

RS / RSM Series — General Purpose Metal Oxide Resistors



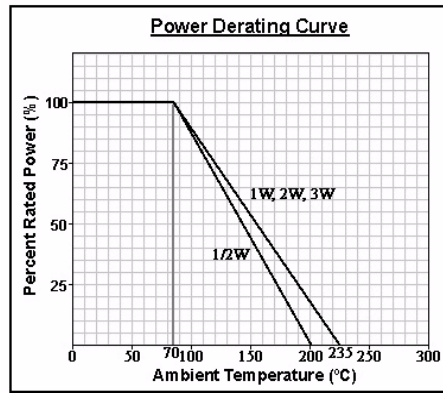
Features

- Lower-cost alternative to Carbon Comps and Wirewounds
- Coating meets UL 94V-0
- Meets solvent test of Mil Standard 202, Method 215
- Cut and formed product is available on select sizes; contact factory for details
- Higher or lower resistance values may be possible; contact factory
- RoHS compliant / lead-free available (RSF, RSMF)

Electrical Specifications

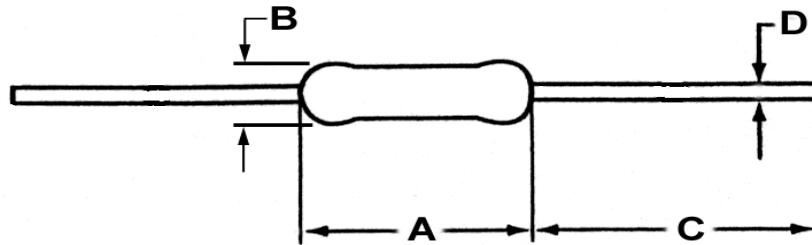
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage*	Maximum Pulse Voltage	Dielectric Withstanding Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
						1.0%	2.0% & 5.0%
RS 1/2	0.5W	250V	500V	600V	±200 ppm/°C	0.1Ω – 75KΩ	0.1Ω – 1MΩ
RS 1	1.0W	350V	700V	600V	±200 ppm/°C	0.1Ω – 100KΩ	0.1Ω – 1MΩ
RS 2	2.0W	350V	700V	600V	±200 ppm/°C	0.1Ω – 120KΩ	0.1Ω – 1MΩ
RS 3	3.0W	500V	800V	600V	±300 ppm/°C	10Ω – 510KΩ	10Ω – 510KΩ
RS 5	5.0W	750V	1,000V	1,000V	±300 ppm/°C	1.0Ω – 510KΩ	1.0Ω – 510KΩ
RSM 1/2	0.5W	250V	500V	350V	±200 ppm/°C	0.1Ω – 47KΩ	0.1Ω – 510KΩ
RSM 1	1.0W	350V	700V	500V	±200 ppm/°C	0.1Ω – 75KΩ	0.1Ω – 510KΩ
RSM 2	2.0W	350V	700V	500V	±200 ppm/°C	0.1Ω – 100KΩ	0.1Ω – 510KΩ
RSM 3	3.0W	500V	800V	500V	±200 ppm/°C	0.1Ω – 118KΩ	0.1Ω – 510KΩ
RSM 5	5.0W	750V	1,000V	800V	±300 ppm/°C	1.0Ω – 510KΩ	1.0Ω – 510KΩ

* Lesser of \sqrt{PR} or maximum working voltage.



How to Order

RS		1/2		0.47		5%		R			
SEI Type		Code		Nominal Resistance		Tolerance		Packaging			
Type	Description	Code	Wattage	Tolerance	Values	SEI Types	Pkg Qty	Description	Code		
RS	EIA Standard	1/2	0.5W	1.0%	E96	RSM 1/2	5,000	Tape	R		
RSM	Mini	1	1.0W	2.0%	E24	RS 1/2, RSM 1, RS 1, RSM 2	2,500				
RSF	Standard RoHS	2	2.0W	5.0%	E24	RS 2, RSM 3	1,000				
RSMF	Mini RoHS	3	3.0W			RS 3, RSM 5	500	Ammo	T		
		5	5.0W			RSM 1/2	5,000				
						RS 1/2, RSM 1	2,000				
						RS 1, RS 2, RSM 2, RSM 3	1,000	Bulk	A		
						RS 3, RSM 5	500				
						All	1,000				



Mechanical Specifications

Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Units
RS 1/2	0.35 ± 0.04 9.0 ± 1.0	0.14 ± 0.02 3.5 ± 0.5	1.10 ± 0.12 28.0 ± 3.0	0.024 ± 0.002 0.60 ± 0.05	inches mm
RS 1	0.43 ± 0.04 11.0 ± 1.0	0.18 ± 0.02 4.5 ± 0.5	1.18 ± 0.12 30.0 ± 3.0	0.028 ± 0.004 0.70 ± 0.10	inches mm
RS 2	0.59 ± 0.04 15.0 ± 1.0	0.20 ± 0.04 5.0 ± 1.0	1.18 ± 0.12 30.0 ± 3.0	0.028 ± 0.004 0.70 ± 0.10	inches mm
RS 3	0.71 ± 0.08 17.5 ± 2.0	0.26 ± 0.06 6.5 ± 1.5	1.38 ± 0.12 35.0 ± 3.0	0.031 ± 0.002 0.80 ± 0.05	inches mm
RS 5	0.96 ± 0.08 24.5 ± 2.0	0.34 ± 0.06 8.5 ± 1.5	1.38 ± 0.12 35.0 ± 3.0	0.031 ± 0.002 0.80 ± 0.05	inches mm
RSM 1/2	0.26 ± 0.02 6.5 ± 0.5	0.09 ± 0.01 2.3 ± 0.2	1.10 ± 0.12 28.0 ± 3.0	0.020 ± 0.002 0.52 ± 0.05	inches mm
RSM 1	0.35 ± 0.04 9.0 ± 1.0	0.14 ± 0.02 3.5 ± 0.5	1.10 ± 0.12 28.0 ± 3.0	0.024 ± 0.002 0.60 ± 0.05	inches mm
RSM 2	0.43 ± 0.04 11.0 ± 1.0	0.18 ± 0.02 4.5 ± 0.5	1.18 ± 0.12 30.0 ± 3.0	0.028 ± 0.004 0.70 ± 0.10	inches mm
RSM 3	0.59 ± 0.04 15.0 ± 1.0	0.20 ± 0.04 5.0 ± 1.0	1.18 ± 0.12 30.0 ± 3.0	0.028 ± 0.004 0.70 ± 0.10	inches mm
RSM 5	0.71 ± 0.08 17.5 ± 2.0	0.26 ± 0.06 6.5 ± 1.5	1.38 ± 0.12 35.0 ± 3.0	0.031 ± 0.002 0.80 ± 0.05	inches mm

Performance Characteristics

Test	Standard / Method	Requirement	
		RSM series	RS series
Short Time Over Load	JISC 5202 5.5	± 2.0%	± 1.0%
Biased Humidity	MIL-STD 202, Method 103	± 1.5%	
Dielectric Withstanding Voltage	MIL-STD 202, Method 103	± 0.5%	
Load Life	MIL-STD 202, Method 103	± 2.0%	
Load Life in Humidity	JISC 5202 7.9	± 2.0%	
Temperature Cycling	JESD22 Method JA-104	± 1.0%	
Low Temperature Operation	MIL-STD 202, Method 103	± 0.5%	
Moisture Resistance	MIL-STD 202, Method 103	± 0.5%	
Resistance to Solder Heat	MIL-STD 202, Method 210F	± 1.0%	
Terminal Strength	MIL-STD 202, Method 103	± 0.2%	
Vibration	MIL-STD 202, Method 103	± 0.5%	

Operating Temperature Range : -55°C to +200°C (RS 1/2, RSM 1)

-55°C to +235°C (All others)