



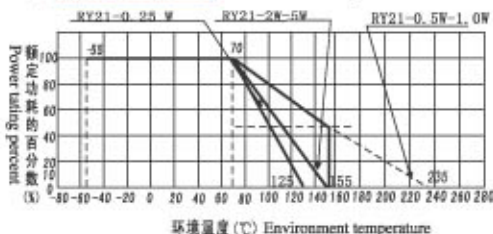
- 稳定度等级5%
Stability reaches 5%
- 为区别于RJ20型产品, 以5条色环表示
5-colors-ring indication
- 阻值范围宽, 精度高, 性能稳定体积小、阻燃性佳
Wide resistance range, high accuracy, high stability, small size and excellent flame retardant

RY21功率型金属氧化膜电阻器
RY21 Power Metal Oxide Film Resistor

★ **适用标准 Standard**

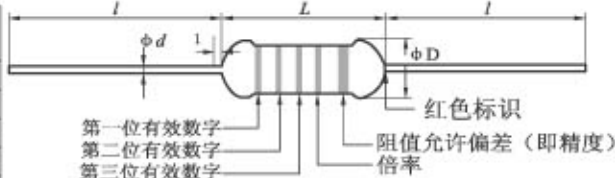
- ▲ GB5729-2003 (IEC115-1) 电子设备用固定电阻器, 第一部分: 总规范
GB5729-2003 (IEC115-1) Fixed resistor used in electronic equipment part 1: Generic specification
- ▲ Q/RU216-1993 RY21-0.25W型金属氧化膜电阻器详细规范
Q/RU216-1993 Type RY21-0.25W metal oxide film resistor specification
- ▲ Q/RU203-1995 (企业标准) RY21-0.5W-1W功率型金属氧化膜电阻器详细规范
Q/RU203-1995 Type RY21-0.5W-1W oxide-film resistor specification
- ▲ Q/RU120-1995 (企业标准) RY21-2W-5W金属氧化膜电阻器详细规范
Q/RU120-1995 Type RY21-2W-5W oxide-film resistor specification
- ▲ IEC68 基本环境试验规程系列标准 Basic environment test procedure

★ **降功耗曲线 Derating curve**



★ **外形尺寸 Dimension** (mm)

型号 Type	阻体尺寸 Resistor dimension		引线尺寸 Terminal dimension	
	ΦD	L	Φd±0.05	l±2
RY21-0.25	1.8±0.3	3.5±0.3	0.5	28
RY21-0.5	2.5±0.2	6.6±0.3	0.6	28
RY21-1	3.6±0.3	9.6±0.9	0.7	28
RY21-2	4.0±0.5	12.4±0.6	0.8	26
RY21-3	5.9±0.6	15.9±1.1	0.8	26
RY21-5	8.4±0.6	24.7±0.8	0.8	32



注: 1 引线两端涂层长度≤1.5mm.
1 the length of termination coated ≤1.5mm.
2 RY21-0.25W因尺寸小不打红色标识。
Red company sign at the edge of body, but RY21-0.25w not marking.

★ **主要技术指标 Main specification**

型号 Type	70℃下额定功耗 Rated power consumption at 70℃ (W)	阻值范围 Resistance range (Ω)	标称阻值系列 Resistance series	阻值允许偏差 Resistance tolerance ± (%)	电阻温度系数 TCR ±(×10 ⁻⁶ /℃)	元件极限电压 Limit voltage (V)	绝缘电压 (直流或交流峰值) Insulation voltage (DC or AC peak value) (V)
RY21	0.25	1~2M	E24	1 (F) 2 (G) 5 (J)	100 250 500	150	250
	0.5	[0.1~4.7] [5.1~5.1M]		5 (J)		250	350
	1	[0.1~4.7] [5.1~390K]	E48 E96 E192	[5 (J)] 2 (G) 5 (J)		350	500
	2					350	500
	3					350	500
5	1~390K			500	700		

★ **主要检验项目、检验方法及性能要求 Main inspection items, methods & requirements**

检验项目 Items	性能要求 Requirements	检验方法 Methods
电阻温度系数 TCR (×10 ⁶ /℃)	±250, ±500	-55℃~+155℃ -55℃~+125℃ (0.25W)
70℃ (或室温) 耐久性 Endurance at 70℃ or room temperature	± (5%R+0.1 Ω)	70±2℃ U _i (或室温 U _i =√PR) 1000h
耐电压 Withstand voltage	无击穿或飞弧 No breakage or flashover	V形块法, 施加交流电压其峰值为绝缘电压值的1.42倍, t=1分钟 V-block Method 1.42times insulation voltage, 1min
可焊性 Solder ability	焊料润湿引出端并能自由流动说明 可焊性良好 Good tinning	235±5℃ 2±0.5s
过载 Over-load	± (1%R+0.05 Ω)	施加 2.5 U _i (或 2U _{max}) 持续时间 5S 2.5U _i (或 2U _{max}) adopt lower 5s
引出端强度 Terminal strength	± (1%R+0.05 Ω)	拉力: 5N (0.25W) 10N (其它) 弯曲: 2次 扭转: 180° 2次 Tensile: 5N (0.25W) 10N (or) bending 2time, each direction Time torsion: 180°, 2time
耐焊接热 Resistance to soldering heat	± (1%R+0.05 Ω)	槽温: 350±10℃ 浸入时间: 3.5±0.5S 距元件主体: 2+ ^{0.6} / ₀ mm Welding temperature 350±10℃ 3.5±0.5S body away: 2+ ^{0.6} / ₀ mm
温度快速变化 Fast temperature change	± (1%R+0.05 Ω)	-55℃~+155℃ (其它 or) 65℃~+125℃ (0.25W) 5次循环 cycle 5time
振动 Vibration	± (1%R+0.05 Ω)	频率: 10Hz~500Hz 振幅: 0.75mm (或 98m/s ²) (取较小者) 总持续时间: 6h 10Hz~500Hz 0.75mm (or 98m/s ²) 6h
气候顺序 Climate category	± (5%R+0.1 Ω)	干热—循环湿热 (第一个循环)—寒冷—低气压—循环湿热 (其余的循环)—一直流负荷 Dry heat, damp heat first cycle, cold
稳态湿热 Steady damp-heat	± (5%R+0.1 Ω)	T=40±2℃ 相对湿度 90~95% 5天 T=40±2℃ humidity: (90~95)% 5day
上限类别温度耐久性 Endurance at upper category temperature	± (5%R+0.1 Ω)	U=0 1000h 125℃ (0.25W) 235℃ (0.5W~1W) 155℃ (2W~5W)
阻燃性 flame retardant	燃烧时间小于10秒 Flaming time <10s	火焰法 (Flames method) 15s 5次 (Time)