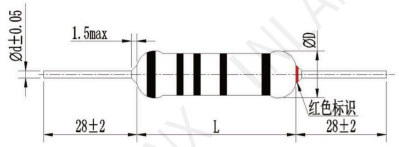
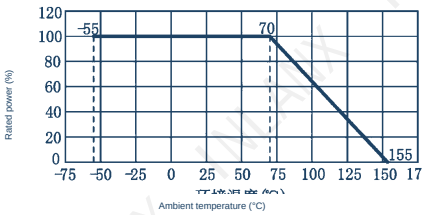
RY21S Ultra Small Metal Oxide Film Resistor

Outline Drawing



Derating Curve





Grades YG and J; QB available. Detail specification Q/RU 264-2005; YG additionally QZJ 84061; general specification GB/T 5729-2003.

Dimensions • mm

Drawing also marks Φd±0.05 mm, 1.5max and red identification.

Power W	ΦD	L	Φd	Lead l
1	2.5±0.2	6.5±0.5	0.6	28±2
2	3.6±0.3	9.8±0.7	0.7	28±2

Electrical Specifications

Resistance 1Ω–10MΩ; TCR ±250 or ±500 ×10□□/K.

Power W	Resistance Ω	Tolerance %	Limit V	Withstand V	TCR ×10□□/K
1	1–10M	±5	250	350	±250, ±500
2	1–10M	±5	350	500	±250, ±500

Main Inspection Items

Item	Test method	Requirement
Dielectric withstand	V-block, 1min, rated voltage	No breakdown/arcing
Solderability	235±5°C, 2±0.5s	Free solder flow and lead wetting
Rapid temperature change	-55 to 125°C, 5 cycles	ΔR≤±(1%R+0.05Ω)
Overload	min(2.5UR,2Umax), 5s	ΔR≤±(2%R+0.1Ω)
Lead strength	Pull 10N; bend twice; twist 180° twice	ΔR≤±(1%R+0.05Ω)
Soldering heat	260±5°C, 10±1s	ΔR≤±(1%R+0.05Ω)
Climatic sequence	High 155°C 16h; damp 25–55°C 24h; low -55°C 2h; low pressure 8.5kPa 1h; damp 24h	ΔR≤±(5%R+0.1Ω)
70°C endurance	70±2°C, min(UR,Umax), 1000h	ΔR≤±(5%R+0.1Ω)
Vibration	10–500Hz, 150m/s², 2h	ΔR≤±(1%R+0.05Ω)
Damp heat	40±2°C, RH90–95%, 56d	ΔR≤±(5%R+0.1Ω)
Upper-category endurance	U=0, 155°C, 1000h	ΔR≤±(5%R+0.1Ω)

Ordering Information

RY21S-1W-100Ω-J

RY21S / power / nominal resistance / tolerance J±5%.