

- 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
 - Flameproof
 - RoHS compliant / lead-free

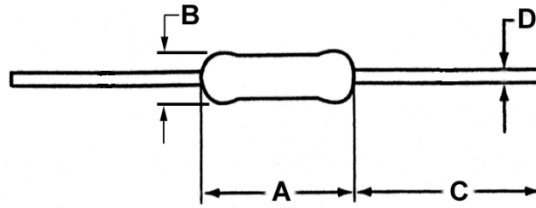


Electrical Specifications								
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Maximum Overload Voltage	Dielectric Withstanding Voltage	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance		
						1%	2%	5%
RSF12	0.5W	250V	400V	350V	±200 ppm/°C	0.1 - 150K	0.1 - 75K	0.1 - 1M
RSF1	1W	350V	600V	600V	±200 ppm/°C	0.1 - 100K		
RSF2	2W	350V	600V	600V	±200 ppm/°C	0.1 - 120K		
RSF3	3W	800V	1,000V	750V	±200 ppm/°C	0.1 - 470K	0.1 - 560K	
RSF5	5W	1,000V	1,000V	750V	±200 ppm/°C			
RSMF12	0.5W	250V	400V	350V	±200 ppm/°C	0.1 - 46.4K	0.1 - 47K	0.1 - 470K
RSMF1	1W	350V	600V	500V	±200 ppm/°C	0.1 - 75K		
RSMF2	2W	350V	600V	500V	±200 ppm/°C	0.1 - 100K		
RSMF3	3W	500V	800V	600V	±200 ppm/°C	0.1 - 118K	0.1 - 120K	
RSMF5	5W	1,000V	1,000V	750V	±200 ppm/°C	0.1 - 470K	0.1 - 560K	0.1 - 1M

(1) Lesser of $\sqrt{P \cdot R}$ or maximum working voltage

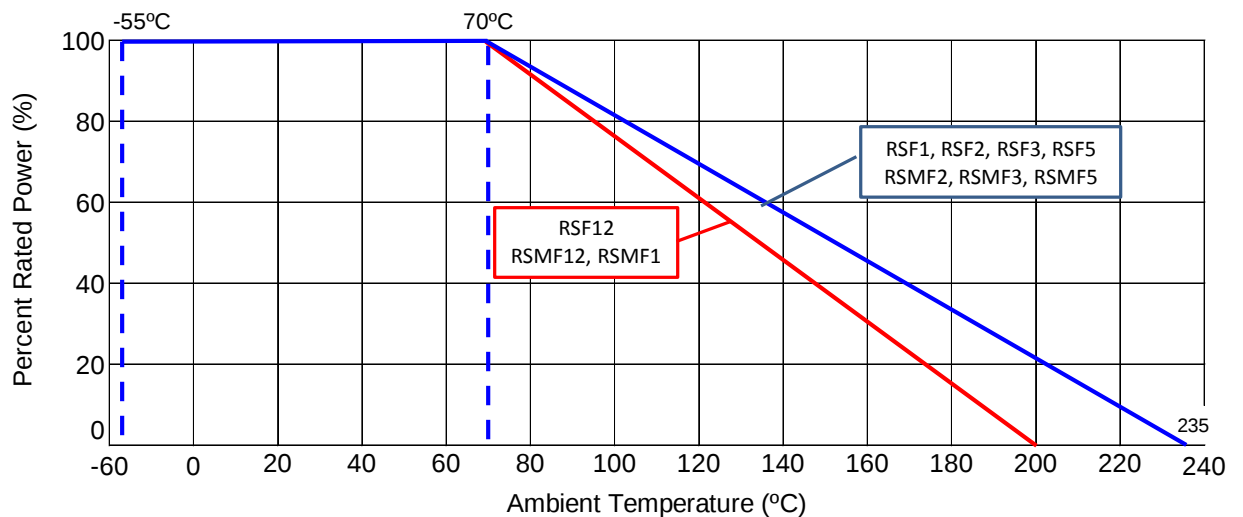
Performance Characteristics			
Test	Standard / Method	Typical Results	Test Limits
Insulation Resistance	JIS C5201-1, IEC60115-1, 4.6	≥ 1GΩ	≥ 1GΩ
Voltage Proof	JIS C5201-1, IEC60115-1, 4.7	<± 0.25%	≤ ± (0.5% + 0.05Ω) No mechanical damage.
Short Time Overload	JIS C5201-1, IEC60115-1, 4.13	<± 0.1%	≤ ± (0.75% + 0.05Ω)
Resistance to Solder Heat	JIS C5201-1, IEC60115-1, 4.18	<± 1.0%	≤ ± (2.0% + 0.05Ω)
Endurance at 70°C	JIS C5201-1, IEC60115-1, 4.25.1	<± 2.0%	≤ ± (5.0% + 0.05Ω)
Robustness of Terminations	JIS C5201-1, IEC60115-1, 4.16	<± 0.10%	≤ ± (1.0% + 0.05Ω)
Damp Heat (Steady state)	JIS C5201-1, IEC60115-1, 4.24	<± 1.5%	≤ ± (5% + 0.05Ω)
Rapid Change of Temperature	JIS C5201-1, IEC60115-1, 4.19	<± 0.2%	≤ ± (1% + 0.05Ω)
Resistance to Solvents	JIS C5201-1, IEC60115-1, 4.29	Pass	No damage to component or removal of marking.
Intermittent Overload	JIS C5201-1, IEC60115-1, 4.39	<± 0.3%	≤ ± (2% + 0.05Ω)
Accidental Overload (Flame resistance)	JIS C5201-1, IEC60115-1, 4.26	Pass	No flaming of gauze.

Operating Temperature Range: -55°C to +200°C (RSF12, RSMF12, RSMF1)
-55°C to +235°C (All others)

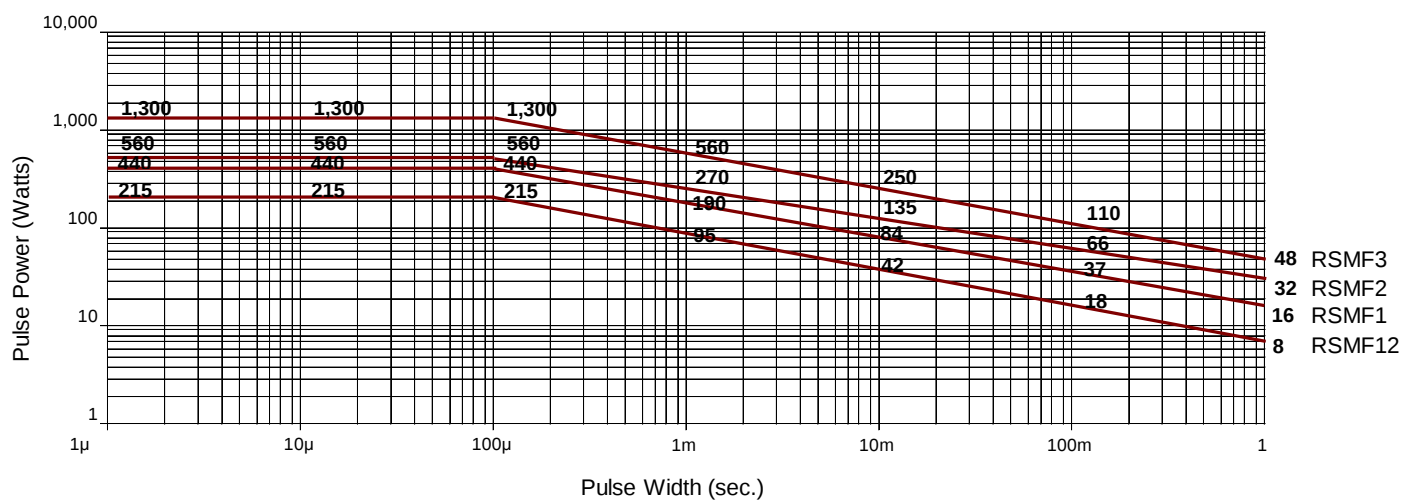


Mechanical Specifications						
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Lead-Tape Specification	Unit
RSF12	0.35 ± 0.04	0.13 ± 0.03	1.10 ± 0.12	0.03 ± 0.003	0.250	inches
	9.00 ± 1.00	3.20 ± 0.80	28.00 ± 3.00	0.70 ± 0.08	6.35	mm
RSF1	0.43 ± 0.06	0.18 ± 0.04	1.10 ± 0.20	0.03 ± 0.002	0.250	inches
	11.00 ± 1.50	4.50 ± 1.00	28.00 ± 5.00	0.80 ± 0.05	6.35	mm
RSF2	0.59 ± 0.06	0.22 ± 0.04	1.18 ± 0.20	0.03 ± 0.004	0.250	inches
	15.00 ± 1.50	5.50 ± 1.00	30.00 ± 5.00	0.75 ± 0.10	6.35	mm
RSF3	0.69 ± 0.04	0.24 ± 0.02	1.38 ± 0.12	0.03 ± 0.002	0.250	inches
	17.50 ± 1.00	6.00 ± 0.50	35.00 ± 3.00	0.80 ± 0.05	6.35	mm
RSF5	0.96 ± 0.04	0.31 ± 0.02	1.38 ± 0.12	0.03 ± 0.002	0.250	inches
	24.50 ± 1.00	8.00 ± 0.50	35.00 ± 3.00	0.80 ± 0.05	6.35	mm
RSMF12	0.24 ± 0.03	0.09 ± 0.01	1.10 ± 0.12	0.02 ± 0.003	0.250	inches
	6.00 ± 0.80	2.30 ± 0.30	28.00 ± 3.00	0.55 ± 0.07	6.35	mm
RSMF1	0.35 ± 0.04	0.13 ± 0.03	1.10 ± 0.12	0.03 ± 0.003	0.250	inches
	9.00 ± 1.00	3.20 ± 0.80	28.00 ± 3.00	0.70 ± 0.08	6.35	mm
RSMF2	0.43 ± 0.06	0.18 ± 0.04	1.18 ± 0.20	0.03 ± 0.002	0.250	inches
	11.00 ± 1.50	4.50 ± 1.00	30.00 ± 5.00	0.80 ± 0.05	6.35	mm
RSMF3	0.59 ± 0.06	0.22 ± 0.04	1.18 ± 0.20	0.03 ± 0.004	0.250	inches
	15.00 ± 1.50	5.50 ± 1.00	30.00 ± 5.00	0.75 ± 0.10	6.35	mm
RSMF5	0.69 ± 0.04	0.24 ± 0.02	1.38 ± 0.08	0.03 ± 0.002	0.250	inches
	17.50 ± 1.00	6.00 ± 0.50	35.00 ± 2.00	0.80 ± 0.05	6.35	mm

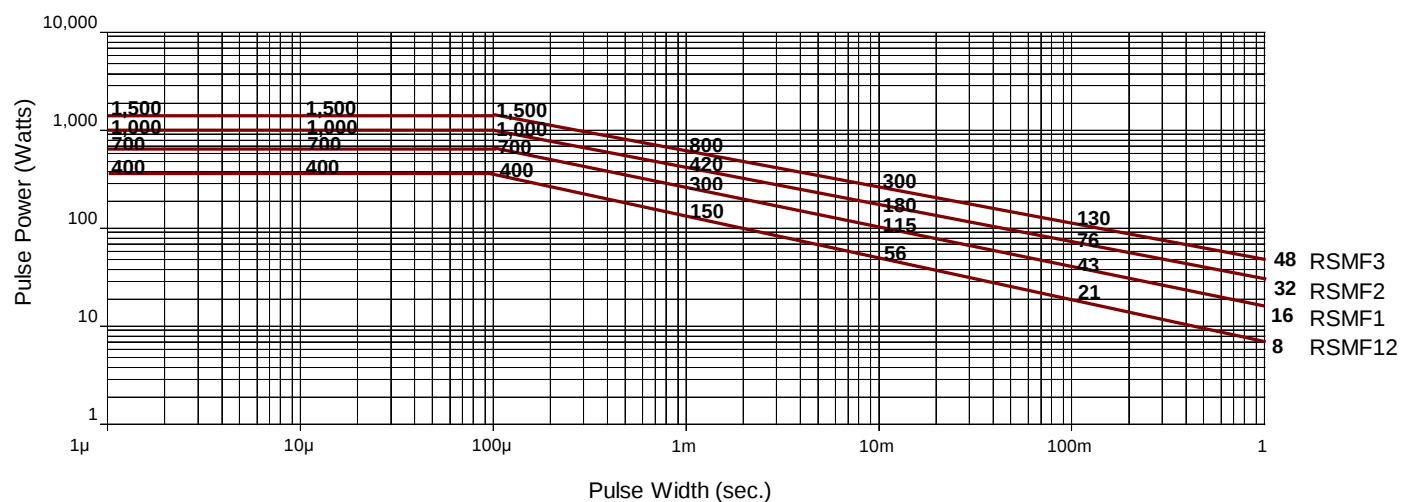
Power Derating Curve:



Pulse Limiting Power (One Pulse) / RSMF Series $\leq 5\Omega$



Pulse Limiting Power (One Pulse) / RSMF Series $\geq 5\Omega$



How to Order

1	2	3	4	5	6	7	8	9	10	11
R	S	F	1	2	J	T	R	4	7	0

Product Series		Size	Power	Tolerance			Packaging				Resistance Value		
RSF	Metal Oxide	12	0.5W	Code	Tol	Value	Code	Description	Size	Quantity	Four characters with the multiplier used as the decimal holder. 0.22 ohm = R220 33.2 ohm = 33R2 10.2 Kohm = 10K2 1 Mohm = 1M00		
RSMF	Mini	1	1W	F	1%	E96	T	Tape and Reel	RSMF12	5,000			
PRSF ⁽¹⁾	Panasert	2	2W	G	2%	E24			RSF12, RSF1 RSMF1, RSMF2, PRSM2	2,500			
PRSM ⁽¹⁾	Panasert Mini	3	3W	J	5%				RSF2, RSMF3 RSF3, RSMF5	1,000			
		5	5W						RSF5	500			
							A	Ammo	RSMF12	5,000			
									RSF12; RSMF1	2,000			
									RSF1, RSF2, RSMF2, PRSM2, RSMF3	1,000			
									RSF3, RSF5, RSMF5	500			
							B	Bulk	All Sizes	1,000			

(1) For packaging information see Radial Leaded Packaging Spec page