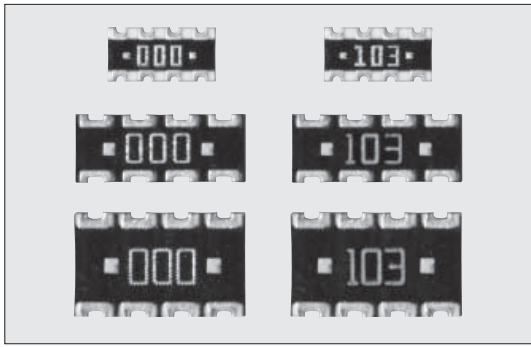


CN-RT 抗硫化网络电阻器 (贴片) (凹型) Anti Sulfuration Chip Networks (Concave Termination)



外观颜色：黑色
Coating color：Black

特点 Features

- 由于内部上面电极使用高性能抗硫化材料，所以内部上面电极不会被硫化断线。
- 比片状电阻的安装密度高。
- 产品使用个数减少，贴片成本降低。
- 在回流焊过程中自我调整性高
- 安装时易于进行图像识别。
- 适用于回流焊和波峰焊。
- 端子为无铅品对应欧盟RoHS。电极，电阻，玻璃釉包含铅玻璃成分，此成分不包含在欧盟RoHS之中。
- Excellent anti-sulfuration characteristic due to using high sulfuration-proof inner top electrode material.
- More advancement in the mounting density than individual chip resistors.
- Mounting cost reduction by decreasing the number of parts mounting times.
- Higher self-alignment effect in reflow-soldering process.
- Suitable for an image recognition mounter due to square corner design.
- Suitable for both reflow and flow 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.

参考标准 Reference Standards

IEC 60115-1
JIS C 5201-1

额定值 Ratings

型号 Type	额定功率 Power Rating (W/Element)	电阻值范围 Resistance Range (Ω) J: ±5% E24	电阻温度系数 T.C.R. (×10 ⁻⁶ /K)	最高使用电压 Max. Working Voltage	最高过载电压 Max. Overload Voltage	额定周围温度 Max. Overload Voltage	使用温度范围 Max. Overload Voltage	编带和包装数/卷 Taping & Q'ty/Reel (pcs)	
								TD	TE
CN1J4RT	0.063	10~1M	±200	50V	100V	+70℃	-55~+125℃	5,000	—
CN2A4RT	0.1			100V	200V			—	4,000
CN2B4RT	0.125			200V	400V			—	4,000

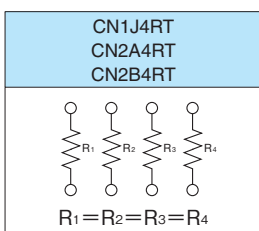
按照额定功率使用时，比单一的贴片电阻的发热温度高，在使用时请加以注意。

Please note that network resistors generate higher heat rather than single flat chip resistor even under rated power output.

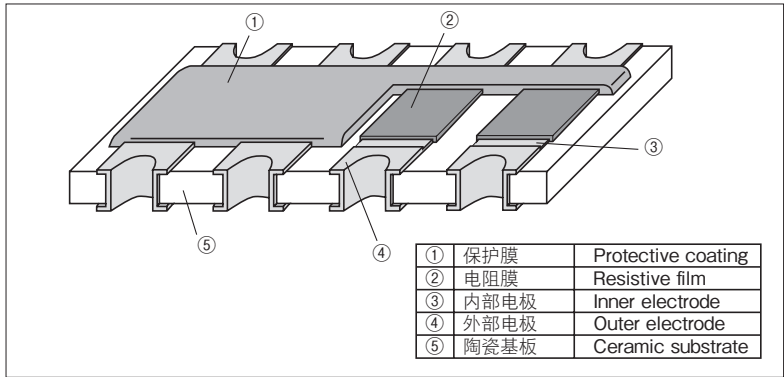
额定电压是 $\sqrt{\text{额定功率} \times \text{公称电阻值}}$ 所算出的值或表中最高使用电压两者中小值为额定电压。

Rated voltage = $\sqrt{\text{Power Rating} \times \text{Resistance value}}$ or Max. working voltage, whichever is lower.

电路构成 Circuit Construction



结构图 Construction



品名构成 Type Designation

实例 Example

CN	1J	4	RT	TD	103	J
品种 Product Code	形状 Size	素子数 Number of Resistors	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
	1J 2A 2B	4	RT : Sn	TD: Paper TE: Plastic embossed BK: Bulk	3 digits	J : ±5%

端子表面材质，以无铅品为准。

欲知关于此产品含有的环境负荷物质详情（除EU-RoHS以外），请与我们联系。编带细节请参考卷末附录C。

The terminal surface material lead free is standard.

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

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

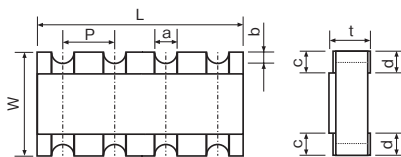
用途 Applications

- 用于数字电路的阻尼电阻，推挽电阻和终端电阻。
- 限制LED的电流。
- Resistors for Damping, Pull-up/Pull-down, Termination for digital circuits.
- LED current limiting.

跳线额定 Jumper Ratings

型号 Type	电阻值 Resistance	额定电流 Current Rating	最大浪涌电流 Max. Surge Current
CNZ1J4RT	50mΩ以下 50mΩ max.	0.5A	2A
CNZ2A4RT		1.0A	3A
CNZ2B4RT			4A

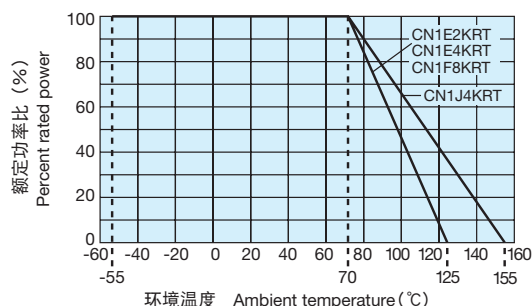
■ 外形尺寸 Dimensions



型号 Type (Inch Size Code)	尺寸 Dimensions (mm)									Weight (g) (1000pcs)
	L±0.2	W±0.2	c	d±0.1	t±0.1	a (top)	a (bottom)	b±0.1	P	
CN1J4RT (0603×4)	3.20	1.6	0.3±0.2	0.40	0.6	0.5±0.1	0.4±0.15	0.15	(0.8)	10.2
CN2A4RT (0805×4)	5.08	2.0	0.4±0.2	0.55		0.8±0.1	0.75±0.15		(1.27)	20.6
CN2B4RT (1205×4)		3.2	0.5±0.3							33.5

() 内的数值作为参考。 Figures in parenthesis are referential values.

■ 负荷减轻特性曲线 Derating Curve

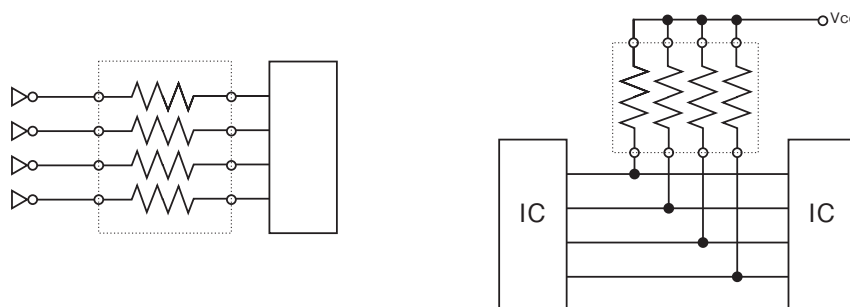


在环境温度70℃以上使用时，应按照上图负荷减轻特性曲线，减小额定功率。
For resistors operated at an ambient temperature of 70℃ or above, a power rating shall be derated in accordance with the above derating curve.

■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements ΔR±%		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.	在规定的允许偏差内 Within specified T.C.R.	—	+25℃/-55℃ and +25℃/+125℃
过载 (短时间) Overload (Short time)	2	0.5	额定电压×2.5倍施加5秒钟 Rated voltage×2.5 for 5s
耐焊接热 Resistance to soldering heat	1	0.25	260℃±5℃, 10s±1s
温度突变 Rapid change of temperature	1	0.5	-55℃ (30min.) / +125℃ (30min.) 5 cycles
耐湿负荷 Moisture resistance	5	1	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℃	5	0.5	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	0.2	+125℃, 1000h
硫化试验 Sulfuration test	5	—	用含硫3.5%的工业油浸渍 105℃±3℃ 500h Soaked in industrial oil with sulfur substance 3.5% contained 105℃±3℃ 500h

■ 应用范例 Examples For Circuit Board Application



■ 使用注意事项 Precautions for Use

- 网络电阻器偶尔会发生串扰的情况，当把它们用于高频电路时，在电路设计时请考虑串扰的影响。
- A few cross talks will occur in network resistors. In case of using them for a high frequency circuit, please design circuits taking the effect by the cross talks into consideration.