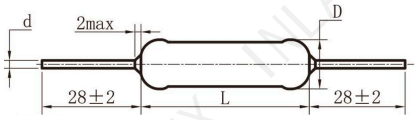
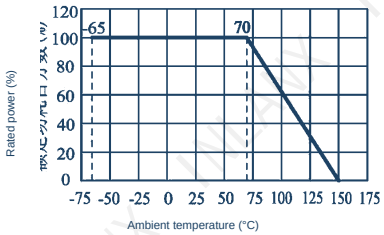
RY Metal Oxide Film Resistor

Outline Drawing



Derating Curve





Grades J, QJB/K, YG and SAST; QB available. J: Q/RU21929.14-2007 for 0.25/0.5W, Q/RU21929.8-2002 for 1/2W; YG additionally QZJ84061; SAST: SASTYPS 0501/0008-2015; general GJB1929-1994.

Dimensions • mm

Power W	L	ΦD	Φd	Leads each side
0.25	7 max	2.7 max	0.6±0.05	28±2
0.5	10.5 max	3.9 max	0.6±0.05	28±2
1	13 max	4.5 max	0.8±0.05	28±2
2	17 max	6.5 max	0.8±0.05	28±2

Electrical Specifications

Power W	Resistance Ω	Series	Tolerance %	Normal V	Low pressure V	TCR ×10□□/K
0.25	1~1k	E24, E48	±5, ±10	250	150	±250
0.5	1~1k	E24, E48	±5, ±10	350	200	±250
1	1~1k	E24, E48	±5, ±10	500	300	±250
2	1~1k	E24, E48	±5, ±10	750	350	±250

Main Inspection Items

Item	Requirement	Test method
Solderability	Tin coverage ≥95%	(245±2)°C, 5s
Overload	ΔR≤±(1%R+0.05Ω); no arcing	2.5UR, 5s
Lead strength	ΔR≤±(1%R+0.05Ω); no damage	Pull 10N; twist 360°, 3 times
Soldering heat	ΔR≤±(1%R+0.05Ω)	(350±10)°C, 3–3.5s
Thermal shock	ΔR≤±(1%R+0.05Ω)	-65 to 150°C, 5 cycles
Low-temp operation	ΔR≤±(1%R+0.05Ω)	-65°C, UR, 45min
Specified shock	ΔR≤±(1%R+0.05Ω)	980m/s², 6ms sawtooth, 10 times
High-frequency vibration	ΔR≤±(1%R+0.05Ω)	10–2000Hz, 0.75mm, 150m/s², 8h
Dielectric withstand	ΔR≤±(1%R+0.05Ω); no breakdown/arcing	V-block, AC rms; voltage as rated, 1min
Insulation resistance	R≥10GΩ	100V DC
Moisture resistance	ΔR≤±(4%R+0.1Ω), R≥100MΩ	RH80–98%, -10 to 65°C, 24h/cycle, 10 cycles
Life	ΔR≤±(5%R+0.1Ω)	70±5°C, UR, 1.5h on/0.5h off, 2000h

Ordering Information

RY-0.5W-100Ω-J

Model RY / power / nominal resistance / tolerance code J±5%, K±10%.