

Melf Metal Film Resistors

# MMP Type

## Power Type Normal Style [ MMP Series ]

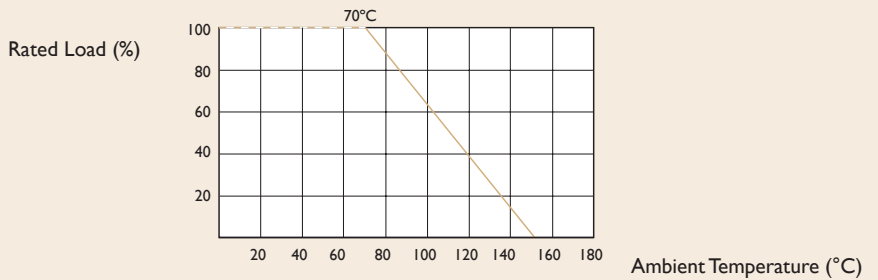


### FEATURES

Power Rating	1W, 2W
Resistance Tolerance	±1%, ±2%, ±5%
High thermal conductivity and specific gravity rods	
Flame Proof Silicone Coating: UL94V-0	
Pink body color	

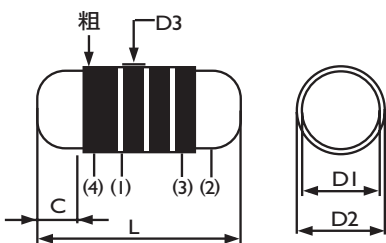
### POWER DERATING CURVE

For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve below.



### DIMENSIONS

Unit : mm



STYLE	L	D1	D2max	Cmin
MMP100	5.9±0.2	2.2±0.15	2.4	0.5
MMP200	8.5± 1.0	3.2±0.20	3.4	0.5

Note :

## ELECTRICAL CHARACTERISTICS

STYLE	TEST METHOD	MMP100	MMP200
Power Rating at 70°C		1W	2W
Maximum Overload Voltage		700V	700V
Maximum Working Voltage		350V	350V
Dielectric Withstanding Voltage	JIS-C-5202 5.7 in V-Block for 60 Seconds	500V	500V
Temperature Coefficient	JIS-C-5202 5.2 Room Temp.Add 100°C	±50, ±100, ±200ppm/°C	
Short Time Overload	JIS-C-5202 5.5 2.5 Times RCWV for 5Seconds	±2.0% +0.05Ω	
Insulation Resistance	JIS-C-5202 5.6 in V-Block	>1000MΩ	
Pulse Overload	JIS-C-5202 5.8 4Times RCWV 1000Hrs Cycles (1sec.on,25sec.off)	±1.0 % +0.05Ω	
Operating Temp. Range		- 55°C to +155°C	
Value Range , ±0.5 % ±1%		10Ω To 1MΩ for E240 or E90 Series	
Value Range ±5 %		1Ω To 1MΩ for E24 Series	

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

## ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRAISE
Terminal Strength	JIS-C-5202 6.1 Direct load for 10 sec.in the direction of the terminal leads	≥2.5kg(24.5N)
Resistance to Soldering Heat	JIS-C-5202 6.4 350°C±10°Cfor 3±0.5 Seconds	±0.25% ±0.05Ω
Solderability	JIS-C-5202 6.5 235±5°Cfor 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
Temperature Cycling	JIS-C-5202 7.4 -55→Room Temp.→+155°C→Room Temp. for 5Cycles	±1.0 % +0.05Ω
Humidity	JIS-C-5202 7.5 40±2°C, 90~95% RH for 1,000Hrs	±1.0 % +0.05Ω
Load Life in Humidity	JIS-C-5202 7.9 40±2°C, 90~95% RH at RCWV for 1000Hrs (1.5 Hrs. on , 0.5 Hrs. off)	±2.0%+0.05Ω
Load Life	JIS-C-5202 7.10 70°Cat RCWV for 1000Hrs. (1.5Hrs.on,0.5Hrs.off)	±2.0%+0.05Ω
Overload Flame Retardant	JIS-C-5202 7.12 4Times RCWV for 1 minute.	No evidence of Flaming or arcing

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