

Metal plate resistors

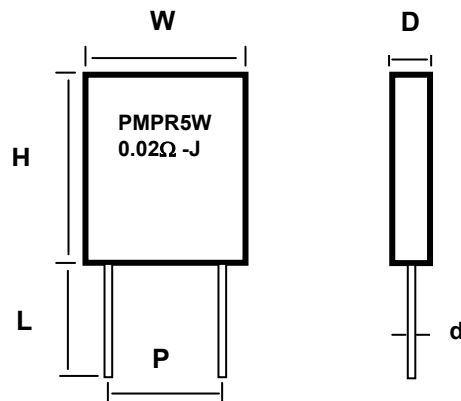
MPR 2W/5W/10W

FEATURES

- Low resistance values
- Non inductive
- Excellent stability and moisture.

APPLICATIONS

- PDP power board
- LCD / LED power
- Power supplies.



DESCRIPTION

The element of resistor is a resistive metal plate. the wires are welded on ends of metal Plate and inserted into ceramic case as flame retardant.

Type	Dimensions (mm)					
	W ±1.0	H ±1.0	D ±1.0	P ±1.0	L ±0.5	d ±0.05
MPR 2W	14	8.5	5	10	3.7	0.8
MPR 5W	14	18	5			
MPR 10W	16	18	8.5			

QUICK REFERENCE DATA

DESCRIPTION	VALUE		
	MPR 2W	MPR 5W	MPR 5W
resistance range	0.005 Ω to 0.56 Ω		
resistance tolerance	±10%, ±5%, ±2% (E24) ±1%, (E48, E96 series)		
temperature coefficient	± 250 ppm / °C		
rated dissipation at T _{amb} = 70 °C	2 W	5W	10W
max. working voltage	$\sqrt{P \times R}$		
basic specifications	IEC 60 115-1 and 60 115-2		
climatic category (IEC60068)	40 / 200 / 56		

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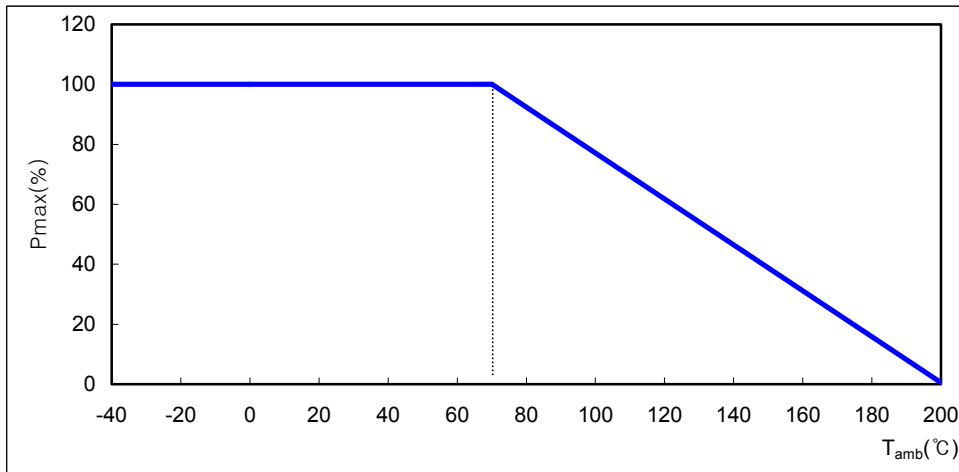
ORDERING INFORMATION

Ordering code indicating resistor types and packing

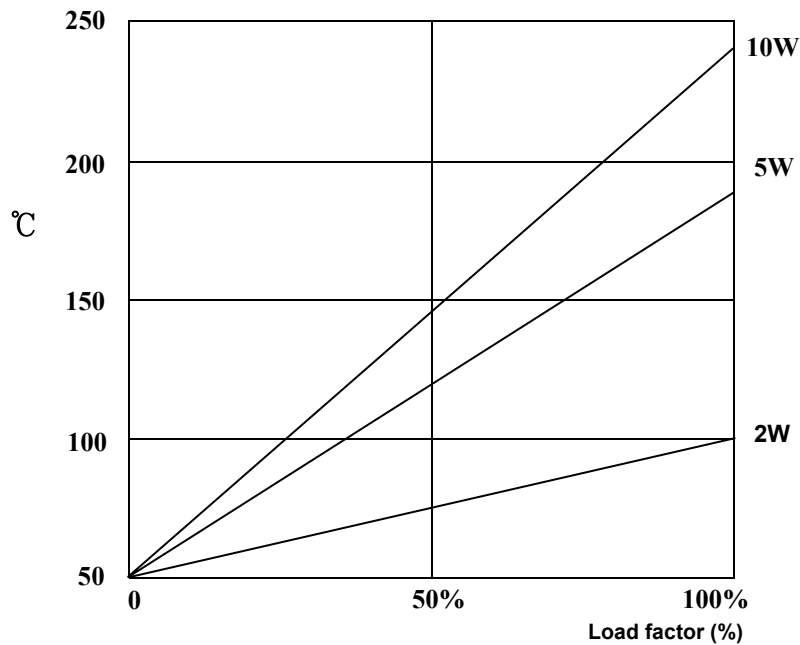
Type	Packing	Quantity	Tol. ± %	Ordering code
MPR 2W	Bulk	500	5	PMPR 182 13xxx
MPR 5W	Bulk	300		PMPR 185 13xxx
MPR 10W	Bulk	500		PMPR 186 13xxx

The maximum permissible hot – spot temperature is 125 °C.

Derating curve



Hot spot temperature



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Test procedures and requirements

Electrical and mechanical characteristics the following characteristics must be inspected regularly for compliance with the requirements according to the instruction.

TEST	PROCEDURE	REQUIREMENTS		
		MPR 2W	MPR 5W	MPR 10W
terminal strength	Load : 4.5Kg ; 10s	No evidence of mechanical damage or loosening terminals.		
solderability	5s; 260 °C flux 600	good tinning ; no damage		
resistance to soldering heat	thermal shock : 3s; 350 °C; 2.5mm from body	± (2%+0.05 Ω)		
rapid change of temperature	30minutes at -55 °C and 30minutes at +155 °C; 5cycles	± (2%+0.05 Ω)		
damp heat (steady state)	56days; 40 °C; 90 to 95% RH; dissipation 0.01 P _n	± (3%+0.05 Ω)		
endurance	1000hours at 70 °C; P _n or V _{max} 1.5 hours on and 0.5 hours off	± (5%+0.1 Ω)		
temperature coefficient	between -55 °C and +155 °C (TC x 10 ⁻⁶ /K)	± 250ppm / °C		
insulation resistance	500V _{DC} during 1minute; V-block method	R _{ins min} : 1000 MΩ		
short time overload	rated voltage x 2.5, 5s on 45sec off 5 cycles	± (2.0%+0.05 Ω)		