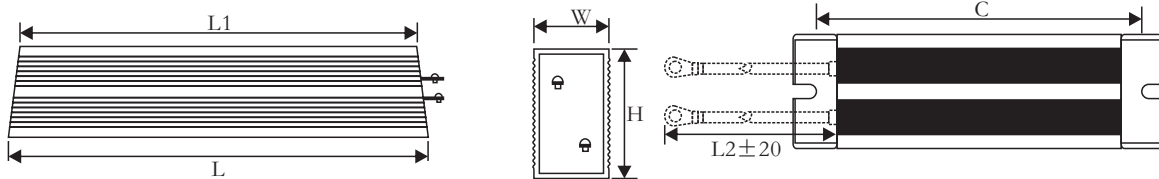


● Features

- I Aluminum crust surface with good performance in heat radiation, suitable for cooling plate installation, can be used in the atrocious environment.
- II Small size, high power load.
- III High insulating capacity, encapsulation by non-flame inorganic material, good performance in vibration.
- IV Multi connection form will be easy to fix.
- V Widely used in power supply, Transducer, Elevator, Arena audio and high requirement equipment industry.
- VI Resistance tolerance: $\pm 1\%$, $\pm 2\%$, $\pm 5\%$, $\pm 10\%$.

● Dimensions



Type	Power (W)	Dimensions (mm)					
		L ± 1	L1 ± 1	W ± 0.5	H ± 0.5	C ± 0.5	L2
MNF	1000	400	362	50	107	384	Customized lead wire is available
	1200	450	412	50	107	434	
	1500	485	447	50	107	468	
	2000	550	510	50	107	532	

● Ordering Information

Example:

MNE	1000	J	10R0
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1) Type: MNE SERIES

(2) Power Rating: 1000=1000W, 1200=1200W, 1500=1500W, 2000=2000W

(3) Tolerance: J = $\pm 5\%$

(4) Resistance Value: R100=0.1 Ω , 1R00=1 Ω , 10R0=10 Ω

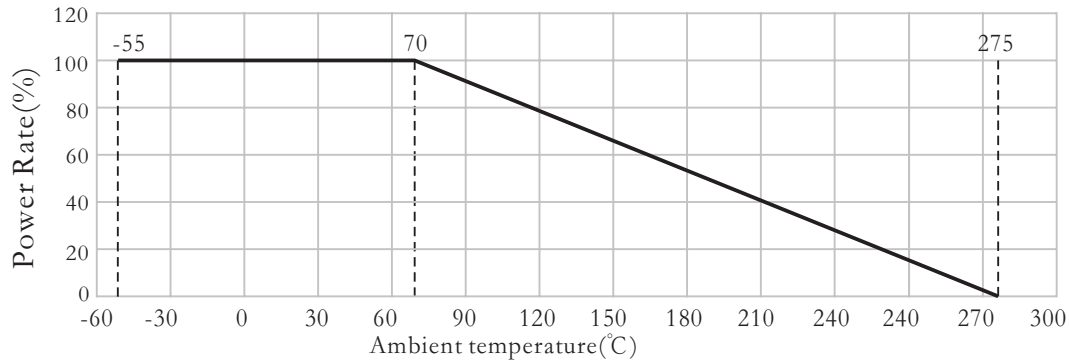
● Reference Standards

JISC 5201-1

● Applications And Ratings

Rated Power (W)	Resistance Range (Ω)		Tolerance	T.C.R	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage
	Standard	Non-inductive					
1000	1 Ω ~30K	1~2K	J $\pm 5\%$	$\pm 300\text{PPM}/^\circ\text{C}$	$\sqrt{P \cdot R}$	$\sqrt{10 \cdot P \cdot R}$	2000V/Ac
1200	1 Ω ~30K	1~2K					
1500	1 Ω ~30K	1~2K					
2000	1 Ω ~30K	1~2K					

Derating Curve



Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	$\pm 300\text{ppm}/^{\circ}\text{C}$	Test resistance value at normal temperature and normal temperature added 100°C, calculate °C resistance value change rate.
Short time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	10X rated power or Max. overload voltage(get the lower) for 5seconds.
Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	Immerge into the $350 \pm 10^{\circ}\text{C}$ tin stove for 2~3 seconds
Dielectric withstanding voltage	No obvious mechanical damage or spark-over	Add AC 1500V or 2000V or 2500V for 1min.
Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	At -55°C for 30min, then at $+25^{\circ}\text{C}$ for 10~15min, then at $+125^{\circ}\text{C}$ for 30min, then at $+25^{\circ}\text{C}$ for 10~5 min, total 5cycles.
Load life in humidity	$\Delta R \leq \pm (3\%R_0 + 0.05\Omega)$	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the $40 \pm 2^{\circ}\text{C}$ and 90~95% relative humidity.
Load life in heat	$\Delta R \leq \pm (3\%R_0 + 0.05\Omega)$	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the $70 \pm 2^{\circ}\text{C}$.
Terminal strength	$\Delta R \leq \pm (2\%R_0 + 0.1\Omega)$	Pull:100N
Vibration	$\Delta R \leq \pm (2\%R_0 + 0.1\Omega)$	Frequency:10~55Hz, Swing:0.75mm, Test time:6hours
Nonflammability	No visible flame	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.