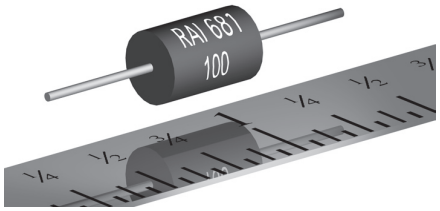
100 Series / SM Series / PC Series

Precision Wirewound Resistors



- **Resistances to 25MOhms**
- **Resistance Tolerances to ±0.005%**
- **Temperature Coefficients of ±1 ppm/K**
- **Power Ratings to 2W**
- **100% Acceptance Tested / Traceable to NIST**
- **Long Term Stability / 100ppm/year**
- **Matched Resistance Sets to ±0.001% and ±0.5 ppm/K**

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]** 0.020 [0.5]	200
SM-12	0.20	750k		0.187 [4.7]	0.450 [11.4]	0.025 [0.6]	200
100	0.20	800k		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	10M		0.375 [9.5]	1.000 [25.4]	0.032 [0.8]	600
106	1.00	12M		0.500 [12.7]	1.000 [25.4]	0.032 [0.8]	800
107	1.50	15M		0.500 [12.7]	1.500 [38.1]	0.032 [0.8]	900
108	2.00	25M		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 Number - Resistance - Tolerance - TCR (If not standard)
Example: SM-6 25kOhms 0.1%

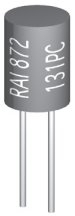
SPECIFICATIONS (continued)

PC Series

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]	Lead Spacing ±0.015" [±0.4mm]	
100PC	0.125	500k	0.005	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] Where more than one lead is listed / the top value is Standard

Lead Length = 1.00 [25] Min.



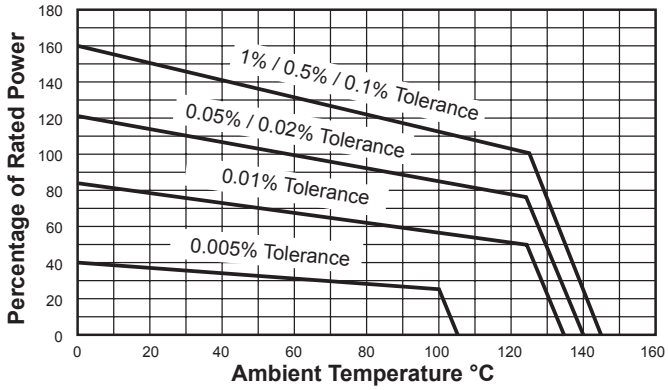
Rectangular Series

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
SP5086	0.300	500k	0.102 [2.6]	0.320 [8.1]	0.300 [7.6]	0.025 [0.6]	0.150 [3.8]	150
SP5232	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/K 10Ω to100Ω : ±20ppm/K <10Ω : ±30ppm/K
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 maximun resistance change of ±20ppm/year under normal conditions.

High TC - These resistors are available in High TC configurations. Standard TC's are +2600 / +3850 / +4500 / +5000 / and +6000 ppm/K.