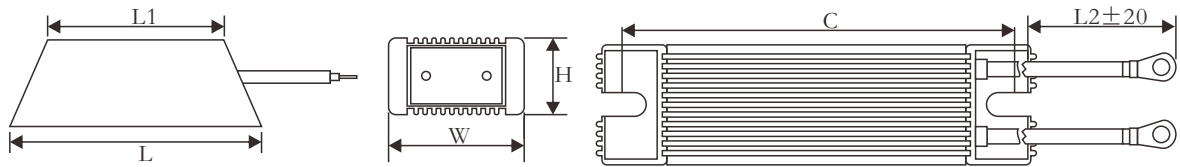


# MNA 铝壳电阻 Aluminum Shell Resistor



本体颜色: Body Color  
 标准品: Standard(Silver 银色)  
 标示: Marking  
 文字: Alphanumeric  
 (根据客户要求提供相应标识)  
 (According to the customer request to provide corresponding identification)

## 外形尺寸 Dimensions



规格 Type	功率 Power (W)	尺寸Dimensions(mm)					
		L±1	L1±1	W±0.5	H±0.5	C±0.5	L2
MNA	60	90	66	40	15	70	引出端可按 客户要求制作
MNA	100	120	95	40	15	106	

## 特性 Feature

- 金属铝壳包封，散热性能好、适合散热板安装,可长期在恶劣环境下使用。  
Aluminum crust surface with good performance in heat radiation, suitable for cooling plate installation, can be used in the atrocious environment.
- 体积小、功率负荷大  
Small size, high power load.
- 绝缘性高，采用阻燃无机材料一体化封装，抗振性好。  
High insulating capacity, encapsulation by non-flame inorganic Material, good performance in vibration.
- 多种接线方式，便于安装  
Multi connection form will be easily to fix.
- 广泛用于电源、变频器、电梯、舞台音响及高端设备行业。  
Widely used in power supply, Transducer, Elevator, Arena audio and high requirement equipment industry.
- 精度范围:±5%,±10%。  
Resistance tolerance: ±5%, ±10%.

## 参考规格Reference Standards

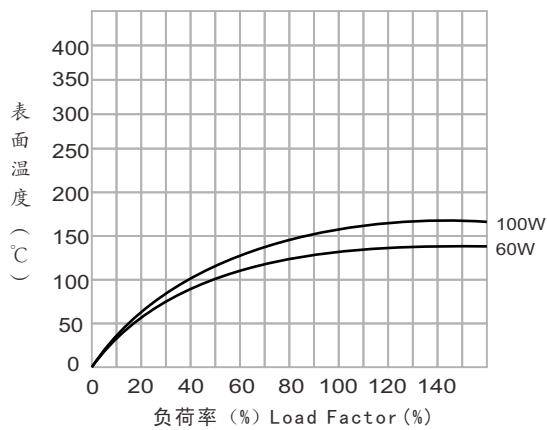
JIS C 5201-1

## 功率、阻值范围与耐电压Power And Resistance etc

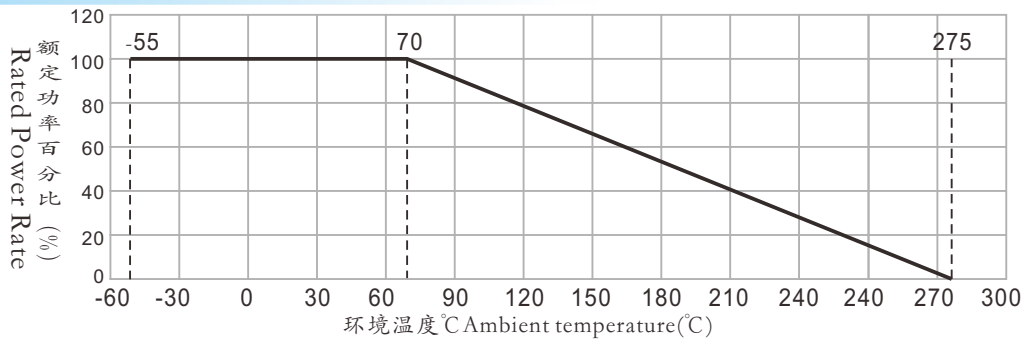
额定功率 Rated Power (W)	阻值范围 Resistance Range(Ω)	误差值 Tolerance	温度系数 T.C.R	最高使用电压 Max Working Voltage	最高负荷电压 Max Overload Voltage	耐电压Dielectric Withstanding Voltage
60	1R~1KR	J±5%	±300PPM/°C	$\sqrt{P \cdot R}$	$\sqrt{10 \cdot P \cdot R}$	1500V/Ac
100	1R~1KR	K±10%				

# MNA 铝壳电阻 Aluminum Shell Resistor

## 表面温升曲线 Temperature rising curve



## 降功耗曲线 Derating Curve



## 性能 Performance

试验项目 Test Items	性能 Performance	试验方法 Test Methods(JIS C 5201-1)
温度系数 Temperature coefficient	$\pm 300\text{ppm}/^\circ\text{C}$	在常温及常温+100°C时分别测量电阻并计算每度的阻值变化率。 Test resistance value at normal temperature and normal temperature added 100°C, calculate $^\circ\text{C}$ resistance value change rate.
短时间过负荷 Short time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	施加10倍额定功率或最高负荷电压 (取较小者) 5秒 10X rated power or Max. overload voltage (get the lower) for 5seconds.
耐焊接热 Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	在350±10°C的锡炉中浸入2~3秒。 Immerge into the 350±10°C tin stove for 2~3 seconds
耐电压 Dielectric withstanding voltage	无显著的机械损伤, 无击穿和飞弧现象	采用包箱法, 施加交流1500V或2000V或2500V的电压1分钟。
温度循环 Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	在-55°C时放置30分钟, 然后在+25°C时放置10~15分钟, 然后在+125°C时放置30分钟, 然后再在25°C时放置10~15分钟, 共循环5次。At -55°C for 30min, then at +25°C for 10~15min, then at +125°C for 30min, then at +25°C for 10~15 min, total 5cycles.
耐湿负荷寿命 Load life in humidity	$\Delta R \leq \pm (3\%R_0 + 0.05\Omega)$	在温度为40±2°C, 相对湿度为90~95%的恒温恒湿箱中, 施加额定电压或最大工作电压 (取较小者) 共1000小时 (1.5小时通, 0.5小时断)。Overload rated voltage or Max.working voltage (get the lower) for 1000hours (1.5hours on and half-hour off) at the 40±2°C and 90~95% relative humidity.
耐温负荷寿命 Load life in heat	$\Delta R \leq \pm (3\%R_0 + 0.05\Omega)$	在70±2°C恒温恒湿箱中施加额定电压或最大工作电压 (取较小者) 共1000小时 (通1.5小时, 断0.5小时)。Overload rated voltage or Max.working voltage (get the lower) for 1000hours (1.5hours on and half-hour off) at the 70±2°C.
引出端强度 Terminal strength	$\Delta R \leq \pm (2\%R_0 + 0.1\Omega)$	拉力 Pull:100N
振动 Vibration	$\Delta R \leq \pm (2\%R_0 + 0.1\Omega)$	频率 Frequency:10~55Hz, 振幅 Swing:0.75mm, 测试时间 Test time:6hours
难燃性 Nonflammability	不可有明显火焰 No visible flame	分别按5、10、16倍额定功率加交流负荷5分钟。 Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.

## 料号编号 ordering Information

例 example

型号Type	额定功率 Rated Power	误差值 Tolerance	电阻值 (Ω) Resistance	直线 Straight length
MNA 铝壳电阻 Aluminium Shell Resistor	60:60W 100:100W	J ± 5% K ± 10%	R100=0.1 1R00=1 10R0=10	S200:200mm Straight length