

FUSIBLE WIRE WOUND RESISTORS, FLAMEPROOF

保險絲繞線電阻器

Features

1. It is suitable for protecting circuit boards.
2. Noncombustible insulating coating; "Solvent" proof and resistant to high temperature.
3. Low temperature coefficient.
4. Uniform in fusing time.
5. UL 1412 approval : FKN 1W ~ 3W Series.

特色

1. 適用於需要保護的各種電路基板及設計。
2. 不燃性絕緣塗裝，可耐溶劑清洗及高溫。
3. 溫度係數低(±300ppm/°C以下)。
4. 保險絲熔斷時間一致。
5. UL1412認證：FKN 1W ~ 3W Series。



ELECTRICAL AND MECHANICAL PERFORMANCE

電氣及機械特性

| 特性 Characteristics | 規格值 Standards | 試驗方法 Test Methods |
|-------------------------------------|---|---|
| 阻值容許誤差 Resistance Tolerance | ±5% (J) or ±2% (G) | - |
| 溫度係數 Resistance Temp. Coeff. | ±300 ppm / °C | -55°C ~ 200°C |
| 額定負載 Power Rating Load | Surface temp. 275°C Max. 最高表面溫度 275°C, ΔR/R ≤ ±3% | Rated voltage for 30 minutes 額定電壓 / 30分鐘 |
| 短時間過負載 Short Time Overload | ±2% | 2.5 times of rated voltage for 5 seconds. 2.5 倍額定電壓 / 5秒 |
| 耐電壓 Dielectric Withstanding Voltage | No evidence of mechanical damage or insulation breakdown. 無機械性能損壞及絕緣擊穿現象 | Applying suitable voltage listed on Dimensions for one minute. 施加規定電壓 1 分鐘 |
| 絕緣電阻 Insulation Resistance | 1,000MΩ | DC100V or 500V megger |
| 熔斷特性 Fusing Characteristics | Fusing time is within 60 seconds. 熔斷時間 < 60秒. | 25 times of rated wattage |
| 焊錫性 Solder-ability | Minimum 95% coverage 焊錫面積 ≥ 95% | 235 ± 5°C for 2 seconds |
| 浸錫耐熱性 Resistance to Soldering Heat | No evidence of mechanical damage. 無機械性能損壞現象, ΔR/R ≤ ±1% | 270 ± 5°C for 10 ± 1 seconds 350 ± 10°C for 3.5 ± 0.5 seconds |

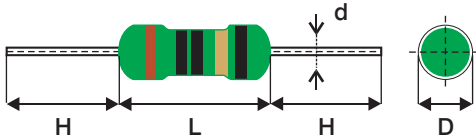
ENVIRONMENTAL CHARACTERISTICS

耐環境特性

| 特性 Characteristics | 規格值 Standards | 試驗方法 Test Methods |
|-------------------------------|---------------|---|
| 溫度週率 Temp. Cycle | ΔR/R ≤ ±1% | -55°C (30 min.) → Room Temp.(3 min.) → +200°C (30 min.) → Room Temp.(3 min.) / (5 cycles) |
| 負載壽命 Load Life | ΔR/R ≤ ±5% | Rated power load 90 minutes ON 30 minutes OFF 70°C 1000 hours |
| 耐濕壽命 Moisture-proof Load Life | ΔR/R ≤ ±5% | Rated power load 90 minutes ON 30 minutes OFF 40°C 95% RH 1000 hours |
| 不燃性 Nonflammability | not flamed | 16 times of rated wattage for 5 min. |

Dimensions

尺寸



Unit : mm

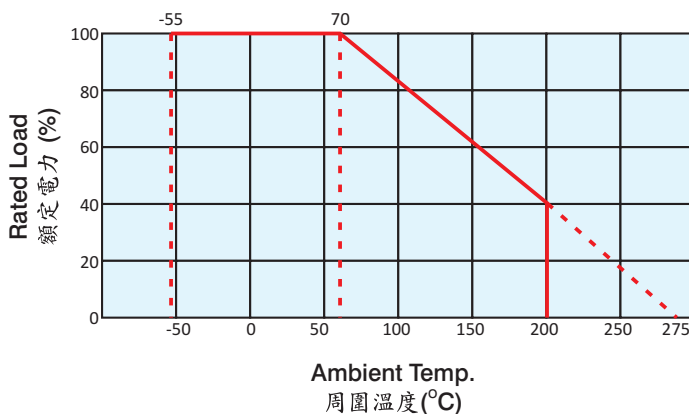
| Rated Wattage | D±1 | L±1 | H±3 | d±0.1 | Resistance Range(Ω) | Dielectric Withstanding Voltage |
|---------------|-----|-----|-----|-------|---------------------|---------------------------------|
| 1W | 4.0 | 9 | 28 | 0.65 | 0.1~500 | 350V |
| 2W | 5.0 | 11 | 28 | 0.8 | 0.1~800 | 500V |
| 3W | 5.5 | 13 | 38 | 0.8 | 0.1~800 | 500V |
| 5W | 6.5 | 19 | 38 | 0.8 | 0.1~800 | 500V |

- Note:**
1. Fusing time can also be consulted between buyers and the manufacturer before producing.
 2. The resistance value will be as high as 100 times the original value after fusing.

Derating Curve

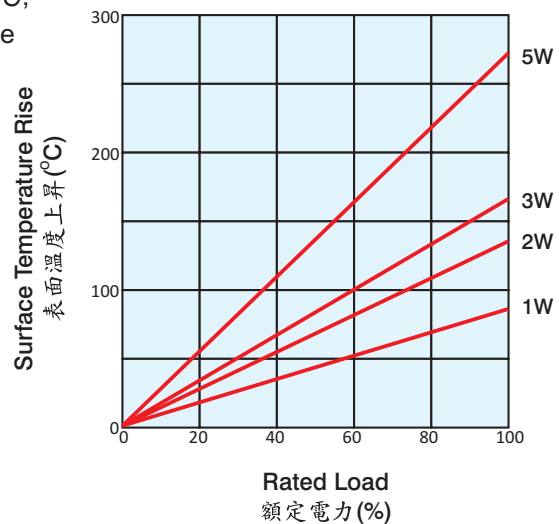
電力輕減曲線

For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with the curve below.



Surface Temperature Rise

表面溫度上昇曲線



How to order

訂貨方式

It is composed by Type, Rated Wattage, Nominal Resistance, Tolerance and Package. e.g.

FKN 1W 10R J T/B
a. b. c. d. e.

a. : Type(種類): Fusible Wire Wound Resistors, Flameproof are called "FKN".

b. : Rated Wattage(額定電力) : Shown by "W", such as 1W, 2W, 3W, 5W.

c. : Nominal Resistance(公稱電阻值) : 10Ω.

d. : Tolerance(容許誤差): G = ±2% , J = ±5% .

e. : Package(包裝方式) :

T/R=tape & reel (捲裝); T/B=tape in box(帶裝); Nil= Bulk(散裝).