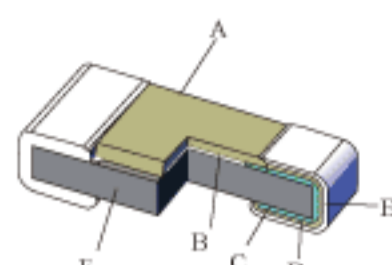




●特点 Features:

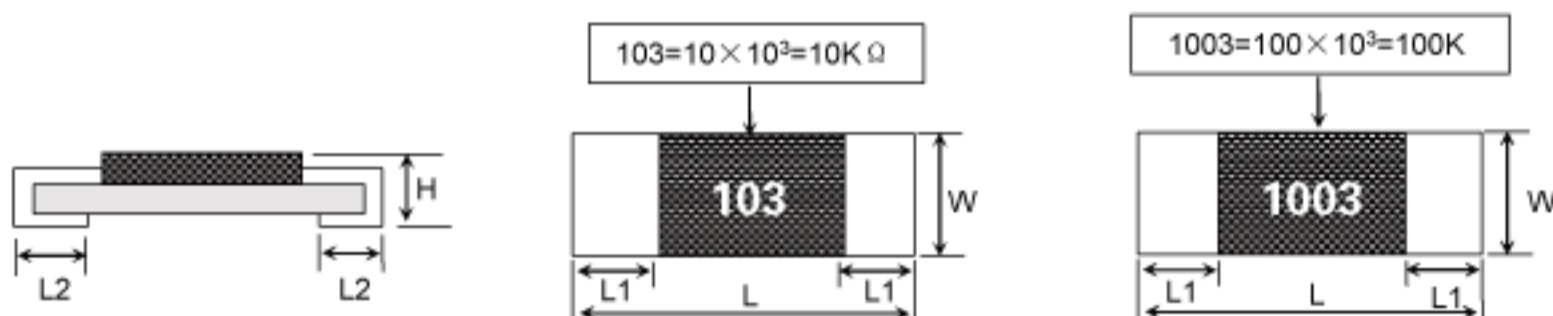
- 1、小型量轻、大幅缩小PCB板面积及重量。It can reduce the area and weight of the PCB for its small size and light.
- 2、使用环境温度 Operating ambient temperature: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ 。
- 3、高性赖性: 金属电阻体加玻璃保护层及三层电极构造,可靠度高。High credibility: the thick metal film resistor body is added with glass protective layer and three layers of electrode composition.
- 4、易装配性: 外观尺寸均匀、精确、易于装配。The appearance dimension is symmetrical and accurate for easy assembly.
- 5、阻值误差 Resistance tolerance: $\pm 1\%$ 、 $\pm 5\%$ 。

●产品结构图 Construction Drawing:



- A、保护膜 Protective coating
- B、电阻体 Resistive film
- C、内电极 Inner electrode
- D、中间电极 (镀镍层) Middle electrode (Ni Plating)
- E、外部电极 (镀锡层) Outer electrode (Sn Plating)
- F、陶瓷基板 Ceramic substrate

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

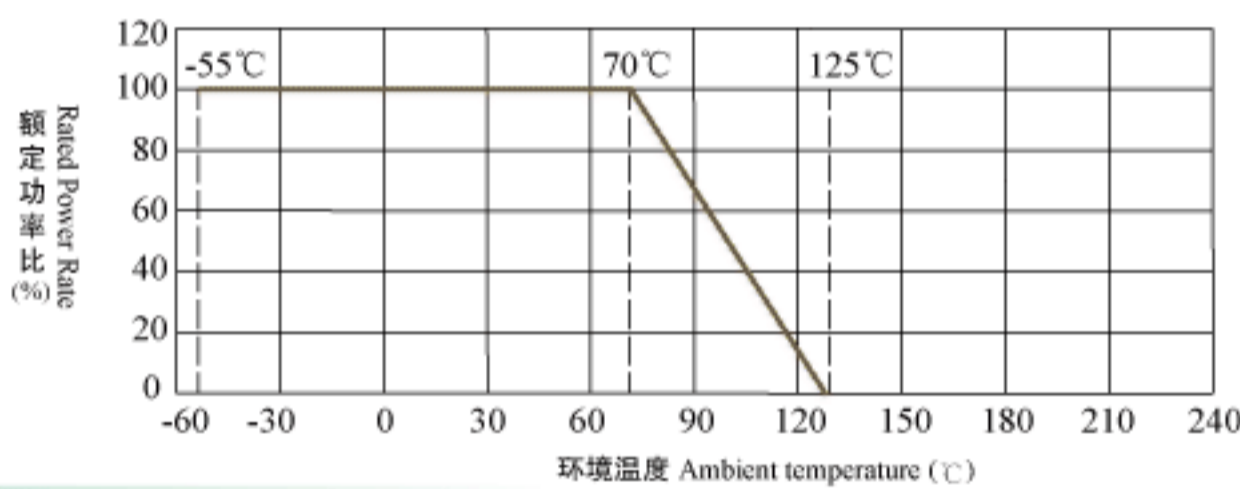


料号 Part No.	规格 Type	功率 Power	尺寸 Dimensions (mm)					最高使用电压 Max. working voltage	最高负荷电压 Max. overload voltage	阻值范围 Resistance range
			L	W	H	L1	L2			
GRM0201	0201(0603)	1/20W	0.60±0.03	0.30±0.03	0.23±0.03	0.10±0.05	0.15±0.05	25V	50V	10R~1M
GRM0402	0402(1005)	1/16W	1.00±0.10	0.50±0.10	0.30±0.10	0.20±0.10	0.25±0.10	50V	100V	0R~10M
GRM0603	0603(1608)	1/10W	1.60±0.15	0.80±0.15	0.40±0.10	0.30±0.20	0.30±0.20	50V	100V	0R~22M
GRM0805	0805(2012)	1/8W	2.00±0.20	1.25±0.15	0.50±0.10	0.40±0.20	0.40±0.20	150V	200V	0R~22M
GRM1206	1206(3216)	1/4W	3.20±0.20	1.60±0.15	0.60±0.10	0.50±0.20	0.50±0.15	200V	400V	0R~22M
GRM1210	1210(3225)	1/3W	3.20±0.20	2.50±0.20	0.60±0.10	0.50±0.20	0.50±0.20	200V	400V	0R~22M
GRM2010	2010(5025)	3/4W	5.00±0.20	2.50±0.20	0.60±0.10	0.60±0.20	0.60±0.20	200V	400V	0R~22M
GRM2512	2512(6432)	1W 2W	6.40±0.20	3.20±0.20	0.60±0.10	1.00±0.20	1.00±0.20	200V	400V	0R~22M

1 [Http://www.konay.net](http://www.konay.net)

贴片电阻 Chip Resistors (GRM) KONAY

●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℃时分别测量电阻值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 °C resistance value change rate.	1% : $\pm 100\text{ppm}$ 、 $\pm 200\text{ppm}$ 5% : $\pm 200\text{ppm}$ 、 $\pm 400\text{ppm}$
短时间过负荷 Short time overload	施加2.5倍额定电压或最高负荷电压(取较小者)5秒。 2.5 × rated voltage or Max. overload voltage (get the lower) for 5 seconds.	1% : $\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$ 5% : $\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$
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)。	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
电极强度(拉力) Terminal strength (pull)	弯曲距离:3mm (10秒) Bending distance : 3 mm (10 seconds)	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
耐焊接热 Resistance to soldering heat	在350±10℃的锡炉中浸入2~3秒。 Immerge into the 350±10℃ tin stove for 2~3 seconds.	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
可焊性 Solderability	在245±3℃锡炉中浸入2~3秒。 Immerge into the 245±3℃ tin stove for 2~3 seconds.	焊锡面积覆盖率95%以上 The soldering area 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.	1% : $\Delta R \leq \pm (0.5\%R_0 + 0.05\Omega)$ 5% : $\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$
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.	1% : $\Delta R \leq \pm (1\%R_0 + 0.1\Omega)$ 5% : $\Delta R \leq \pm (3\%R_0 + 0.1\Omega)$
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℃.	1% : $\Delta R \leq \pm (1\%R_0 + 0.1\Omega)$ 5% : $\Delta R \leq \pm (3\%R_0 + 0.1\Omega)$

●料号规则 Part No. Regulation:

GRM	0201	20	J	H	1	100K0
产品名称 Product Name	尺寸 Size	功率 Power	精度 Tol.	T.C.R.	包装 Packing	阻值 Ohm
贴片电阻 Chip Resistors	0201 = 0603 0402 = 1005 0603 = 1608 0805 = 2012 1206 = 3216 1210 = 3225 2010 = 5025 2512 = 6432	20 = 1/20W 16 = 1/16W 10 = 1/10W 18 = 1/8W 13 = 1/3W 14 = 1/4W 12 = 1/2W 34 = 3/4W 1B = 1W 2B = 2W	F = ±1% J = ±5%	G = Normal H = ±100PPM I = ±200PPM J = ±250PPM K = ±300PPM L = ±350PPM M = ±400PPM N = Normal	1 = 10KPCS 4 = 4KPCS 5 = 5KPCS	0R100 = 0.1Ω 0R220 = 0.22Ω 10R00 = 10Ω 10K00 = 10KΩ 1M000 = 1MΩ