



Power Wirewound Resistors

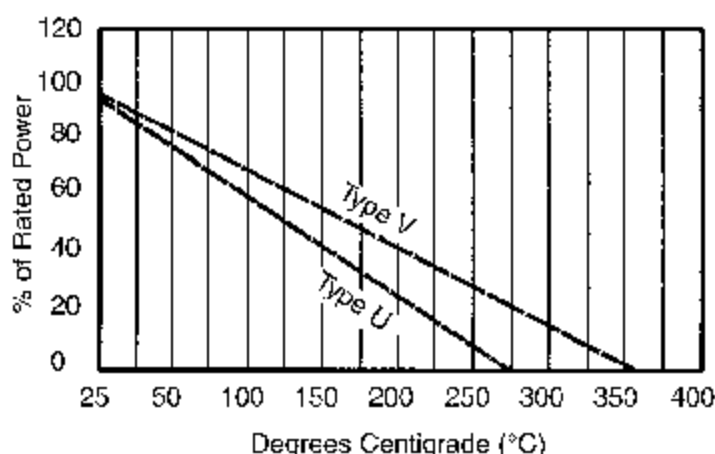
Power Rating

RGA Power Wirewound Resistors fall into at least one of two power rating specifications, depending on the part size, tolerance, and stability requirements. The resistor will perform to these specifications if operated at or below its rated power (derated for temperature if necessary).

RP, RB Series	Maximum hotspot temperature of 275°C.	Type U
All Tolerances	.5% maximum change in resistance over 1500 hour load life	
3% and 5% Tolerances For: RP-2 and Larger RP-5 and Larger	Maximum hotspot temperature of 350°C. 3% maximum change in resistance over 1500 hour load life	Type V

Derating

RGA Power Wirewound Resistors have an operating temperature range of -55°C to 275°C (350° in many cases). However, operation at high ambient temperatures requires power derating according to the curves below. Derating is necessary to ensure that the resistor will perform according to specification.



Please Note:

Sizes shown and specified in this catalog are standard. However, many more custom configurations and sizes are available, on short lead time. Call with your requirements.

Non-Inductive

RGA Power Wirewound Resistors are available with non-inductive (Aryton-Perry) winding. Non-inductive units are identified by the suffix -NI following the part-number (For example RP-2-NI). Some special conditions apply. Non-inductive units are not available with fiberglass core parts.

- For non-inductive units, divide max. resistance by 2
- Body O.D.s may be slightly larger than inductive units
- For non-inductive units, reduce working voltage by a factor of .7

Part Numbering System

RP	2W	101	J	B
Type	Rated Power	Nominal Resistance	Tolerance	Packaging Code
RP RB	1/4W 15W	3 Digits for 2% + e.g. 2R2=2.2~ 102=1K~ 4 Digits for 1% - e.g. 1001=1k~	J - 5% F - 1% B - .1% A - .05% .01% .001%	B Bulk T Tape & Reel

Power Wirewound Resistors



RP Series

Features:

Welded construction throughout.
High Temperature silicon coating—solvent resistant.
Non-inductive (Aryton-Perry) winding available.
Wide selection of standard sizes.
Tolerance to $\pm 0.01\%$ available.

Meets applicable requirements of MIL-R-26E.

(However, this does not imply qualification)

Available SPECIAL Features:

Specific matching of parts (by temperature coefficient or tolerance).
Special temperature coefficients.
Variable lead size (length and diameter).
Special marking.
Special lead or terminal configurations, materials.
Many non-standard sizes.

RGA Part Number	Military Style	Power Rating		Minimum Resistance	Standard Resistance Range	Maximum Resistance
		Type U	Type V			
RP-1/2A		.5W	N/A	.05 Ω	.1 Ω to 4K Ω	6.5K Ω
RP-1/2		.75W	N/A	.05 Ω	.1 Ω to 6K Ω	10.5K Ω
RP-1	RW-70	1.0W	N/A	.05 Ω	.1 Ω to 7.5K Ω	13.5K Ω
RP-1A		1.2W	N/A	.05 Ω	.1 Ω to 12K Ω	20K Ω
RP-2		2.25W	3.0W	.01 Ω	.1 Ω to 15.7K Ω	28K Ω
RP-2A	RW-69	2.5W	3.25W	.01 Ω	.1 Ω to 23.6K Ω	43K Ω
RP-2B		1.5W	2.25W	.01 Ω	.1 Ω to 10.5K Ω	19K Ω
RP-2C		3.5W	4.25W	.01 Ω	.1 Ω to 35.4K Ω	64K Ω
RP-3	RW-79	3.0W	3.75W	.01 Ω	.1 Ω to 18.5K Ω	33K Ω
RP-3B		3.5W	4.25W	.01 Ω	.1 Ω to 33K Ω	60K Ω
RP-4		4.0W	5.0W	.02 Ω	.1 Ω to 48K Ω	80K Ω
RP-4B	RW-74	5.0W	6.5W	.02 Ω	.1 Ω to 71K Ω	129K Ω
RP-5	RW-67	5.5W	7.0W	.02 Ω	.1 Ω to 92K Ω	168K Ω
RP-7		7.0W	9.0W	.02 Ω	.1 Ω to 108K Ω	197K Ω
RP-10	RW68, RW78	10.0W	12.0W	.04 Ω	.1 Ω to 203K Ω	370K Ω
RP-10B		9.0W	11.0W	.04 Ω	.1 Ω to 168K Ω	308K Ω
RP-15		15.0W	20.0W	.05 Ω	.1 Ω to 285K Ω	530K Ω

*Consult factory on resistance values which fall between the minimum/maximum resistance and the standard resistance range.



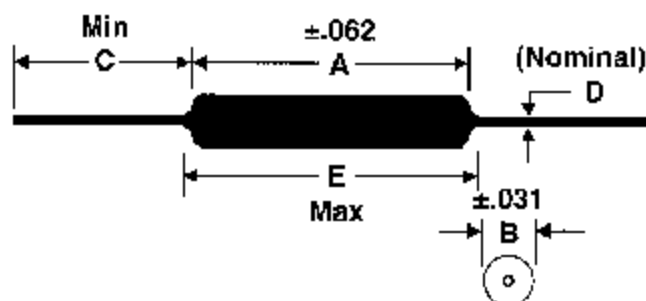
Power Wirewound Resistors

RP Series

General Electrical Specifications:

Tolerance:	Standard 5% 3% 1% Available .5% .25% .1% .05%
Dielectric Strength:	RP-1/2A through RP-1A 500 VAC All others 1000 VAC
Temperature Coefficient:	±20 PPM 10 ohms and above ±50 PPM 1 ohm - 9.9 ohm ±90 PPM below 1 ohm
Short time overload:	RP-3B and smaller 5 seconds @ 5 times rated power RP-4 and larger 5 seconds @ 10 times rated power

Meets MIL R 26E



RP Series Resistor Sizes

RGA Part Number	Dimensions (in inches)				
	A	B	C	D	E
RP-1/2A	.275	.094	1.500	.020	.375
RP-1/2	.344	.094	1.500	.020	.450
RP-1	.406	.094	1.500	.020	.500
RP-1A	.562	.094	1.500	.020	.550
RP-2	.500	.167	1.500	.032	.300
RP-2A	.500	.219	1.500	.032	.600
RP-2B	.375	.167	1.500	.032	.475
RP-2C	.625	.218	1.500	.032	.725
RP-3	.562	.167	1.500	.032	.650
RP-3B	.780	.167	1.500	.032	.875
RP-4	.812	.218	1.500	.032	.900
RP-4B	.875	.312	1.500	.040	.975
RP-5	1.032	.312	1.500	.040	1.125
RP-7	1.188	.312	1.500	.040	1.280
RP-10	1.760	.344	1.500	.040	1.844
RP-10B	1.720	.312	1.500	.040	1.800
RP-15	1.850	.475	1.500	.050	1.960