



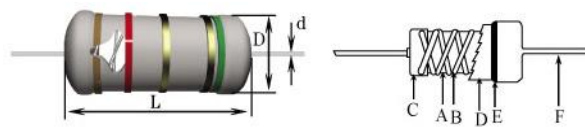
绕线类
WIREWOUND RESISTORS

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●特点 Features:

- 1、耐热性好、温度系数小、噪声低、负荷功率大。Good heat-durability. low temperature coefficient, low noise, high load power.
- 2、使用环境温度 Operating ambient temperature: -55℃~+275℃.
- 3、表面涂不燃性面漆, 1/4W~6W 用色环标识阻值, 涂漆颜色为灰白色, 精度色环后增加绿色环表示无感; 7W 以上用印字标识阻值, 表面涂漆颜色为绿色。Surface is nonflammable, the 1/4W~6W coating is gray white and indicate the resistance value by color ring; the 7W or over will indicate the resistance value by lettering and coating is green.
- 4、阻值误差 Resistance tolerance: ±1%、±2%、±5%、±10%.

●产品结构图 Structural Drawing:



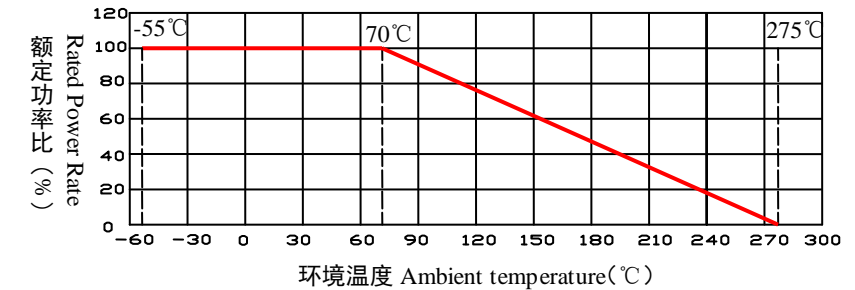
- A、高热传导瓷芯 High heat exchanged Ceramic core.
- B、镍铬或康铜合金丝 Nickel Chrome or nickel and copper alloy.
- C、铁帽 Iron Cap.
- D、硅树脂涂料 Silicon resin coating.
- E、色环 Color Ring.
- F、镀锡铜线 Tinned copper lead wire.

●规格尺寸及耐压性能 Dimensions and Voltage Performance:

料号 Part No.	功率 Power	阻值范围 Resistance range	尺寸 Dimensions			最大使用电压 Max. working voltage	最大负荷电压 Max. overload voltage	最高绝缘电压 Max. insulation voltage
			L±	D±0.5	d±0.05			
NKN012	1/2W	0R1~10R	9.0	3.2	0.58	150V	400V	250V
NKN01B	1W	0R1~10R	9.0	3.2	0.75	150V	400V	250V
NKN02B	2W	0R1~12R	11.0	4.5	0.75	150V	400V	350V
NKN03B	3W	0R1~22R	15.0	5.0	0.75	350V	600V	500V
NKN04B	4W	0R1~33R	17.0	6.0	0.75	350V	600V	500V
NKN05B	5W	0R1~33R	17.0	6.0	0.75	350V	600V	500V
NKN06B	6W	0R1~47R	25.0	8.0	0.75	500V	600V	750V
NKN07B	7W	0R1~56R	31.0	8.0	0.75	500V	600V	750V
NKN08B	8W	0R2~62R	41.0	8.0	0.75	500V	600V	750V
NKN09B	9W	0R3~100R	52.0	8.0	0.75	750V	800V	1000V
NKN10B	10W	0R3~100R	52.0	8.0	0.75	750V	800V	1000V

备注: a、额定电压=√功率×阻值;
b、当计算得出的额定电压大于元件极限电压, 使用时取二者较小值。
Note: a、Rated voltage $V = \sqrt{\text{Power} \times \text{Resistance Value}}$;
b、If the calculated rated voltage is higher than the max. working voltage, it will be got the lower value.

●额定功率递减图 Rated Power Derating Curve:



●性能测试 Performance Test:

测试项目 Test Item	测试条件 Test Condition	性能 Performance
温度系数 Temperature coefficient	在常温及常温+100℃时分别测量电阻并计算每度的阻值变化率。Test the resistance value at normal temperature and normal temperature added 100℃, calculate per℃ resistance value change rate.	±300ppm/℃
短时间过负荷 Short time overload	1/2~4W 施加 5 倍额定功率的电压 (√5PR), 5~10W 施加 10 倍额定功率的电压 (√10PR) 或最高负荷电压 (取较小者) 5 秒。1/2~4W: According 5 times rated power to account the voltage (√5PR), 5~10W: According 10 times rated power to account the voltage (√10PR) or Max. overload voltage (get the lower) for 5 seconds.	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$
断续过负荷 Pulse overload	4 倍额定电压或最高断续负荷电压 (取较小者) 测试 1 秒, 停止 25 秒, 循环 10000±200 次。At 4 × rated voltage or Max. pulse overload voltage (get the lower) cycle 10000±200 times (1 second on, 25 seconds off).	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
耐焊接热 Resistance to soldering heat	在 350±10℃ 锡炉中浸入 2~3 秒。 Immerge into 350±10℃ tin stove for 2~3 seconds.	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
可焊性 Solderability	在 260±5℃ 锡炉中浸入 2~3 秒。 Immerge into 260±5℃ tin stove for 2~3 seconds.	焊锡面积覆盖 95% 以上 The area of soldering is over 95%
温度循环 Temperature cycling	在 -55℃ 时放置 30 分钟, 然后在 +25℃ 时放置 10~15 分钟, 然后再在 +125℃ 时放置 30 分钟, 然后在 +25℃ 时放置 10~15 分钟, 共循环 5 次。At -55℃ for 30 min, then at +25℃ for 10~15 min, then at +125℃ for 30 min, then at +25℃ for 10~15 min, total 5 cycles.	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
耐湿负荷寿命 Load life in humidity	在温度为 40±2℃, 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 (通 1.5 小时, 断 0.5 小时)。Overload rated voltage or Max. working voltage (get the lower) for 1000 hours (1.5 hours on and half-hour off) at the 40±2℃ and 90~95% relative humidity.	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$
耐温负荷寿命 Load life in heat	在 70±2℃ 恒温恒湿箱中施加额定电压或最大工作电压 (取较小者) 1000 小时 (通 1.5 小时, 断 0.5 小时)。Overload rated voltage or Max. working voltage (get the lower) for 1000 hours (1.5 hours on and half-hour off) at the 70±2℃.	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$
难燃性 Nonflammability	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.	不可以有明显火焰 No visible flame

●料号规则 Part No. Regulation:

NKN	01B	J	0	T520	100R0
产品种类 Product Name	功率 Power	精度 Tol.	特殊码 Special Code	成型 Forming	阻值 Ohm
绕线无感固定电阻器 Wirewound Noninductive Resistors	014=1/4W 012=1/2W 01B=1W 02B=2W 03B=3W 04B=4W	05B=5W 06B=6W 07B=7W 08B=8W 09B=9W 10B=10W	F=±1% G=±2% J=±5% K=±10%	T520=T52 T710=T71 M001=M F001=F B001=B	0R100=0.1Ω 0R220=0.22Ω 10R00=10Ω 100R0=100Ω