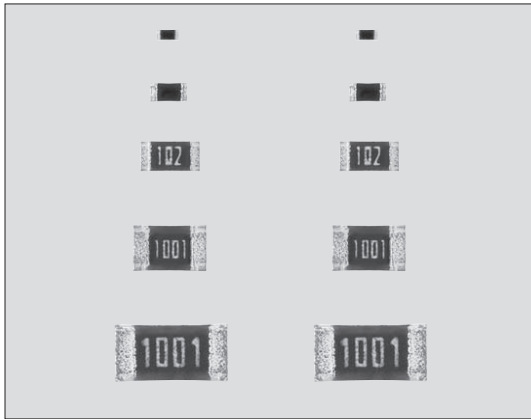


THICK FILM (ULTRA PRECISION)



矩形片式电阻器
Flat Chip Resistors

RK73G 矩形片式电阻器 (超精密级) Flat Chip Resistors (Ultra Precision Grade)



外观颜色: 黑色 (1E)、紫红色 (1J、2A、2B)
Coating color: Black (1H, 1E), Dark blue (1J, 2A, 2B)

■ 特点 Features

- 是表面贴装型的金属釉厚膜电阻器。
- 是阻值允许偏差±0.5%、电阻温度系数±50×10⁻⁶/K的高精度产品。
- 对应回流焊、波峰焊。
- 端子无铅品, 符合欧盟RoHS。电极、电阻膜层、玻璃中所含的铅玻璃不适用欧盟RoHS指令。
- AEC-Q200相关数据已取得。
- Metal-glaze thick film resistor for surface mounting.
- High precision resistor with T.C.R. ±50×10⁻⁶/K and tolerance ±0.5%.
- Suitable for both flow and reflow solderings.
- Products with lead free termination meet EU-RoHS requirements. EU-RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 qualified.

■ 用途 Applications

- VCO
- 用于替换金属膜片状电阻器。
- Replacement of metal film chip resistors.

■ 参考标准 Reference Standards

IEC 60115-8
JIS C 5201-8
EIAJ RC-2134C

■ 额定值 Ratings

型号 Type	额定功率 Power Rating	电阻温度系数 T.C.R. (×10 ⁻⁶ /K)	电阻值范围 Resistance Range (Ω)		最高使用电压 Max. Working Voltage	最高 过载电压 Max. Overload Voltage	二次加工和包装数量/卷 Packaging & Q'ty/Reel (pcs)					
			D: ±0.5% E24, E96	F: ±1% E24, E96			TA	TC*TCM	TPL*TP	TD	TE	
1H	0.05W	±50	100~1M ^{※2}	100~1M ^{※2}	25V	50V	35,000	TC :10,000 TCM:15,000	-	-	-	-
1E	0.063W		-	-	50V	100V	-	-	TPL:20,000 TP :10,000	-	-	-
1J	0.1W		-	-	75V	150V	-	-	-	-	5,000	-
2A	0.125W		-	-	150V	200V	-	-	-	-	5,000	4,000
2B	0.25W		-	-	200V	400V	-	-	-	-	5,000	4,000

额定环境温度 Rated Ambient Temperature : +70℃

使用温度范围 Operating Temperature Range: -55℃~+155℃

额定电压=√额定功率×公称电阻值所算出的值或表中最高使用电压两者中小的值为额定电压。

Rated voltage = √ Power Rating × Resistance value or Max. working voltage, whichever is lower.

跳线片式电阻器请参照RK73Z系列。

For flat chip jumper resistor, please refer to RK73Z series.

※2 RK73G1H (D: ±0.5%, F: ±1%) 的公称电阻值为E24。

※2 The nominal resistance value for RK73G1H (D: ±0.5%, F: ±1%) is E24.

本样本手册中记载的产品规格如有变更, 恕不一一奉告。订购及使用之前, 请仔细确认规格表的内容。

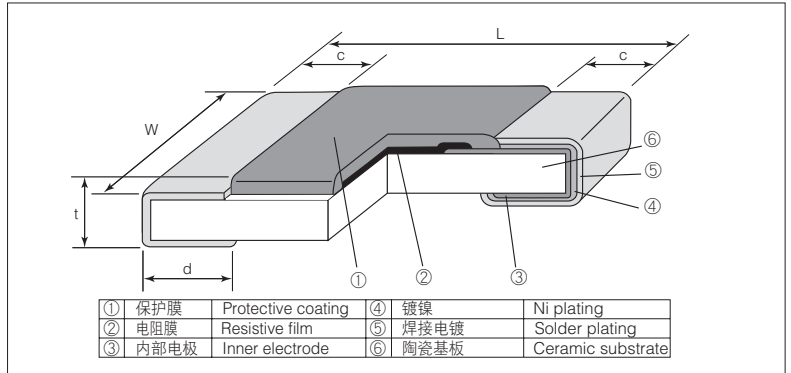
用于车载设备、医疗设备、航空设备以及其它涉及人身安全、或可能引起重大损失的设备上时, 请务必事先与我司联系。这些产品在这类用途中出现故障或失灵可能导致人身事故或严重损坏。

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

Contact our sales representatives before you use our products for applications including automobiles, medical equipment and aerospace equipment.

Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

■ 结构图 Construction



① 保护膜	Protective coating	④ 镀镍	Ni plating
② 电阻膜	Resistive film	⑤ 焊接电镀	Solder plating
③ 内部电极	Inner electrode	⑥ 陶瓷基板	Ceramic substrate

■ 外形尺寸 Dimensions

型号 Type (Inch Size Code)	尺寸 Dimensions (mm)					Weight (g) (1000pcs)
	L	W	c	d	t	
1H (0201)	0.6±0.03	0.3±0.03	0.1±0.05	0.15±0.05	0.23±0.03	0.14
1E (0402)	1.0 ^{+0.1} _{-0.06}	0.5±0.05	0.2±0.1	0.25 ^{+0.05} _{-0.1}	0.35±0.05	0.68
1J (0603)	1.6±0.2	0.8±0.1	0.3±0.1	0.3±0.1	0.45±0.1	2.14
2A (0805)	2.0±0.2	1.25±0.1	0.4±0.2	0.3 ^{+0.2} _{-0.1}	0.5±0.1	4.54
2B (1206)	3.2±0.2	1.6±0.2	0.5±0.3	0.4 ^{+0.2} _{-0.1}	0.6±0.1	9.14

■ 品名构成 Type Designation

实例 Example

RK73G	2A	T	TD	1002	D
品种 Product Code	额定功率 Power Rating	端子表面材质 Terminal Surface Material	二次加工 Taping	公称电阻值 Nominal Resistance	阻值允许偏差 Resistance Tolerance
	1H:0.05W 1E:0.063W 1J:0.1W 2A:0.125W 2B:0.25W	T: Sn (L: Sn/Pb ^{※1})	TA:1mm pitch press paper TC*TCM:2mm pitch press paper TPL*TP:2mm pitch punch paper TD:4mm pitch punch paper TE:4mm pitch plastic embossed BK: Bulk	4 digits	D:±0.5% F:±1%

※1 1H尺寸只对应表面端子材质T。

※1 With type 1H, only T is available as the terminal surface material.

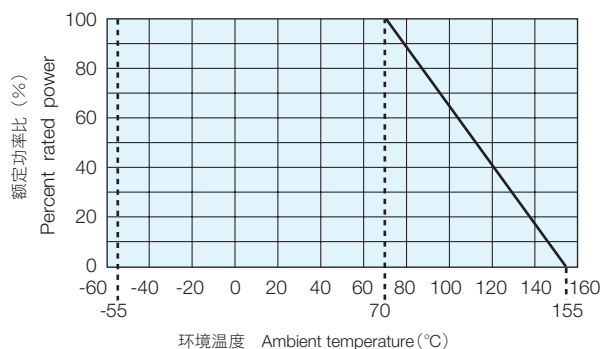
端子表面材质, 以无铅品为准。

编带细节参照卷末附录C。

The terminal surface material lead free is standard.

For further information on taping, please refer to APPENDIX C on the back pages.

■ 负荷减轻特性曲线 Derating Curve



在环境温度70℃以上使用时，应按照上图负荷减轻特性曲线，减小额定功率。
For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the above derating curve.

■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements $\Delta R \pm (\% + 0.05 \Omega)$		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
电阻值 Resistance	在规定的允许偏差内 Within specified tolerance	-	25°C
电阻温度系数 T.C.R.	在规定值以内 Within specified T.C.R.	-	+25°C/+125°C: 1H +25°C/-55°C and +25°C/+125°C: 1E, 1J, 2A, 2B
过载(短时间) Overload (Short time)	2	0.6	额定电压×2.5倍施加5秒钟 (2B: 额定电压×2倍) Rated voltage × 2.5 for 5s
耐焊接热 Resistance to soldering heat	1	1: 1H 0.4: 1E, 1J, 2A, 2B	260°C±5°C, 10s±1s
温度突变 Rapid change of temperature	0.5	0.3	-55°C (30min.) / +125°C (30min.) 100 cycles
耐湿负荷 Moisture resistance	3: 1H, 1E 2: 1J, 2A, 2B	1: 1H, 1E 0.6: 1J, 2A, 2B	40°C±2°C, 90%~95%RH, 1000h 1.5小时ON、0.5小时OFF的周期 1.5h ON/0.5h OFF cycle
在70°C时的耐久性 Endurance at 70°C	3: 1H, 1E 2: 1J, 2A, 2B	1: 1H, 1E 0.6: 1J, 2A, 2B	70°C±2°C, 1000h 1.5小时ON、0.5小时OFF的周期 1.5h ON/0.5h OFF cycle
高温放置 High temperature exposure	1	0.6	+155°C, 1000h