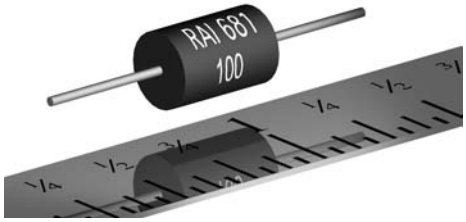
100 Series, SM Series, PC Series Precision Wirewound Resistors

- **Resistances to 25 Megohms**
- **Tolerance to ±0.005%**
- **Temperature Coefficients to ±1ppm/°C**
- **Power Rating to 2 Watts**
- **100% Acceptance Tested, Traceable to NIST**
- **Long Term Stability, 100ppm/year**
- **Matched Resistance Sets to ±0.001% and ±0.5ppm/°C**



Riedon's precision resistors are designed for critical applications that require very accurate and stable resistance values. They are available in a subminiature series, the standard 100 series and a special low-reactance version for fast rise time applications.

These precision resistors are non-inductively wound on molded bobbins. The solderable and weldable leads are tinned copper. Internally, they are welded for highest precision and reliability.

All Precision resistors are aged to insure stability. A protective coating insulates the windings and protects the welds. The bobbin is encapsulated using a specially formulated epoxy so temperature expansion coefficients of all materials are closely matched.

SPECIFICATIONS

Standard Tolerances -	± 0.005% to ± 1% (See Derating Curve)
Temperature Coefficient -	R >100 Ω ; ±10ppm/°C
	10 Ω <= R <= 99.9 Ω ; ±20ppm/°C
	R <10 Ω ; ±30ppm/°C

Fast Rise Time -

Most precision resistors are available in low reactance designs for fast rise time and extended frequency response applications. Call the factory for information and specifics.

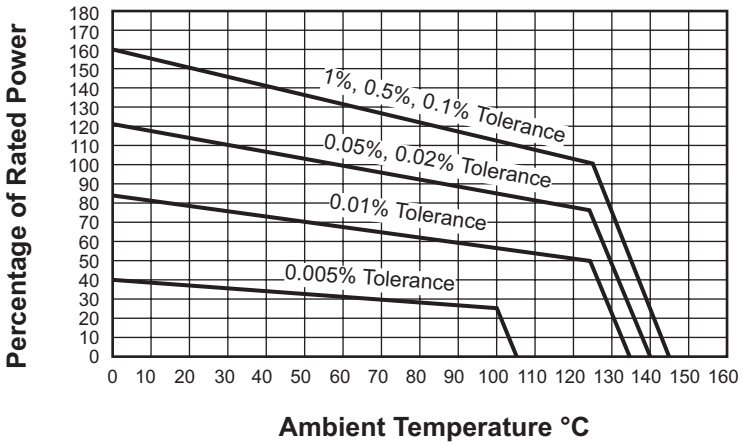
High Stability -

All precision resistors are available in High Stability versions with a maximum resistance change of ±20ppm/year under normal conditions. Specify the Prefix “S” when ordering.

Ordering information:

Part Number - Resistance - Tolerance - TCR

Example: **106 - 1.49K Ohm - 0.01% - 5ppm**



Riedon Inc. 300 Cypress Avenue Alhambra CA 91801 (626) 284-9901 Fax: (626) 284-1704
www.riedon.com

100 Series, SM Series, PC Series
Precision Wirewound Resistors

Standard 100 Series

Type	Commercial Wattage	Maximum Resistance	Minimum Tolerance	Diameter ±0.005”	Length ±0.025”	Maximum Voltage	Lead Diameter AWG*
100	0.20	800K	0.005	0.250	0.375	200	20 / 22
101	0.25	1.2M	0.005	0.250	0.500	300	20 / 22
102	0.33	2.5M	0.005	0.250	0.750	400	20 / 22
103	0.50	7.5M	0.005	0.375	0.885	400	20
104	0.50	7.0M	0.005	0.500	0.500	400	20
105	0.60	7.0M	0.005	0.500	0.625	400	20
106	1.00	12M	0.005	0.500	1.000	800	20
107	1.50	15M	0.005	0.500	1.500	900	20
108	2.00	25M	0.005	0.500	2.000	1000	20
120	0.40	3.8M	0.005	0.375	0.500	300	20
121	0.50	3.8M	0.005	0.375	0.750	400	20
129	0.75	10M	0.005	0.375	1.000	600	20
139A	0.15	500K	0.005	0.250	0.250	100	22
153	1.75	15M	0.005	0.500	1.750	900	20

* Lead Diameter: 20 AWG = 0.032”; 22 AWG = 0.025”; Lead Length = 1.50” Min.

Subminiature Series

Type	Commercial Wattage	Maximum Resistance	Minimum Tolerance	Diameter ±0.005”	Length ±0.025”	Maximum Voltage	Lead Diameter AWG*
SM-2	0.06	75K	0.1	0.100	0.210	75	24
SM-3	0.08	150K	0.05	0.125	0.260	100	22 / 24
SM-4	0.10	250K	0.05	0.125	0.375	100	24
SM-5	0.12	400K	0.01	0.187	0.250	150	22
SM-6	0.15	500K	0.01	0.187	0.295	150	22
SM-7	0.25	1M	0.005	0.210	0.465	250	22
SM-12	0.20	750K	0.005	0.187	0.450	200	22
SM-13	0.10	250K	0.05	0.156	0.312	100	24
SM-15	0.175	750K	0.005	0.187	0.375	200	22 / 24

* Lead Diameter: 22 AWG = 0.025”; 24 AWG = 0.020”; Lead Length = 1.50” Min.

Printed Circuit Series

Type	Commercial Wattage	Maximum Resistance	Diameter ±0.005”	Length ±0.025”	Maximum Voltage	Lead Spacing	Lead AWG*
100PC	0.125	500K	0.250	0.375	150	0.15	22
101PC	0.250	600K	0.250	0.500	150	0.15	22
104PC	0.500	1M	0.500	0.500	400	0.30	22 / 20
120PC	0.400	800K	0.375	0.500	300	0.20	20
130PC	0.125	500K	0.250	0.312	150	0.15	22
131PC	0.125	500K	0.250	0.312	150	0.20	22
SP5131	0.050	75K	0.130	0.200	150	0.10	26

* Lead Diameter: 20 AWG = 0.032”; 22 AWG = 0.025”; 26 AWG = 0.016”
Lead Spacing Tolerance = ±0.015”, Lead Length = 1.00” Min.

Rectangular Series

Type	Commercial Wattage	Maximum Resistance	W ±0.010”	H ±0.025”	L ±0.010”	Maximum Voltage	Lead Spacing	Lead AWG*
SM-8	0.125	500K	0.140	0.250	0.270	15	0.125	22 / 20
SM-9	0.250	750K	0.150	0.270	0.540	150	0.250	20
SP5086	0.300	500K	0.102	0.320	0.300	150	0.150	22
SP5232	0.500	1M	0.160	0.525	0.585	150	0.400	20

* Lead Diameter: 20 AWG = 0.032”; 22 AWG = 0.025”; 26 AWG = 0.016”
Lead Spacing Tolerance = ±0.015”, Lead Length = 1.00” Min.

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