

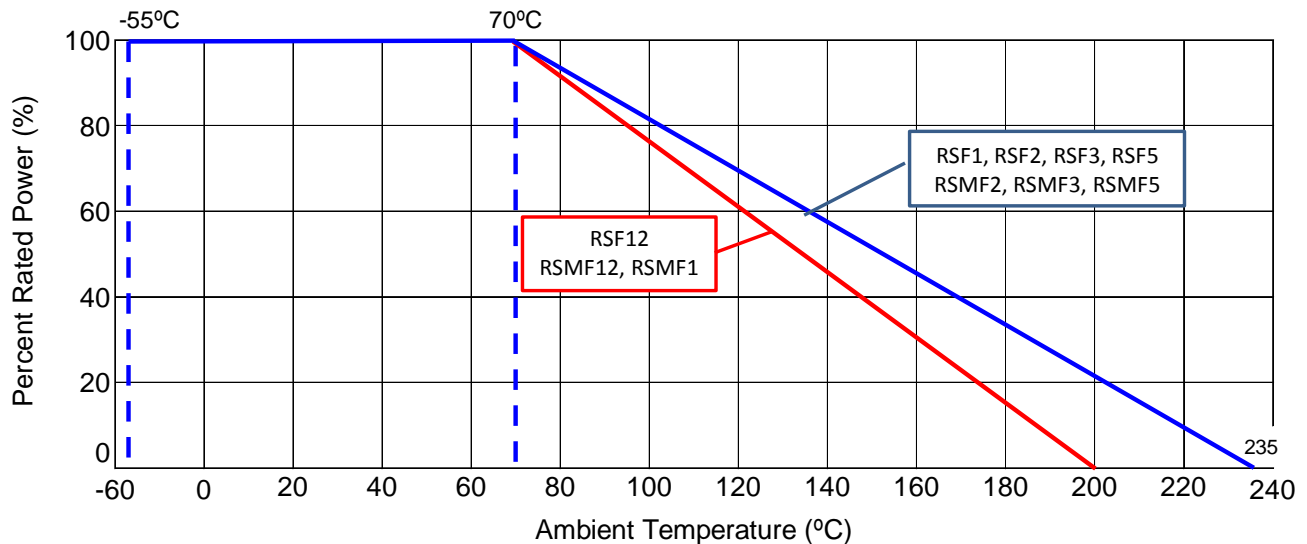
- Features:
- Lower-cost alternative to carbon comps and wirewounds
 - Coating meets UL 94V-0
 - Meets solvent test of Mil Standard 202, Method 215
 - Cut and formed product is available on select sizes; contact factory for details
 - Higher or lower resistance values may be possible; contact factory
 - 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		0.1 - 1M
RSF2	2W	350V	600V	600V	±200 ppm/°C	0.1 - 120K		0.1 - 1M
RSF3	3W	800V	1,000V	750V	±200 ppm/°C	0.1 - 470K	0.1 - 560K	0.1 - 1M
RSF5	5W	1,000V	1,000V	750V	±200 ppm/°C	0.1 - 470K	0.1 - 560K	0.1 - 1M
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		0.1 - 470K
RSMF2	2W	350V	600V	500V	±200 ppm/°C	0.1 - 100K		0.1 - 470K
RSMF3	3W	500V	800V	600V	±200 ppm/°C	0.1 - 118K	0.1 - 120K	0.1 - 470K
RSMF5	5W	1,000V	1,000V	750V	±200 ppm/°C	0.1 - 470K	0.1 - 560K	0.1 - 1M

(1) Lesser of \sqrt{PR} or maximum working voltage

Power Derating Curve:

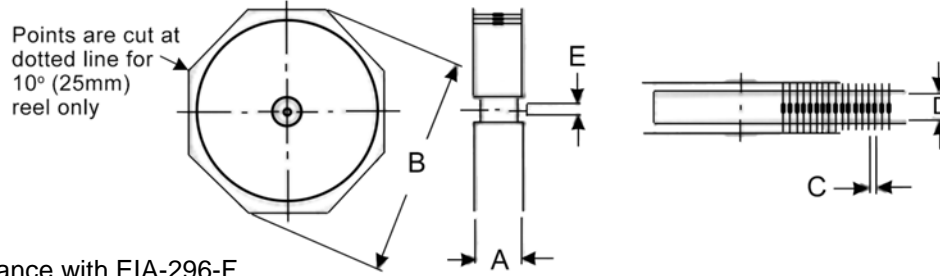


Performance Characteristics				
Test	Standard / Method	Typical Results	Test Limits	
Insulation Resistance	JIS C5201-1, IEC60115-1, 4.6	$\geq 1G\Omega$	$\geq 1G\Omega$	
Voltage Proof	JIS C5201-1, IEC60115-1, 4.7	$<\pm 0.25\%$	$\leq \pm (0.5\% + 0.05\Omega)$	No mechanical damage.
Short Time Overload	JIS C5201-1, IEC60115-1, 4.13	$<\pm 0.1\%$	$\leq \pm (0.75\% + 0.05\Omega)$	
Resistance to Solder Heat	JIS C5201-1, IEC60115-1, 4.18	$<\pm 1.0\%$	$\leq \pm (2.0\% + 0.05\Omega)$	
Endurance at 70°C	JIS C5201-1, IEC60115-1, 4.25.1	$<\pm 2.0\%$	$\leq \pm (5.0\% + 0.05\Omega)$	
Robustness of Terminations	JIS C5201-1, IEC60115-1, 4.16	$<\pm 0.10\%$	$\leq \pm (1.0\% + 0.05\Omega)$	
Damp Heat (Steady state)	JIS C5201-1, IEC60115-1, 4.24	$<\pm 1.5\%$	$\leq \pm (5\% + 0.05\Omega)$	
Rapid Change of Temperature	JIS C5201-1, IEC60115-1, 4.19	$<\pm 0.2\%$	$\leq \pm (1\% + 0.05\Omega)$	
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	$<\pm 0.3\%$	$\leq \pm (2\% + 0.05\Omega)$	
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

Packaging Specifications



Series	Code	A max ⁽¹⁾	B max	C	D ⁽²⁾	Tape	Unit
RSF	12	2.736 69.50	13.504 343.00	0.197 ± 0.020 5.00 ± 0.50	2.063 ± 0.079 52.40 ± 2.00	0.250 6.35	inches mm
	1	2.815 71.50	13.504 343.00	0.197 ± 0.020 5.00 ± 0.50	2.063 ± 0.079 52.40 ± 2.00	0.250 6.35	inches mm
	2	3.524 89.50	13.504 343.00	0.394 ± 0.020 10.00 ± 0.50	2.500 ± 0.079 63.50 ± 2.00	0.250 6.35	inches mm
	3	3.740 95.00	12.008 305.00	0.394 ± 0.020 10.00 ± 0.50	2.874 ± 0.079 73.00 ± 2.00	0.250 6.35	inches mm
	5	4.331 110.00	12.008 305.00	0.394 ± 0.020 10.00 ± 0.50	3.465 ± 0.079 88.00 ± 2.00	0.250 6.35	inches mm
RSMF	12	2.618 66.50	13.504 343.00	0.197 ± 0.020 5.00 ± 0.50	2.063 ± 0.079 52.40 ± 2.00	0.250 6.35	inches mm
	1	2.736 69.50	13.504 343.00	0.197 ± 0.020 5.00 ± 0.50	2.063 ± 0.079 52.40 ± 2.00	0.250 6.35	inches mm
	2	2.815 71.50	13.504 343.00	0.197 ± 0.020 5.00 ± 0.50	2.063 ± 0.079 52.40 ± 2.00	0.250 6.35	inches mm
	3	3.524 89.50	13.504 343.00	0.394 ± 0.020 10.00 ± 0.50	2.500 ± 0.079 63.50 ± 2.00	0.250 6.35	inches mm
	5	3.740 95.00	12.008 305.00	0.394 ± 0.020 10.00 ± 0.50	2.874 ± 0.079 73.00 ± 2.00	0.250 6.35	inches mm

Dimension "E": This is a non-critical dimension that does not have a tolerance in the standard.

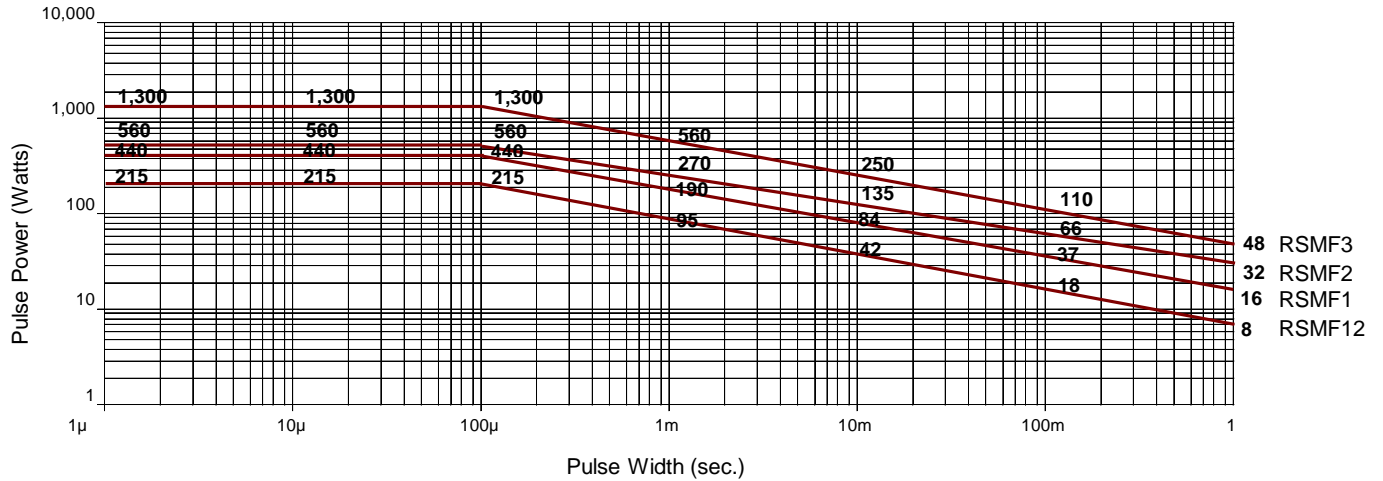
Range of diameters is from 0.547 inches (13.90 mm) to 1.500 inches (38.10 mm).

(1) Reference value only. The "A" dimension shall be governed by the overall length of the taped component.

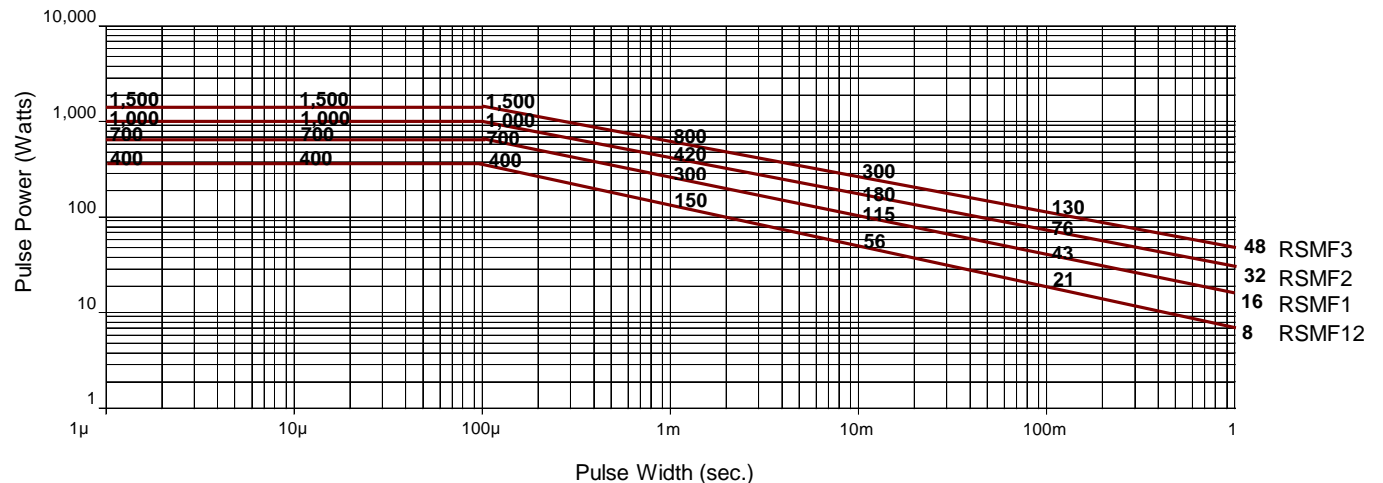
The distance between flanges shall be 0.059 inches (1.50 mm) to 0.315 (8.00 mm) greater than the overall component.

(2) The given dimension "D" expresses the standard width spacing. A 26mm narrow spacing is available as option "N" packaging code.

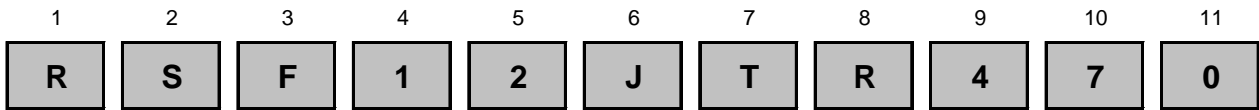
Pulse Limiting Power (one pulse) / RSMF Series ≤ 5Ω



Pulse Limiting Power (one pulse) / RSMF Series ≥ 5Ω



How to Order



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⁾	Panaset	2	2W	G	2%	E24	RSF12, RSF1		2,500		
PRSM ⁽¹⁾	Panaset Mini	3	3W	J	5%		RSMF1, RSMF2, PRSM2		1,000		
		5	5W				A		Ammo	RSMF12	5,000
							B	Bulk		RSMF12, RSMF1	2,000
										All Sizes	1,000

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

(*) 1,000 pieces MOQ