

Melf Metal Film Resistors

MMF Type

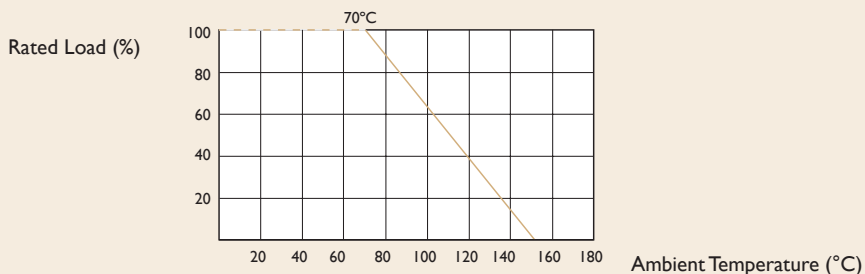
Normal & Miniature Style [MMF Series]



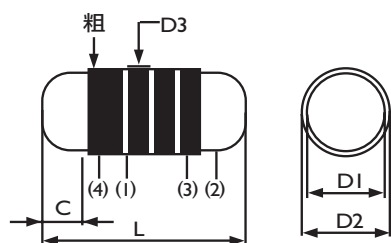
FEATURES

Power Rating	1/6W, 1/4W, 1/2W, 1W, 2W
Resistance Tolerance	$\pm 0.1\%$, $\pm 0.25\%$, $\pm 0.5\%$, $\pm 1\%$
T.C.R	$\pm 15\text{ppm}/^{\circ}\text{C}$, $\pm 25\text{ppm}/^{\circ}\text{C}$, $\pm 50\text{ppm}/^{\circ}\text{C}$, $\pm 100\text{ppm}/^{\circ}\text{C}$

DERATING CURVE



DIMENSIONS



STYLE		DIMENSION				Unit : mm
Normal	Miniature	L	D1	D2max	Cmin	
MMF-12	MMF25S/MMF204	3.5 $\pm$ 0.2	1.4 $\pm$ 0.15	1.55	0.5	
MMF-25	MMF50S/MMF207	5.9 $\pm$ 0.2	2.2 $\pm$ 0.15	2.4	0.5	
MMF-50	MMFIWS	8.5 $\pm$ 0.2	3.2 $\pm$ 0.20	3.4	0.5	



Note :

ELECTRICAL CHARACTERISTICS

STYLE	MMF-12	MMF25S	MMF204	MMF-25	MMF50S	MMF207	MMF-50	MMFIWS
Power Rating at 70 °C	1/6W	1/4W	0.4W	1/4W	1/2W	0.6W	1/2W	1W
Maximum Working Voltage	150V	200V	200V	250V	300V	300V	350V	350V
Maximum Overload Voltage	300V	400V	400V	500V	600V	600V	700V	700V
Operating Temp. Range	- 55°C to +155°C							
Standard Value Range	1Ω~10MΩ							
Temperature Coefficient	±25ppm/°C, ±50ppm/°C, ±100ppm/°C							

* Standard resistance is 1Ω~10MΩ, below or over this resistance on request.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD		APPRAISE
Short Time Overload	JIS-C-5202 5.5	2.5 Times RCWV for 5 Seconds	±(0.25%+0.05Ω)
Dielectric Withstanding Voltage	JIS-C-5202 5.7	in V-Block for 60 Seconds	by Type
Temperature Coefficient of Resistance	JIS-C-5202 5.2	-55°C to +155°C	by Type
Insulation Resistance	JIS-C-5202 5.6	in V-Block	>10000MΩ
Solderability	JIS-C-5202 6.5	235±5°C for 5±0.5 Seconds	95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9	IPA 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	JIS-C-5202 5.8	4 Times RCWV 10000 Cycles (1 Sec. on , 25 Sec. off)	±(1%+0.05Ω)
Load Life in Humidity	JIS-C-5202 7.9	40±2°C, 90~95% RH at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±(1.5%+0.05Ω)
Load Life	JIS-C-5202 7.10	70°C at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±(1.5%+0.05Ω)
Temperature Cycling	JIS-C-5202 7.4	-55°C→Room Temp.→+155°C→Room Temp. for 5 Cycles	±(0.75%+0.05Ω)
Resistance to Soldering Heat	JIS-C-5202 6.4	350°C±10°C for 3±0.5 Seconds	±(0.25%+0.05Ω)

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