/3.0Ag/0.5Cu solid wire or no-clean rosin cored wire; 370 °C (700 °F) max. for 3 seconds 96.5Sn/3.0Ag/0.5Cu solder with no-clean flux; 260 °C (500 °F) max. for 5 seconds Not recommended
Marking	Manufacturer's name and part number, resistance value and tolerance, linearity tolerance, wiring diagram, and date code.
Ganging (Multiple Section Potentiometers)	2 cups maximum
Hardware	One lockwasher (H-37-2) and one mounting nut (H-38-2) is shipped with each potentiometer.

Part No.	Product No.	Manufacturer	Description	Resistance data (Ω)	Power rating (W)
39004	3500S-2-102	Bourns	Precision Potentiometer	1000Ω	2W
39005	3500S-2-502	Bourns	Precision Potentiometer	5000Ω	2W



Features

- Bushing mount
- Optional AR pin feature
- Plastic or metal shaft and bushings
- Wirewound
- Solder lugs or PC pins
- Sealable (Full body seal)
- Designed for use in HMI applications



Electrical Characteristics ¹	
Standard Resistance Range	200 to 100 K ohms
Total Resistance Tolerance	±5 %
Independent Linearity	±0.25 %
Effective Electrical Angle	3600 ° +10 °, -0 °
Absolute Minimum Resistance	1 ohm or 0.1 % maximum (whichever is greater)
Noise	100 ohms ENR maximum
Dielectric Withstanding Voltage (MIL-STD-202, Method 301) Sea Level	1,500 VAC minimum
Power Rating (Voltage Limited By Power Dissipation or 450 VAC, Whichever is Less)	+40 °C: 2 watts +125 °C: 0 watt
Insulation Resistance (500 VDC)	1,000 megohms minimum
Resolution	See recommended part numbers

Mechanical Characteristics ¹	
Stop Strength	45 N-cm (64 oz.-in.) Minimum
Mechanical Angle	3600 ° +10 °, -0 °
Torque (Starting & Running)	0.35 N-cm (0.5 oz.-in.) maximum (unsealed) 1.1 N-cm (1.5 oz.-in.) maximum (sealed)
Mounting	55-80 N-cm (5-7 lb.-in.) (Plastic) 90-113 N-cm (8-10 in.-lb.) (Metal)
Shaft Runout	0.13 mm (0.005 in.) T.I.R.
Lateral Runout	0.20 mm (0.008 in.) T.I.R.
Shaft End Play	0.25 mm (0.010 in.) T.I.R.
Shaft Radial Play	0.13 mm (0.005 in.) T.I.R.
Pilot Diameter Runout	0.08 mm (0.003 in.) T.I.R.
Backlash	1.0 ° maximum
Weight	Approximately 19 G
Terminals	Solder lugs or PC pins
Soldering Condition Manual Soldering	96.5Sn/3.0Ag/0.5Cu solid wire or no-clean rosin cored wire; 370 °C (700 °F) max. for 3 seconds
Wave Soldering	96.5Sn/3.0Ag/0.5Cu solder with no-clean flux; 260 °C (500 °F) max. for 5 seconds
Wash processes	Not recommended

Environmental Characteristics ¹	
Operating Temperature Range	+1 °C to +125 °C
Storage Temperature Range	-55 °C to +125 °C
Temperature Coefficient Over Storage Temperature Range ²	±50 ppm/°C maximum/unit
Vibration Wiper Bounce	15 G 0.1 millisecond maximum
Shock Wiper Bounce	50 G 0.1 millisecond maximum
Load Life Total Resistance Shift	1,000 hours, 2 watts ±2 % maximum
Rotational Life (No Load) Total Resistance Shift	1,000,000 shaft revolutions ±5 % maximum
Moisture Resistance (MIL-STD-202, Method 103, Condition B) Total Resistance Shift	±2 % maximum
IP Rating Sealed Versions (-3, -4, -7, and -8) Unsealed Versions (-1 -2, -5, and -6)	IP 65 IP 40



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