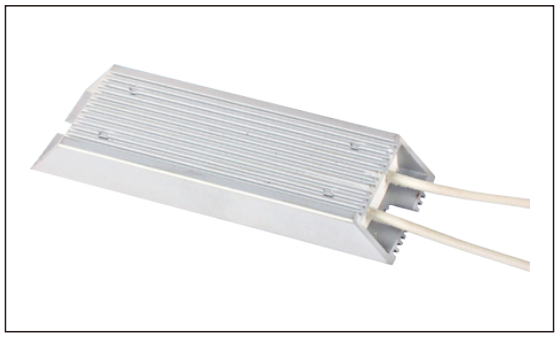
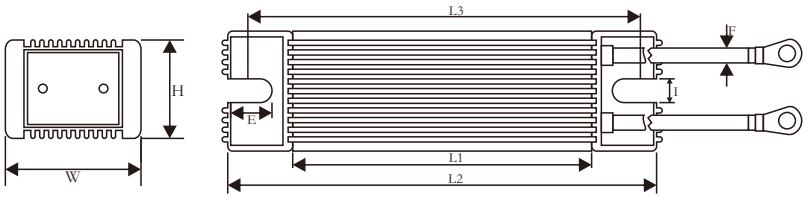
MNB Trapezoid Aluminum Shell Resistor



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: ± 1%, ± 2%, ± 5%, ± 10%.

Dimensions



Type	Power (W)	Dimensions(mm)							
		L1±3	L2±3	L3±3	W±1	H±1	F	E±1	I
MNB	40	65	95	80	40	20	0.75mm^2	12	5
MNB	60	85	115	100	40	20	0.75mm^2	12	5
MNB	80	110	140	125	40	20	0.75mm^2	12	5
MNB	100	140	165	155	40	20	1.5mm^2	12	5.5
MNB	120	160	185	170	40	20	1.5mm^2	12	5.5
MNB	150	185	215	200	40	20	1.5mm^2	12	5.5
MNB	200	120	165	150	60	30	1.5mm^2	12	6
MNB	300	170	215	200	60	30	1.5mm^2	12	6
MNB	400	220	265	250	60	30	1.5mm^2	12	6
MNB	500	310	335	320	60	30	1.5mm^2	12	6
MNB	600	310	335	320	60	60	1.5mm^2	12	6
MNB	800	360	400	380	60	60	1.5mm^2	12	6
MNB	1000	360	400	385	50	107	2.0mm^2	12	6
MNB	1200	410	450	435	50	107	2.0mm^2	12	6
MNB	1500	450	485	470	50	107	2.0mm^2	12	6
MNB	2000	510	550	530	50	107	2.0mm^2	12	6

Ordering Information

Example:

MNB	300	J	10R0
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1)Type: MNB SERIES

(2)Power Rating: 60=60W、100=100W、300=300W、800=800W

(3)Tolerance: J=±5%

(4)Resistance Value:R100=0.1Ω,1R00=1Ω,10R0=10Ω,1000=100Ω,1001=1KΩ

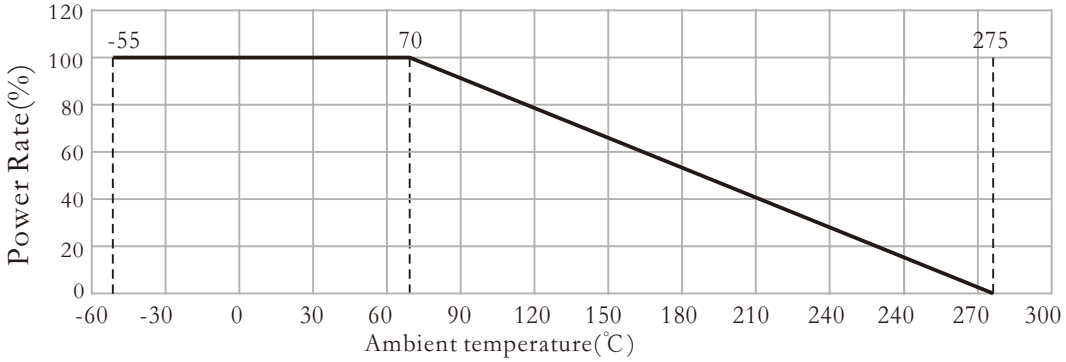
Reference Standards

JISC 5201-1

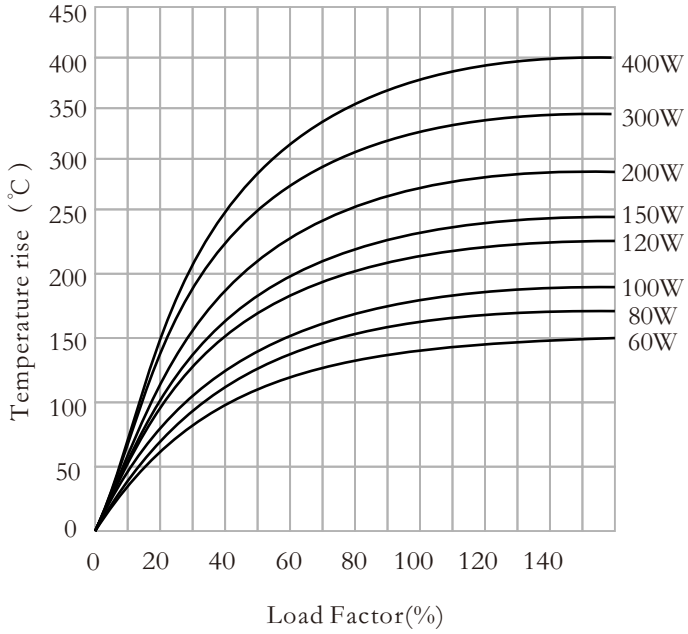
Applications And Ratings

Rated Power (W)	Resistance Range(Ω)		Tolerance	T.C.R	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage
	Standard	Non-inductive					
40	1Ω~5K	0.1~200Ω	J±5%	±300PPM/℃	$\sqrt{P.R}$	$6.25\sqrt{P.R}$	1500V/Ac
60	1Ω~5K	0.1~200Ω					
80	1Ω~6K	0.2~200Ω					
100	1Ω~8K	0.2~500Ω					
120	1Ω~10K	0.2~500Ω					
150	1Ω~12K	0.2~1000Ω					
200	1Ω~15K	0.2~1500Ω					
300	1Ω~18K	0.5~1500Ω					2000V/Ac
400	1Ω~20K	0.5~1500Ω					
500	1Ω~25K	0.5~1500Ω					
600	1Ω~30K	1~2K					
800	1Ω~30K	1~2K					
1000	1Ω~50K	1R~3KΩ					2500V/Ac
1200	1Ω~100K	1R~3KΩ					
1500	1Ω~100K	1R~3KΩ					
2000	1Ω~100K	1R~3KΩ					

Derating Curve



Surface Temperature Rise



Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	±300ppm/℃	Test resistance value at normal temperature and normal temperature added 100℃, calculate ℃ resistance value change rate.
Short time overload	△R≤±(2%R0+0.05Ω)	10X rated power or Max. overload voltage(get the lower) for 5seconds.
Resistance to soldering heat	△R≤±(1%R0+0.05Ω)	Immerge into the 350±10℃ 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	△R≤±(1%R0+0.05Ω)	At-55℃ for 30min, then at+25℃ for 10~15min,then at +125℃ for 30min, then at +25℃ for 10~5, min,total 5cycles.
Load life in humidity	△R≤±(3%R0+0.05Ω)	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the 40±2℃ and 90~95% relative humidity.
Load life in heat	△R≤±(3%R0+0.05Ω)	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the 70±2℃.
Terminal strength	△R≤±(2%R0+0.1Ω)	Pull:100N
Vibration	△R≤±(2%R0+0.1Ω)	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.