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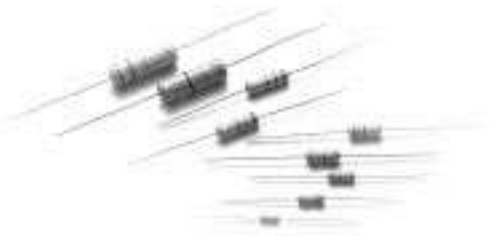
EN: This Datasheet is presented by the manufacturer.

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Metal Oxide Film Resistors

FLAME-PROOF TYPE

Normal & Miniature Style [RSF Series]



INTRODUCTION

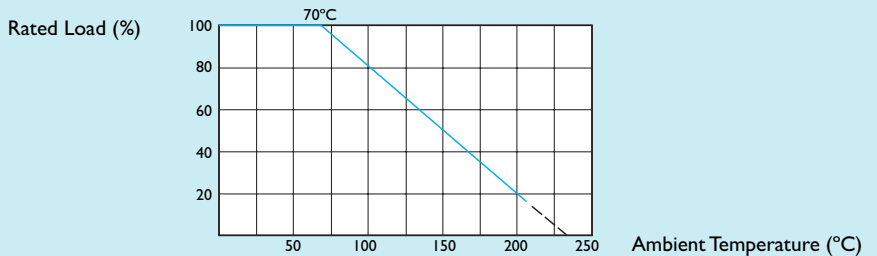
These Metal Oxide Resistors offer excellent performance in applications where stability and uniformity of characteristics are desired. They provide lower cost alternatives to Carbon Composition Resistors and General Purpose Metal Films Metal Oxides also can replace many low power General Purpose wirewound applications, saving both money and time, with shorter delivery cycles

The normal style & the miniature style of RSF series are coated with layers of gray and pink colors flame-proof lacquer respectively.

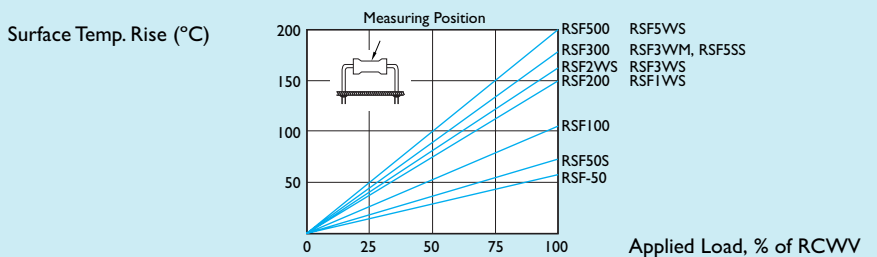
FEATURES

- Low Cost, Prompt Delivery
- High Power-to-Size Ratio for Significant Space Savings
- Complete Flameproof Construction-UL 1412
- High Surge/Overload Capability
- Non-Inductive Design
- Wide Resistance Range: 1Ω~1MΩ
- Resistance Tolerance: ± 5%

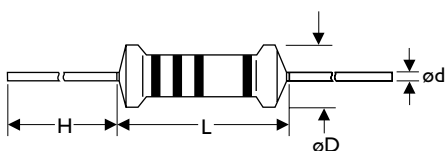
DERATING CURVE



HOT-SPOT TEMPERATURE



DIMENSIONS



STYLE		DIMENSION			
Normal	Miniature	L	øD	H	ød
-	RSF50S	6.3± 0.5	2.3± 0.3	28± 2.0	0.6± 0.05
RSF-50	-	9.0± 0.5	3.2± 0.3	26± 2.0	0.6± 0.05
-	RSF1WS	9.0± 0.5	3.2± 0.3	26± 2.0	0.6± 0.05
RSF100	RSF2WS	11.5± 1.0	4.5± 0.5	35± 2.0	0.8± 0.05
RSF200	RSF3WS	15.5± 1.0	5.0± 0.5	33± 2.0	0.8± 0.05
RSF5SS	RSF3WM	17.5± 1.0	6.5± 1.0	32± 2.0	0.8± 0.05
RSF300	RSF5WS	24.5± 1.0	8.5± 1.0	38± 2.0	0.8± 0.05
RSF500	-	24.5± 1.0	8.5± 1.0	38± 2.0	0.8± 0.05

Unit : mm

Note :

ELECTRICAL CHARACTERISTICS

STYLE	RSF50S	RSF-50	RSF1W S	RSF100	RSF2W S	RSF200	RSF3W S/ RSF3W M	RSF300	RSF5SS/ RSF5W S	RSF500
Power Rating at 70°C	1/2W		1W		2W		3W		5W	
OperatingTemp. Range	-55°C to +155°C									
Maximum Working Voltage	250V	250V	300V	350V	350V	350V	400V/450V	500V	500V/600V	750V
Maximum Overload Voltage	400V	400V	500V	600V	600V	600V	700V/700V	800V	800V/800V	1000V
Dielectric Withstanding Voltage	350V	350V	400V	500V	500V	500V	600V/600V	700V	700V/800V	800V
Value Range ±5%	1Ω~510KΩ									
Temperature Coefficient	±300ppm/°C									

* Standard resistance is 1Ω~510KΩ, below or over this resistance on request.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD		APPRAISE
Short Time Overload	JS-C-5202 5.5	2.5 Times RCW V for 5 Seconds	± (1%±0.05Ω)
Dielectric Withstanding Voltage	JS-C-5202 5.7	in V-Block for 60 Seconds	by Type
Temperature Coefficient of Resistance	JS-C-5202 5.2	-55°C to +155°C	± 200ppm/°C
Insulation Resistance	JS-C-5202 5.6	in V-Block	> 1000MΩ
Solderability	JS-C-5202 6.5	235°C for 5±0.5 Seconds	95% Min. Coverage
Resistance to Solvent	JS-C-5202 6.9	Trichroethane for 1 Min. with Ultrasonic	No Deterioration of Coatings and Markings
Terminal Strength	Direct Load for 10 Sec. in The Direction of The Terminal Leads		≥2.5kg (24.5N)
Pulse Overload	JS-C-5202 5.8	4 Times RCW V 10000 Cycles (1 Sec. on , 25 Sec. off)	± (2%±0.05Ω)
Load Life in Humidity	JS-C-5202 7.9	40±2°C, 90~95% RH at RCW V for 1000 Hrs (1.5 Hrs on , 0.5 Hrs off)	± (5%±0.05Ω)
Load Life	JS-C-5202 7.10	70°C at RCW V for 1000 Hrs (1.5 Hrs on , 0.5 Hrs off)	± (5%±0.05Ω)
Temperature Cycling	JS-C-5202 7.4	-55°C → Room Temp. → +155°C → Room Temp. for 5 Cycles	± (1%±0.05Ω)
Resistance to Soldering Heat	JS-C-5202 6.4	350°C±10°C for 3±0.5 Seconds	± (1%±0.05Ω)

* Rated Continuous Working Voltage (RCW V) = $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$