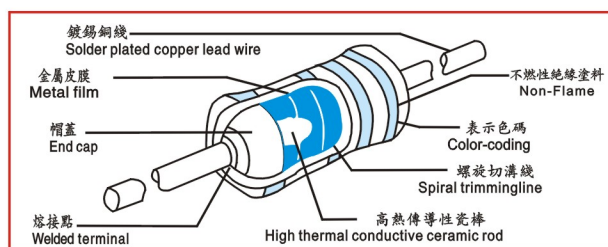


製品介紹 INTRODUCTION

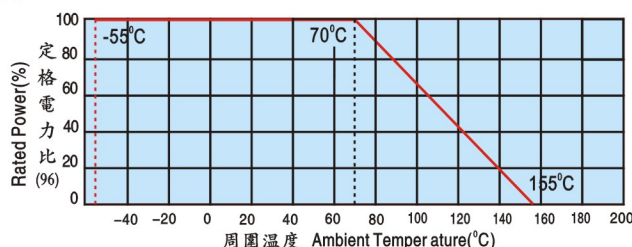
FRN 保險絲型金屬皮膜電阻器，屬於高性能之不燃性電阻器，適用於需要保護的電路基板及設計。

FRN, Fusible metal film resistor, is a nonflammable resistor, which is applied to protect electronic circuit boards and design.

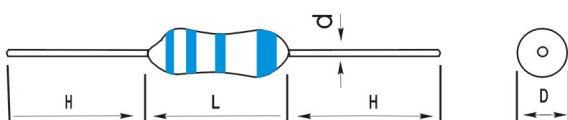
構造 CONSTRUCTION



負荷輕減曲線 DERATING CURVE



形狀 STYLE



尺寸 DIMENSIONS

形名 TYPE		尺 寸 Dimensions (mm)				額定功率 Power Rating	最高開回路電壓 Max Open Circuit Voltage	耐電壓 Dielectric Withstanding Voltage	電阻值範圍 Resistance Range
		L	D	d	H				
普通型 Normal size	FRN 1/6W	3.2±0.2	1.8±0.2	0.40±0.02	25±3	0.16W	150V	200V	0.1Ω~300KΩ
	FRN 1/4W	6.5±0.5	2.3±0.3	0.43±0.02	25±3	0.25W	200V	250V	0.1Ω~300KΩ
	FRN 1/2W	9.0±1.0	3.2±0.5	0.50±0.02	25±3	0.5W	250V	250V	0.1Ω~300KΩ
	FRN 1W	12.0±1.0	4.5±0.5	0.65±0.02	25±3	1W	250V	350V	0.1Ω~300KΩ
	FRN 2W	15.5±1.0	5.0±1.0	0.72±0.02	27±3	2W	250V	350V	0.1Ω~300KΩ
小型化 Small size	FRN 3W	17.5±1.0	6.0±1.0	0.72±0.02	27±3	3W	250V	350V	0.1Ω~300KΩ
	FRN 1/2WS	6.5±0.5	2.3±0.3	0.43±0.02	25±3	0.5W	200V	250V	0.1Ω~300KΩ
	FRN 1WS	9.0±1.0	3.2±0.5	0.50±0.02	25±3	1W	250V	250V	0.1Ω~300KΩ
	FRN 2WS	12.0±1.0	4.5±0.5	0.65±0.02	25±3	2W	250V	350V	0.1Ω~300KΩ
	FRN 3WS	15.5±1.0	5.0±1.0	0.72±0.02	27±3	3W	250V	350V	0.1Ω~300KΩ

NOTE: Specification can be constructed on request.

訂貨方式 HOW TO ORDER

FRN

種類
Type

1/4W

預定電力 Power Rating	
Nominal Size	Small Size
1/4W	1/2WS
1/2W	1WS
1W	2WS
2W	3WS
3W	5WS

T52

形狀/包裝方式 Form/ Packaging	
S	Bulk (Straight)
M	Bulk, M-Form series (Horizontal Forming)
U	Bulk, U-Form series (Vertical Forming)
Txx	Boxed (26.52, 63.73, 83mm width taping)
T/R	Tape on reel packing

J

電阻值誤差率 Resistance Tolerance	
J	±5%
K	±10%
G	±2%
F	±1%

10K

公稱電阻值 Nominal Resistance	
3-Digit: E-24, 12 Series	
e.g. OR12	= 0.12Ω
120R	= 120Ω
1K2	= 1.2KΩ
12M	= 12MΩ

特長 FEATURES

- 不燃性塗裝 Flame proof painting
- 低溫度係數 Low temperature coefficient
- 保險絲熔斷時間一致 Uniform in fusing time

特性 CHARACTERISTICS

試驗項目 Test Items	規格值 Specified Value
溫度係數 Temp. coefficient of resistance	±200PPM/°C
短時間過負荷 Short time overload	±(2%+0.05Ω)
耐電壓 Dielectric withstanding voltage	無損壞的異狀 No evidence of damage
端子強度 Terminal strength	無損壞的異狀 No evidence of damage
耐久性(耐濕負荷) Moisture load life	±(5%+0.05Ω)
耐久性(定格負荷)70°C Load life at 70°C	±(5%+0.05Ω)
溫度循環 Temperature cycling	±(1%+0.05Ω)
焊錫附著性 Resistance to soldering heat	Over 95%
耐溶劑性 Resistance to solvent	無損壞的異狀 No evidence of damage
不燃性 Flame proof	無損壞的異狀 No evidence of damage

熔斷特性 Fusing characteristic

Time Time to fuse Fusing Time	X16	X25	X32	熔斷時間 Fusing Time
1/4W	2.1Ω~1KΩ	1.1Ω~2Ω	0.1Ω~1Ω	60 sec.(Max)
1/2W				
1W				
2W				

* Fusing Voltage = $\sqrt{\text{Power rating} \times \text{Resistance value} \times \text{Times}}$

* The resistance value will be as high as 100 times the original value after fusing.