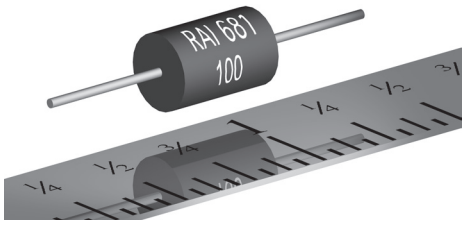
# 100 Series / SM Series / PC Series

Precision Wirewound Resistors




- **Resistances to 6 Megohms**
- **Resistance Tolerances to ±0.005%**
- **Temperature Coefficients of ±2 ppm/°C**
- **High TCR Available (Balco & Platinum Wire)**
- **100% Acceptance Tested / Traceable to NIST**
- **Long Term Stability / 100ppm/year**
- **Matched Resistance Sets to ±0.001% and ±0.5 ppm/°C**

## SPECIFICATIONS




| Type | Commercial Wattage ( Watts ) | Maximum Ohms | Minimum Tolerance ( % ) | Dimensions | | | Maximum Working Voltage |
|---|---|---|---|---|---|---|---|
| | | | | Diameter ±0.005" [±0.13mm] | Length ±0.025" [±0.64mm] | Lead Diameter[1] ±0.002" [±0.05mm] | |
| SM-2 | 0.06 | 75k | 0.005 | 0.100 [2.5] | 0.210 [5.3] | 0.020 [0.5] | 75 |
| SM-3 | 0.08 | 150k | | 0.125 [3.2] | 0.260 [6.6] | **0.020 [0.5]** 0.025 [0.6] | 100 |
| SM-4 | 0.10 | 250k | | 0.125 [3.2] | 0.375 [9.5] | 0.020 [0.5] | 100 |
| SM-13 | 0.10 | 250k | | 0.156 [4.0] | 0.312 [7.9] | 0.020 [0.5] | 100 |
| SM-5 | 0.12 | 400k | | 0.187 [4.7] | 0.250 [6.4] | 0.025 [0.6] | 150 |
| SM-6 | 0.15 | 500k | | 0.187 [4.7] | 0.295 [7.5] | 0.025 [0.6] | 150 |
| 139A | 0.15 | 500k | | 0.250 [6.4] | 0.250 [6.4] | 0.025 [0.6] | 100 |
| SM-15 | 0.175 | 750k | | 0.187 [4.7] | 0.375 [9.5] | **0.025 [0.6]** | 200 |
| SM-12 | 0.20 | 750k | | 0.187 [4.7] | 0.450 [11.4] | 0.025 [0.6] | 200 |
| 100 | 0.20 | 1M | | 0.250 [6.4] | 0.375 [9.5] | **0.032 [0.8]** 0.025 [0.6] | 200 |
| SM-7 | 0.25 | 1M | | 0.210 [5.3] | 0.465 [11.8] | 0.025 [0.6] | 250 |
| 101 | 0.25 | 1.2M | | 0.250 [6.4] | 0.500 [12.7] | **0.032 [0.8]** 0.025 [0.6] | 300 |
| 102 | 0.33 | 2.5M | | 0.250 [6.4] | 0.750 [19.1] | **0.032 [0.8]** 0.025 [0.6] | 400 |
| 120 | 0.40 | 3.8M | | 0.375 [9.5] | 0.500 [12.7] | 0.032 [0.8] | 300 |
| 121 | 0.50 | 3.8M | | 0.375 [9.5] | 0.750 [19.1] | 0.032 [0.8] | 400 |
| 129 | 0.75 | 6M | | 0.375 [9.5] | 1.000 [25.4] | 0.032 [0.8] | 600 |
| 106 | 1.00 | 6M | | 0.500 [12.7] | 1.000 [25.4] | 0.032 [0.8] | 800 |
| 107 | 1.50 | 6M | | 0.500 [12.7] | 1.500 [38.1] | 0.032 [0.8] | 900 |
| 108 | 2.00 | 6M | | 0.500 [12.7] | 2.000 [50.8] | 0.032 [0.8] | 1000 |

[1] Where more than one lead is listed / the top value is Standard Lead Length = 1.50 [38] Min.

## Ordering Information

Part Description: Part Type - Resistance - Tolerance - TCR ( If not standard )
Example: SM-6 25K Ohms 0.1%

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**www.riedon.com**
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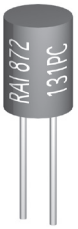
# 100 Series / SM Series / PC Series

Precision Wirewound Resistors

## SPECIFICATIONS (continued)

## PC Series

| Type | Commercial Wattage ( Watts ) | Maximum Ohms | Minimum Tolerance[1] ( % ) | Dimensions | | | | Maximum Working Voltage |
|---|---|---|---|---|---|---|---|---|
| | | | | Diameter ±0.005" [±0.13mm] | Length ±0.025" [±0.64mm] | Lead Diameter[2] ±0.002" [±0.05mm] | Lead Spacing ±0.015" [±0.4mm] | |
| 110PC | 0.05 | 75k | 0.005 | 0.130 [3.3] | 0.200 [5.1] | 0.016 [0.4] | 0.075 [2.5] | 150 |
| 100PC | 0.125 | 500k | | 0.250 [6.4] | 0.375 [9.5] | 0.025 [0.6] | 0.150 [3.8] | 150 |
| 130PC | 0.125 | 500k | | 0.250 [6.4] | 0.312 [7.9] | 0.025 [0.6] | 0.150 [3.8] | 150 |
| 131PC | 0.125 | 500k | | 0.250 [6.4] | 0.312 [7.9] | 0.025 [0.6] | 0.200 [5.1] | 150 |
| 101PC | 0.25 | 600k | | 0.250 [6.4] | 0.500 [12.7] | 0.025 [0.6] | 0.150 [3.8] | 150 |
| 120PC | 0.40 | 800k | | 0.375 [9.5] | 0.500 [12.7] | 0.032 [0.8] | 0.200 [5.1] | 300 |
| 104PC | 0.50 | 1M | | 0.500 [12.7] | 0.500 [12.7] | **0.032 [0.8]** 0.025 [0.6] | 0.300 [7.6] | 400 |




[1]May not apply for all wire types. Please call factory.
[2]Where more than one lead is listed / the top value is Standard
Lead Length = 1.00 [25] Min.

## Rectangular Series

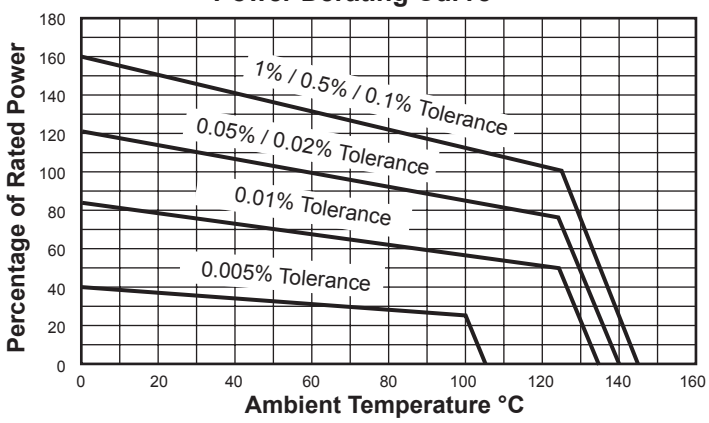
| Type | Commercial Wattage ( Watts ) | Maximum Ohms | Dimensions | | | | | Maximum Working Voltage |
|---|---|---|---|---|---|---|---|---|
| | | | Width ±0.010" [±0.25mm] | Height ±0.025" [±0.64mm] | Length ±0.010" [±0.25mm] | Lead Diameter[1] ±0.002" [±0.05mm] | Lead Spacing ±0.015" [±0.4mm] | |
| SM-8 | 0.125 | 500k | 0.140 [3.6] | 0.250 [6.4] | 0.270 [6.9] | 0.032 [0.8] | 0.125 [3.2] | 150 |
| SM-9 | 0.250 | 750k | 0.150 [3.8] | 0.270 [6.9] | 0.540 [13.7] | 0.032 [0.8] | 0.250 [6.4] | 150 |
| SM-10 | 0.300 | 500k | 0.102 [2.6] | 0.320 [8.1] | 0.300 [7.6] | 0.025 [0.6] | 0.150 [3.8] | 150 |
| SM-11 | 0.500 | 1M | 0.160 [4.1] | 0.525 [13.3] | 0.585 [14.9] | 0.032 [0.8] | 0.400 [10.2] | 150 |




[1] Lead Length = 1.00 [25] Min.

| Specification | Value |
|---|---|
| Tolerances | ±0.005% to ±1% ( See Derating Curve ) |
| Temperature Coefficient ( Standard ) ( down to 1ppm on request ) | >100Ω : ±10ppm/°C<br>10Ω to100Ω : ±20ppm/°C<br><10Ω : ±30ppm/°C |
| Temperature Range | -55°C to +145°C ( See Derating Curve ) |

**Power Derating Curve**




**Notes:** ( Contact Factory for these options )

**Fast Rise Time -** These resistors are available in a low reactance design for fast rise time and extended frequency response.

**High Stability -** These resistors are available in a High Stability version with maximum resistance change of ±20ppm/year under normal conditions.

**Wide TCR Range -** These resistors are available in Low and High TC configurations from -20ppm/K to +6000ppm/K.

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