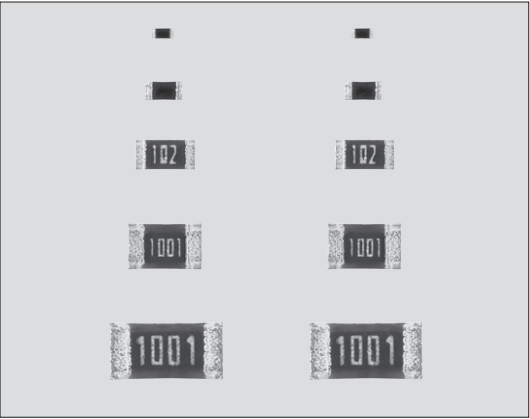


THICK FILM (ULTRA PRECISION)



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

- 是表面安装的金属釉厚膜电阻器。
- 是阻值允许偏差 $\pm 0.5\%$ 、电阻温度系数 $\pm 50 \times 10^{-6}/K$ 的高精度产品。
- 对应回流焊、波峰焊接。
- 端子无铅品，对应欧盟RoHS。电极、电阻膜层、玻璃中所含铅玻璃，不包含在欧盟RoHS指令中。
- Metal-glaze thick film resistor for surface mounting.
- High precision resistor with T.C.R. $\pm 50 \times 10^{-6}/K$ and tolerance $\pm 0.5\%$.
- 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.

用途 Applications

- VCO
- 用于金属膜片式电阻器的置换。
- Replacement of metal film chip resistors.

参考标准 Reference Standards

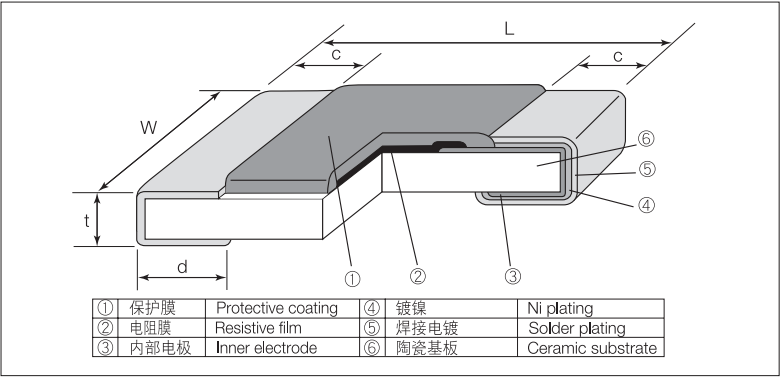
IEC 60115-8
JIS C 5201-8
EIAJ RC-2134C

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 Packaging & Q'ty/Reel (pcs)				
			D: ±0.5% E24, E96	F:±1% E24, E29			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		10~1M	10~1M	50V	100V	—	—	TPL:20,000 TP :10,000	—	—
1J	0.1W		10~1M		75V	150V	—	—	TP :10,000	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℃~+125℃ (1H), -55℃~+155℃ (1E•1J•2A•2B)
额定电压是 $\sqrt{\text{额定功率} \times \text{公称电阻值}}$ 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 = $\sqrt{\text{Power Rating} \times \text{Resistance value}}$ or Max. working voltage, whichever is lower.
※4 RK73G1H (D: $\pm 0.5\%$, F: $\pm 1\%$) 的公称电阻值为E24。
※4 The nominal resistance value for RK73G1H (D: $\pm 0.5\%$, F: $\pm 1\%$) is E24.

结构图 Construction



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 $\pm$ 0.03	0.3 $\pm$ 0.03	0.1 $\pm$ 0.05	0.15 $\pm$ 0.05	0.23 $\pm$ 0.03	0.14
1E (0402)	1.0 $^{+0.1}_{-0.05}$	0.5 $\pm$ 0.05	0.2 $\pm$ 0.1	0.25 $^{+0.15}_{-0.1}$	0.35 $\pm$ 0.05	0.68
1J (0603)	1.6 $\pm$ 0.2	0.8 $\pm$ 0.1	0.3 $\pm$ 0.1	0.3 $\pm$ 0.1	0.45 $\pm$ 0.1	2.14
2A (0805)	2.0 $\pm$ 0.2	1.25 $\pm$ 0.1	0.4 $\pm$ 0.2	0.3 $^{+0.2}_{-0.1}$	0.5 $\pm$ 0.1	4.54
2B (1206)	3.2 $\pm$ 0.2	1.6 $\pm$ 0.2	0.5 $\pm$ 0.3	0.4 $^{+0.2}_{-0.1}$	0.6 $\pm$ 0.1	9.14

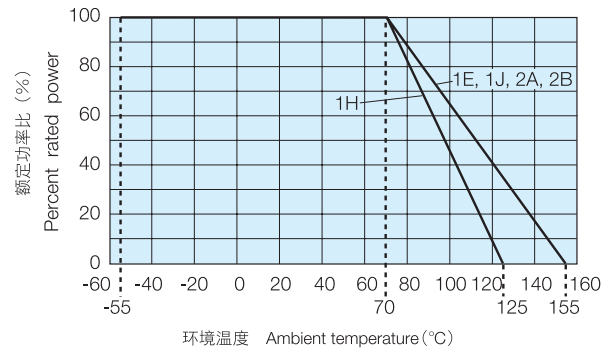
品名构成 Type Designation

实例 Example	实例 Example	实例 Example	实例 Example	实例 Example	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*)	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: $\pm 0.5\%$ F: $\pm 1\%$

※1 1H尺寸只对应T标示的表面端子材料。
※1 With type 1H, only the symbol T is available as the terminal surface material.
端子表面材质，以无铅品为准。
The terminal surface material lead free is standard.
编带细节参照卷末附录C。
For further information on taping, please refer to APPENDIX C on the back pages.

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

■ 负荷特性曲线 Derating Curve



在环境温度70℃以上使用时，应按照上图负荷特性曲线，减小额定功率。
For resistors operated at an ambient temperature of 70℃ 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℃
电阻温度系数 T.C.R.	在规定值以内 Within specified T.C.R.	—	+25℃/+125℃: 1H +25℃/−55℃ and +25℃/+125℃: 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℃±5℃, 10s±1s
温度突变 Rapid change of temperature	0.5	0.3	−55℃ (30min.) / +125℃ (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℃±2℃, 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℃时的耐久性 Endurance at 70℃	3: 1H, 1E 2: 1J, 2A, 2B	1: 1H, 1E 0.6: 1J, 2A, 2B	70℃±2℃, 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	+125℃, 1000h: 1H +155℃, 1000h: 1E, 1J, 2A, 2B