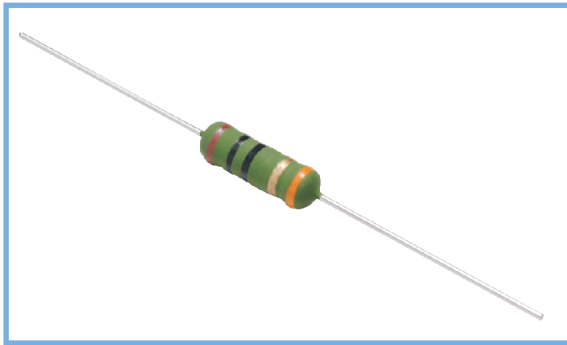


KNP-C series

WIRE WOUND RESISTORS, FLAMEPROOF, ANTI-SURGE

耐雷擊型繞線電阻器



Features

1. Excellent anti-surge characteristics - 6KV according to IEC 61000-4-5.
2. Super heat dissipation; small linear temperature coefficient.
3. Flameproof painting, resistant to heat & solvents.

特色

1. 依據 IEC 61000-4-5 測試方法，耐雷擊能力達6KV。
2. 散熱性佳，溫度係數小且呈線性變化。
3. 不燃性絕緣塗裝，可耐溶劑清洗及高溫。

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	$\pm 5\%$ (J) or $\pm 2\%$ (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, $\Delta R/R \leq \pm 0.5\%$	Rated voltage for 30 minutes 額定電壓 / 30分鐘
短時間過負載 Short Time Overload	$\pm 2\%$	10 times of rated wattage for 5 seconds. 10 倍額定功率 / 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	AC 500V for 1 minutes 施加 AC 500V 電壓 1 分鐘
絕緣電阻 Insulation Resistance	1,000M Ω	DC 500V megger
耐雷擊 Surge Voltage Withstanding	$\Delta R/R \leq \pm 3\%$	20 pulses(1.2/50us), max. 60s between each pulse.
端子強度 Terminal Strength	No evidence of mechanical damage. 無機械性能損壞現象	2.5 kg
焊錫性 Solder-ability	Minimum 95% coverage 焊錫面積 $\geq 95\%$	235 \pm 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, $\Delta R/R \leq \pm 1\%$	270 \pm 5°C for 10 \pm 1 seconds 350 \pm 10°C for 3.5 \pm 0.5 seconds

ENVIRONMENTAL CHARACTERISTICS

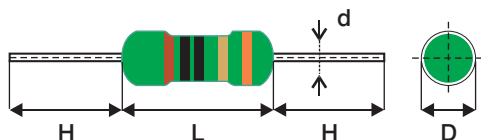
耐環境特性

特性 Characteristics	規格值 Standards	試驗方法 Test Methods
溫度週率 Temp. Cycle	$\Delta R/R \leq \pm 1\%$	-55°C (30 min.) \rightarrow Room Temp.(3 min.) \rightarrow +200°C(30 min.) \rightarrow Room Temp.(3 min.) / (5 cycles)
負載壽命 Load Life	$\Delta R/R \leq \pm 3\%$	Rated power load 90 minutes ON 30 minutes OFF 70°C 1000 hours
耐濕壽命 Moisture-proof Load Life	$\Delta R/R \leq \pm 3\%$	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.

KNP-C series

Dimensions

尺寸



Unit : mm

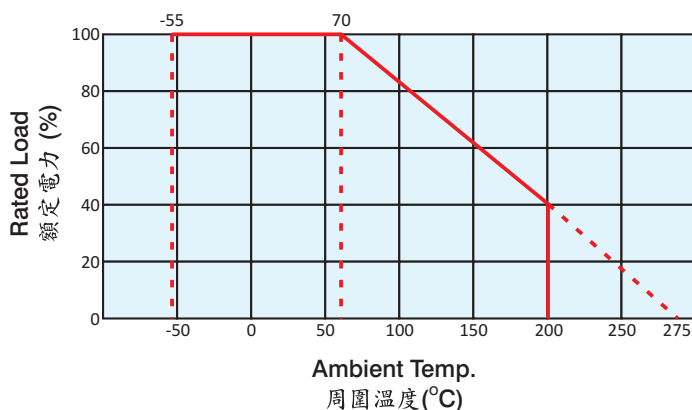
Rated Wattage	D \pm 1	L \pm 1	H \pm 3	d \pm 0.1	Resistance Range(Ω)
3WL	5.5	15	38	0.8	0.1~1K

Note: Too low or too high ohmic values can be supplied only case by case.

Derating Curve

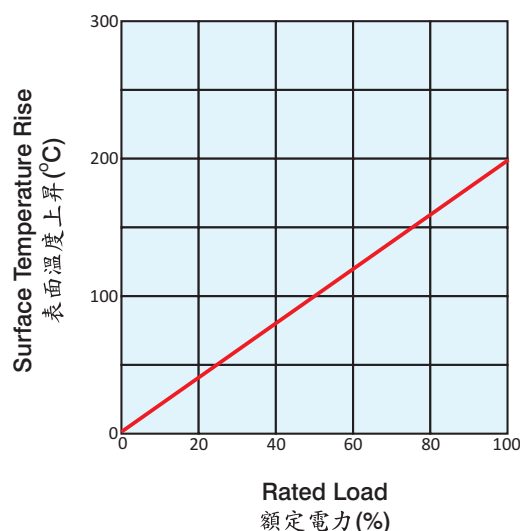
電力輕減曲線

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, Anti-Surge and Package. e.g.

KNP 3WL 10 Ω J C T/B
 a. b. c. d. e. f.

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

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

c. : Nominal Resistance(公稱電阻值) : 10 Ω .

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

e. : C : Letter "C" indicates anti-surge ("C"表示耐雷擊).

f. : Package (包裝方式):

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