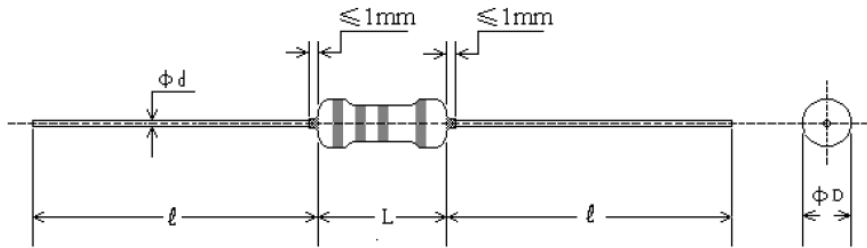


电阻器标准规格书

THE STANDARD STYLE BOOK OF RESISTOR

(MODEL R. CFR-1/2W, 0R-10M J)



1 外形尺寸 (Dimension):

尺寸 Dimension (mm)	L	ΦD	l	Φd CU
数值 Value	9.5 ± 0.5	3.5 ± 0.5	≥ 26	0.48 ± 0.05

2 额定值 (Rated Value):

型号 (Style)	CFR
额定功率 (Rated Power)	1/2W
降功耗曲线 (Derating Curve)	<p>The graph plots the derating curve. The vertical axis is '额定功率的百分数 (%)' (Rated Power Percentage (%)) from 0 to 100. The horizontal axis is '环境温度(°C)' (Ambient Temperature (°C)) from -55 to 240. The curve is a horizontal line at 100% from -55°C to 70°C, and then a straight line from (70, 100) to (235, 0).</p>
额定电压 Rated Voltage	$\sqrt{\text{额定功率(W)} \times \text{标称阻值}(\Omega)}$ Vdc
元件极限电压 Maximum Voltage	250V
最高过载电压 Maximum Overload Voltage	400V
Rated Ambient Temperature	70°C
允许偏差 Tolerance	J ($\pm 5\%$)

阻值范围Resistance Range	0R-10M
使用温度范围Operating Temperature Range	-55℃ ~ +155℃

3 性能(Performance):

项目 Description		性能要求 Performance Requirements	试验方法 Test Method
电阻温度系数 (Resistance Temperature Coefficient)		T. C. R. $\pm 350\text{ppm}/^\circ\text{C}$	试验温度 Test temperature +20℃ / -55℃ / +20℃ / +125℃ / +20℃
过 载 (Short-time Overload)		无可见损伤, 标志清楚 $\Delta R \leq \pm 1\% R$ No visible damage, Markings legible	施加电压应为 2.5 倍额定电压或最高过载电压(取小者) 时间 5 秒 2.5 times rated voltage or maximum overload voltage (the lower) 5 seconds
Intermittent overload		Apply AC voltage 4xRV 10,000 \pm 200 cycles $\Delta R : \pm(1\%+0.05\Omega)$, Marking shall be legible	1sec On, 25sec Off
耐 电 压 (With Standing Voltage)		无击穿或飞弧 (No flasheover or breakdown)	施加交流电压其峰值为 250V 时间 1 分钟 AC 250V 1 minute
Terminal Strength 引出端强度	拉力 Pulled	无可见损伤 $\Delta R \leq \pm 1\% R + 0.05R$ No visible damage	Φd 0.48mm; 负荷 10N 10s Φd 0.48mm; Load 10N 10s
	弯曲 Winded		Φd 0.48mm; 负荷 10N 90° Φd 0.48mm; Load 10N 90°
	扭转 Twisted		360°在相反的方向上 360° in opposite direction
振动 Resistance to Vibration		无可见损伤 $\Delta R \leq \pm 1\% + 0.05R$ No visible damage	10~500Hz 三维方向上各 2 小时 3 direction 2 hours each
耐焊接热 Solder-heat Resistance		无可见损伤 标志清楚 $\Delta R \leq \pm 1\% R$ Marks legible, no visible damage	350℃ 距根部 2mm 3 秒钟 2mm from the body, 3 seconds
Pulse		Applicable only 100R or high, pulse applied voltage is 3 time of rated voltage or maximum pulse voltage. Tolerable change within $\pm(1\% \pm 0.05)$. Marking be legible	
可 焊 性 (Solderability)		表面应覆盖有新的连续焊锡层, 可焊面积必须大于 95%, 且针孔、虚焊等缺陷不得集中在一起 At least 95% of the dipping surface must be covered by new solder, no flaws gathered.	235℃ 距根部 2mm 2 秒钟 2mm from the body, 2 seconds

温度快速变化 Temperature Cycle	无可见损伤 $\Delta R \leq \pm 1\% R + 0.05R$ No visible damage	-55 / +155°C 连续循环 5 次 for 5 cycles
稳态湿热 (Humidity)	无可见损伤 $\Delta R \leq \pm 5\% R + 0.05R$ No visible damage	40°C 95%RH 1344 小时 1344 hours
70°C 耐久性 (Load Life)	无可见损伤 标志清楚 $\Delta R \leq \pm 5\% R + 0.05R$ No visible damage, marks legible	施加电压应为额定电压或元件极限电压 1.5 小时通 0.5 小时断 70°C 1000 小时 rated voltage or maximum voltage, 1.5 hours on, 0.5 hours off, 70 centigrade temperature 1000 hours

4 订货内容 (How to order)

例 (Example)

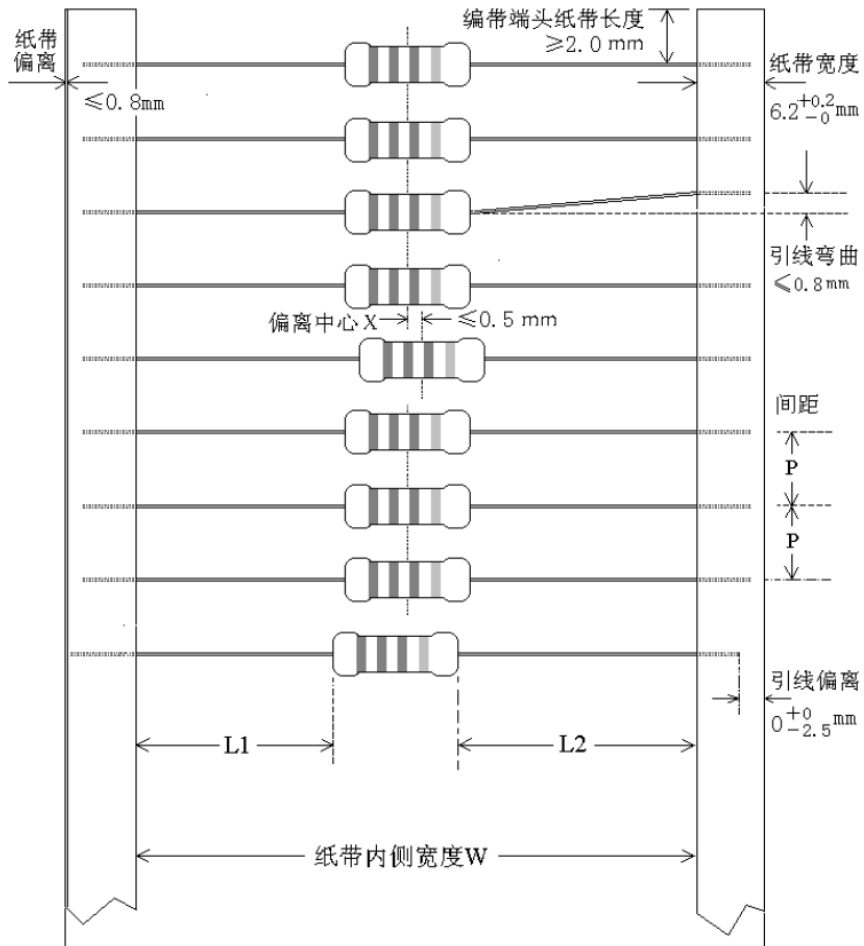
R. CFR- $\frac{1}{2}W$ 0R-10M $\frac{J}{d}$

a b c d

- a 型号 (Style)
- b 额定功率 (Rated power) ($1/2W$)
- c 标称阻值 (Nominal resistance value) (0R-10M)
- d 允许偏差 (Tolerance) ($J \pm 5\%$)

5 加工品 (Taping & Forming)

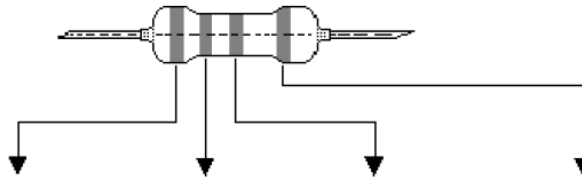
编带产品 (Axial Lead Taping)



单位(unit): mm

编带规格 specification	W	A	P	50 P	L1-L2	X
T-52	52±1	64.5±0.5	5.08± 0.38	254±2	≤1.0	≤0.5

6 色码表示(Color for each numeral)



颜色 Color	第一色圈 第一位数字 1 st color band	第二色圈 第二位数字 2 nd color band	第三色圈 乘数 3 rd color band	第四色圈 允许偏差 4 th color band
黑 Black	0	0	10 ⁰	—
棕 Brown	1	1	10 ¹	—
红 Red	2	2	10 ²	—
橙 Orange	3	3	10 ³	—
黄 Yellow	4	4	10 ⁴	—
绿 Green	5	5	10 ⁵	—
兰 Blue	6	6	10 ⁶	—
紫 Purple	7	7	10 ⁷	—
灰 Gray	8	8	10 ⁸	—
白 White	9	9	10 ⁹	—
金 Gold	—	—	10 ⁻¹	J (± 5%)
银 Silver	—	—	—	K (± 10%)
无色 No color	—	—	—	M (± 20%)