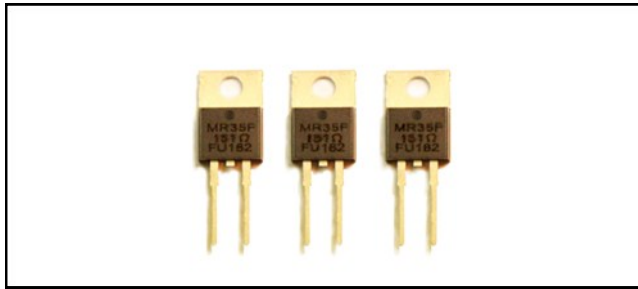


# POWER CHIP RESISTOR

MR

模造電阻器  
POWER CHIP RESISTOR (Standard Type)



外觀顏色 : Body Color  
 黑色 : Black  
 標示 : Marking  
 文字 : Alphanumeric

## 特性 Feature

- ◎高穩定性皮膜或金屬板抵抗元素
- ◎ High stability film or metal plate resistance elements.
- ◎低感值.( $<50\text{nH}$ ).測試頻率 100K Hz
- ◎ Low inductive.( $<50\text{nH}$ ). Test frequency 100K Hz.
- ◎提供 20W,30W,35W,50W
- ◎ Available in 20W,30W,35W,50W.
- ◎產品符合歐盟 RoHS 要求
- ◎ Products meet EU-RoHS.

## 參考規格 Reference standards

- MIL-STD-202 Method 204

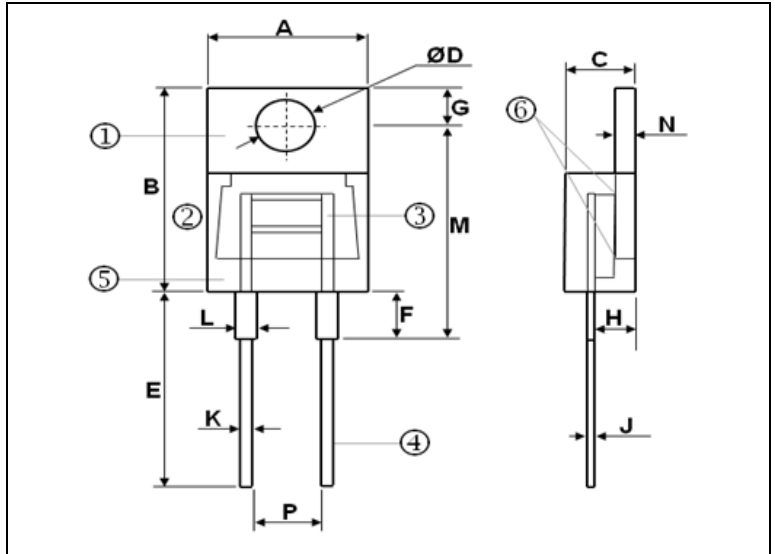
## 料號編碼 Type composition 例 Example

MR	Q	BO	J	1000	S002	AL
型名 Type	品名 Size	額定功率 Rated power	誤差值 Tolerance	電阻值(Ω) Resistance	二次加工 Forming	端腳 End Feet
	Square	B0:20W	F $\pm$ 1%	0R01=0.01	2 Pin	鋁板 Aluminum
	Shape	C0:30W	J $\pm$ 5%	R100=0.1		
		C5:35W		1R00=1		
		E0:50W		10R0=10		
				1000=100		
				1001=1K		
				1002=10K		

## 額定 Ratings

Type	Power Rating 1(W)		Voltage Rating 4	Thermal Resistance	阻值範圍 Resistance Range	誤差值 Tolerances	溫度係數 T.C.R.	包裝 Strip (pcs)	
	Heatsink2	Free Air3							
MR-20	20W	2.00W	500V	5.9°C/W	0.01Ω ~ 0.09Ω	±5%	±200ppm/°C	50	
					0.1Ω ~ 51KΩ	±1%、±5%	±150ppm/°C		
MR-30	30W	2.25W		4.2°C/W	0.01Ω ~ 0.09Ω	±5%	±200ppm/°C		
					0.1Ω ~ 51KΩ	±1%、±5%	±150ppm/°C		
MR-35	35W	2.25W		3.3°C/W	3.3°C/W	0.01Ω ~ 0.09Ω	±5%		±200ppm/°C
						0.1Ω ~ 51KΩ	±1%、±5%		±150ppm/°C
MR-50	50W	2.50W		2.3°C/W	2.3°C/W	0.01Ω ~ 0.09Ω	±5%		±200ppm/°C
						0.1Ω ~ 51KΩ	±1%、±5%		±150ppm/°C

## 結構圖 Construction



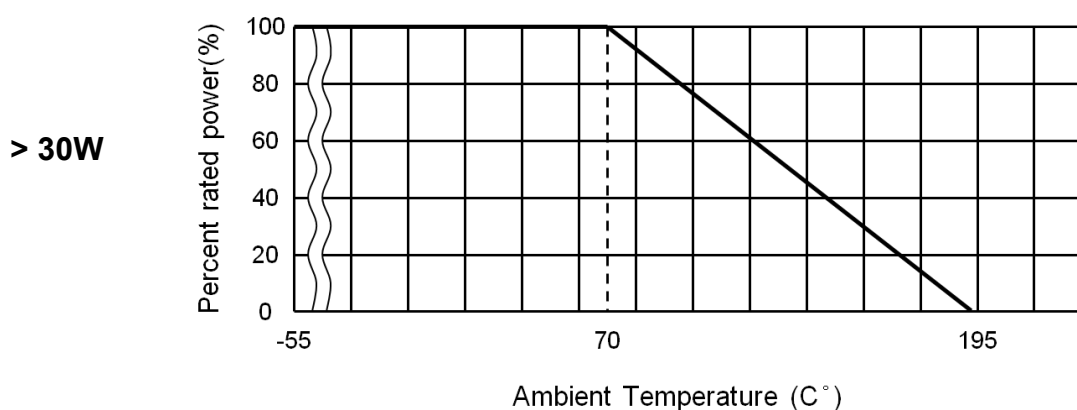
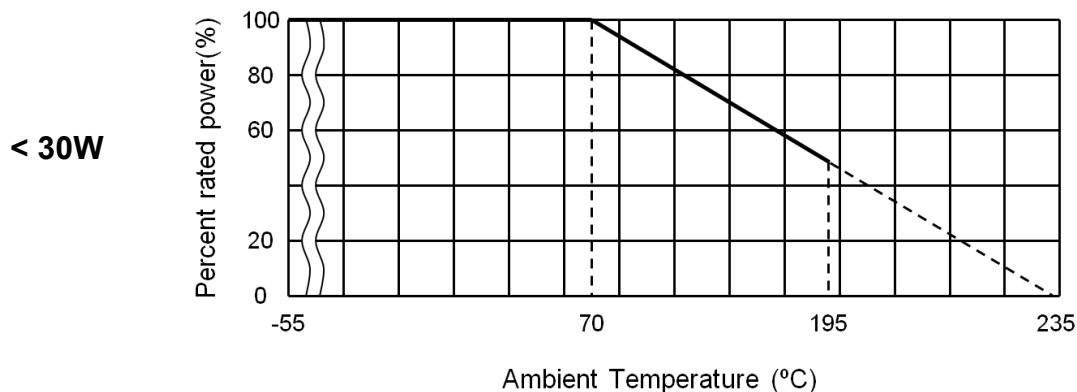
1	散熱片	Flange	Aluminum alloy
2	基板	Substrate	Alumina 99%
3	阻抗材質	Resistance part	Resistance film or metal plate
4	引線	Lead terminal	Copper alloy (plated solder)
5	壓模樹脂	Molded resin	Non-flam ability rubber
6	接點	Junction part	Welding with high frequency

## 外型尺寸 Dimensions (mm)

Rated Power (W)	20	30	35	50
A	10.1±0.2			
B	15±0.2			
C	4.5±0.2			
ØD	3.6±0.1			
E	14.5±1.0			
F	4±0.5			
G	3±0.2			
H	2.75±0.2			
J	0.5±0.1			
K	0.75±0.1			
L	1.4±0.1			
M	16±0.1			
N	1.3±0.1			
P	5.08±0.1			

■ 額定溫度下降曲線圖 Derating curve

例 Example



■ 性能 Performance

試驗項目 Test Items	規格值 Performance Requirements	試驗方法 Test Methods
電阻值 Resistance	規定的誤差值內 Within specified tolerance	測量點從端蓋 10mm Measuring points are 10mm from the end cap
溫度係數 T.C.R.	規定值內 Within specified T.C.R.	室溫+100°C Room temperature +100°C
熱衝擊 Thermal Shock	±0.3%	Test temp. -55°C ~ +85°C Number of 5 cycles
負荷壽命 Load life	±1%	Rated voltage at 70°C for 1,000 hours 1.5hr ON / 0.5hr OFF Cycles
耐濕負荷壽命 Load life in humidity	±5%	10% rate power load 40°C, 95% RH for 1,000 hours; 1.5h ON / 0.5h OFF cycle
耐濕性 Moisture resistance	±1%	65°C, 90~95% RH, 240 小時 65°C, 90~95% RH for 240 hours
焊錫耐熱 Resistance to soldering heat	±0.25%	Temp. of solder 350°C ± 5°C duration of immersion 3.5 s ± 0.5 s
焊錫效果 Solder ability	95 % (min) coverage	Temp. of solder 245°C ± 5°C duration of immersion 3 s ± 0.5 s
耐電壓 Dielectric withstanding voltage	Flash over, burning, insulation damage Should not be observed	V-Block test voltage : DC 2,200V Duration time 60 sec.
絕緣電阻 Insulation resistance	>1,000MΩ	500V 絕緣測試 1 分鐘 500V insulation test 1min.
振動試驗 Vibration	±(0.25 % + 0.05%)	MIL-STD-202 Method 204 Condition D.