



BOURNS®

Features

- 1/4" Round / Single-Turn / Cermet Industrial / Sealed
- Listed on the QPL per MIL-PRF-22097 and High-Rel MIL-PRF-39035
- For trimmer applications/processing guidelines, [click here](#)

RJ50/RJR50 - 1/4 " Round Trimpot® Trimming Potentiometer

Electrical Characteristics

Standard Resistance Range 10 to 1 megohm (see standard resistance table)
Resistance Tolerance $\pm 10\%$ std.
Absolute Minimum Resistance 1 % or 2 ohms (whichever is greater)
Contact Resistance Variation 3.0 % or 3 ohms max. (whichever is greater)
Adjustability
Voltage $\pm 0.05\%$ %
Resistance $\pm 0.15\%$ %
Resolution Infinite
Insulation Resistance 500 vdc. 1,000 megohms min.
Dielectric Strength
Sea Level 600 vac
80,000 Feet 250 vac
Adjustment Angle 240 ° nom.

Environmental Characteristics

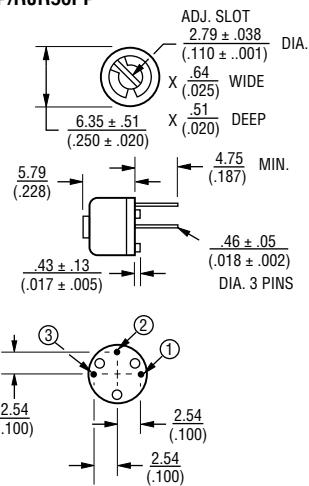
Power Rating @ 85 °C (300 volts max.) 0.5 watt
Power Rating @ 150 °C 0 watt
Temperature Range -55 °C to +150 °C
Temperature Coefficient ± 100 ppm/°C
Seal Test 85 °C Fluorinert†
Humidity MIL-STD-202 Method 106 96 hours (3 % ΔTR, 10 Megohms IR)
Vibration 30 G (1 % ΔTR; 1 % ΔVR) except "P" pin style
Shock 100 G (1 % ΔTR; 1 % ΔVR)
Load Life 1,000 hours 0.5 watt @ 85 °C (3 % ΔTR; 3 % CRV)
Rotational Life 200 cycles (4 % ΔTR; 4 % CRV)

Physical Characteristics

Mechanical Angle 260 ° nom.
Torque 5.0 oz-in. max.
Stop Strength 5.0 oz-in. min.
Terminals Solderable pins
Weight 0.02 oz.
Marking Manufacturer's trademark, resistance code, date code, manufacturer's model number and style
Wiper 50 % (Actual TR) $\pm 10\%$
Standard Packaging 50 pcs. per tube
Adjustment Tool H-90

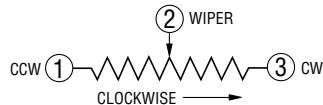
Product Dimensions

RJ50FP/RJR50FP



DIMENSIONS: $\frac{\text{MM}}{\text{INCHES}}$

TOLERANCES: $\pm \frac{0.25}{(.010)}$ EXCEPT WHERE NOTED



How To Order

MIL-PRF-22097

RJ50 F P 103

Model _____

Characteristic _____
F = ± 100 ppm/°C Temp. Coeff. Max.

Terminal Style _____

Resistance Code _____

How To Order

MIL-PRF-39035

RJR50 F P 203 P

Model _____

Characteristic _____
F = ± 100 ppm/°C Temp. Coeff. Max.

Terminal Style _____

Resistance Code _____

Failure Rate _____
M = 1.0 %
P = 0.1 %

Standard Resistance Table

Resistance (Ohms)	Resistance Code
10	100
20	200
50	500
100	101
200	201
500	501
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
25,000	253
50,000	503
100,000	104
200,000	204
250,000	254
500,000	504
1,000,000	105

REV. 04/14

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

"Trimpot" is a registered trademark of Bourns, Inc.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.