

高精密金屬膜電阻器

PMF Series

Resistance Range : 0.1R ~ 1MΩ

Precision Metal Film Resistor - PMF Series

ORDERING PROCEDURE:

Example: PMF050E0001FTB

Power:	Type:	T.C.R/°C	Resistance	Tol.	Package
1/8W	PMF0125	S=±5ppm	0001=0.1Ω	F = ±1%	TB = T/Box.
1/4WS	PMF025S	B=±10ppm	0010=1Ω	D = ±0.5%	B = Bulk
1/4W	PMF025	N=±15ppm	0200=20Ω	C = ±0.25%	
1/2WS	PMF050S	C=±25ppm	3300=33Ω	B = ±0.1%	
1/2W	PMF050	D=±50ppm	4701=4.7KΩ		
1WS	PMF100S	E=±100ppm	5602=56KΩ		
1W	PMF100		1003=100KΩ		
2WS	PMF200S		1004=1MΩ		
2W	PMF200				
3WS	PMF300S				

Figure



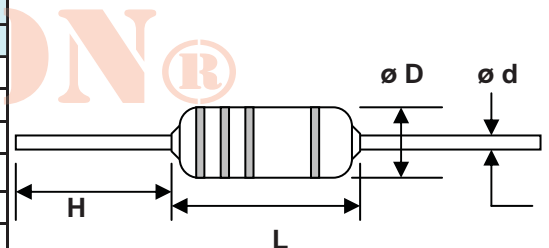
Resistor body color : Blue

PRODUCT FEATURE:

- Low Noise
- Low T.C.R. 100ppm, 50ppm, 25ppm, 10ppm, 5 ppm.
- High Precision : ±1%, ±0.5%, ±0.25%, ±0.1%.
- Power : Standard Type: 1/8W ~ 2W  
Miniature Type: 1/4WS ~ 3WS.
- Resistance Range: E96 0.1R ~ 1M ohm Tolerance Range: ±1%, ±0.5%  
E192 100R ~ 100K ohm Tolerance Range: ±0.25% , ±0.1%.

DIMENSION (mm)

Power:	STYLE	Dimension (mm)			
		L	D	H	d
1/8W	PMF0125	3.3±0.4	1.8±0.3	29±2.0	0.45±0.03
1/4WS	PMF025S	3.3±0.4	1.8±0.3	29±2.0	0.45±0.03
1/4W	PMF025	6.3±0.5	2.3±0.3	29±2.0	0.55±0.03
1/2WS	PMF050S	6.3±0.5	2.3±0.3	29±2.0	0.55±0.03
1/2W	PMF050	9.0±0.5	3.2±0.5	26±2.0	0.65±0.03
1WS	PMF100S	9.0±0.5	3.2±0.5	26±2.0	0.65±0.03
1W	PMF100	11.5±1.0	4.5±0.5	35±2.0	0.78±0.03
2WS	PMF200S	11.5±1.0	4.5±0.5	35±2.0	0.78±0.03
2W	PMF200	15.5±1.0	5.0±0.5	32±2.0	0.78±0.03
3WS	PMF300S	15.5±1.0	5.0±0.5	32±2.0	0.78±0.03



◆ RATED POWER

Type	Power 70°C	Maximum Voltage		Dielectric withstanding Voltage (AC)	Res. E96 Range(Ω)	Res. E192 Range(Ω)	Tolerance	
		Working	Overload				E96	E192
PMF0125	1/8W	200V	400V	300V	0.1 ~1M	100R~100K	±1%, ±0.5%.	±0.25%, ±0.1%.
PMF025S	1/4WS	250V	400V	400V	0.1 ~1M	100R~100K		
PMF025	1/4W	250V	500V	500V	0.1 ~1M	100R~100K		
PMF050S	1/2WS	300V	600V	500V	0.1 ~1M	100R~100K		
PMF050	1/2W	350V	700V	500V	0.1 ~1M	100R~100K		
PMF100S	1WS	400V	800V	700V	0.1 ~1M	100R~100K		
PMF100	1W	450V	1000V	1000V	0.1 ~1M	100R~100K		
PMF200S	2WS	500V	1000V	1000V	0.1 ~1M	100R~100K		
PMF200	2W	500V	1000V	1000V	0.1 ~1M	100R~100K		
PMF300S	3WS	500V	1000V	1000V	0.1 ~1M	100R~100K		
Operating temperature Range:			-55°C ~ 155°C					
Temperature Coefficient:			±15ppm/°C, ±25ppm/°C, ±50ppm/°C, ±100ppm/°C.					

\* Rated power is maximum power which can continuously loaded at specified ambient temperature 70°C, however when the ambient temperature exceeds 70°C, rated power should be determined from the derating curve of Fig 1.

- Value Range for standard resistance, below over this resistance on request.



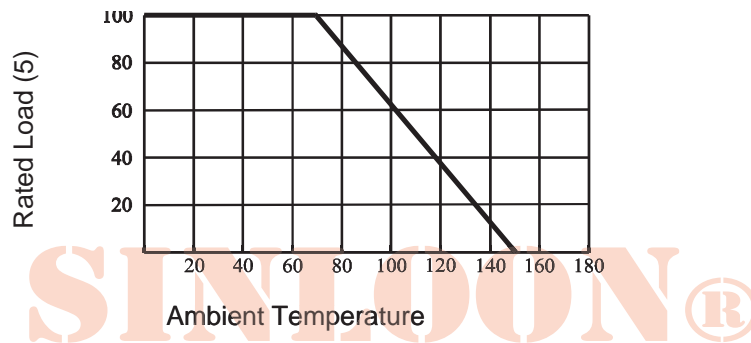
Precision Metal Film Resistor - PMF Series

ENVIRONMENTAL CHARACTERISTICS

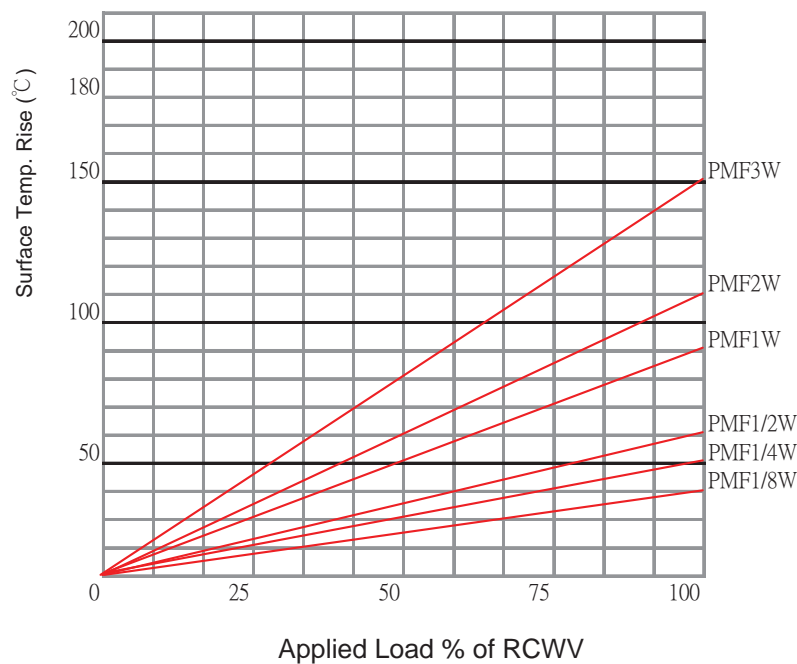
PERFORMANCE TEST	TEST METHOD	APPRAISE
SHORT TIME OVERLOAD	JIS-5202 5.5 2.5 times RCWV for 5 seconds.	±(0.25%+0.05Ω)
TEMPERATURE COEFFICIENT (T.C.R.)	Resistance value at room temperature and room temperature +100°C	By Type
DIELECTRIC WITHSTANDING VOLTAGE	JIS-C5202 5.7 in V-Block for 60 seconds.	By Type
PULSE OVERLOAD	JIS-C5202 5.8 4 times RCWV for 10000 cycles (1sec.on, 25secs.off)	±(0.75%+0.05Ω)
INSULATION RESISTANCE	JIS-C5202 5.6 In V-Block	>10000MΩ
LOAD LIFE	JIS-C-5202 7.10 70°C at RCWV for 1000hrs. (1.5hrs.on, 0.5hrs.off)	±(1.5%+0.05Ω)
LOAD LIFE IN HUMIDITY	JIS-C5202 7.9 40±2°C 90~95%RH at RCWV for 1000hrs.(1.5hrs.on,0.5hrs.off)	±(1.5%+0.05Ω)
SOLDER ABILITY	JIS-C5202 6.5 260±5°C for 2±0.5 seconds.	95% min. coverage
RESISTANCE TO SOLVENT	JIS-C5202 6.9 Trichroethane for 1 min. with ultrasonic.	No deterioration of coatings and makrings.
TERMINAL STRENGTH	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: ≥2.5kg

■ Rated continuous Working Voltage (RCWV) =  $\sqrt{\text{POWER.RATING.} * \text{RESISTANCE.VALUE}}$

POWER GRAPH



HOT-SPOT TEMPERATURE



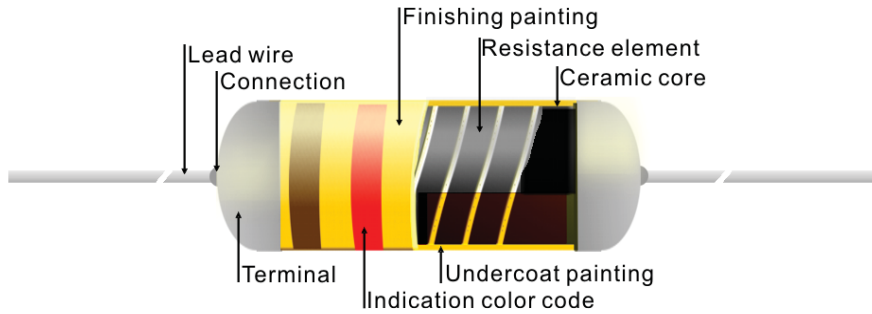
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◆ STRUCTURE DIAGRAM

The construction of resistor (PMF Series) shall be Figure.



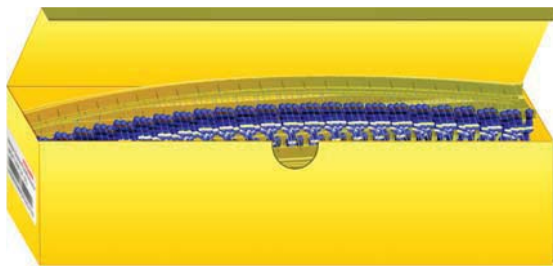
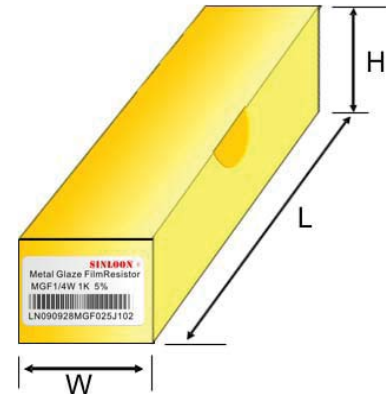
Item	Material
Ceramic Core	High alumina ceramic is used
Resistance element	The resistor element shall consist of metal glaze film.
Terminal	Tinned iron cap.
Connection	The lead wire, which is plated with solder, shall be mounted to the caps by welding process.
Lead Wire	Soldered or tinned annealed copper wire.
Undercoat Painting	Electric insulation varnish.
Finishing painting	Epoxy resin is used.
Indiction	Color code.

◆ Painting Resistor body color

(1)	Normal size	
(2)	Small size	

◆ PACKAGE:

STYLE		Dimensions (mm)			Quantity
Normal	Miniature	L	W	H	
PMF0125	PMF025S	264	80	75	5,000
PMF025	PMF050S	264	80	105	5,000
PMF033	PMF050SS	264	80	35	1,000
PMF050	PMF100S	264	80	46	1,000
PMF100	PMF200S	265	103	82	1,000
PMF200	PMF300S	265	103	96	1,000



品質承諾標誌  
Quality Commitment