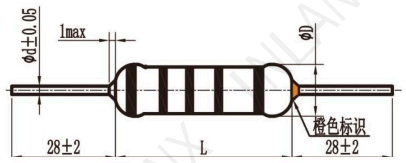
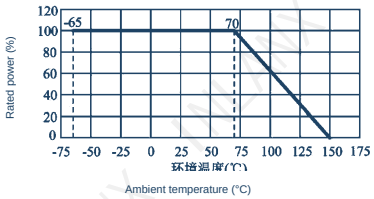
RY23 / RY24 / RY25 Small High Stability Metal Oxide Film Fixed Resistors

Outline Drawing



Derating Curve





YC grade: Q/QJA 20086/7-2019. Other grades: RY23 Q/RU 21929.4-2001, RY24 Q/RU 21929.5-2001, RY25 Q/RU 21929.6-2001; SAST and LMS per procurement specifications. Generic specification GJB 1929-1994.

Outline Dimensions • mm

Model	L	ΦD	Φd
RY23	3.5±0.3	1.9±0.2	0.5
RY24	6.5±0.5	2.3±0.2	0.6
RY25	9.8±0.7	3.5±0.4	0.7

Electrical Specifications

YC ordering ranges: RY23 1 Ω to 2 MΩ; RY24/25 1 Ω to 10 MΩ. Other grades follow their procurement specifications.

Model	Power W	Resistance	Tolerance	Limit V	Dielectric V	TCR ×10^-6/K
RY23	0.25	20 Ω~510 kΩ	±0.5%, ±1%, ±5%	200	250	±100
RY24	0.5	10 Ω~1.5 MΩ	±0.5%, ±1%, ±5%	250	350	±100
RY25	1	10 Ω~1.5 MΩ	±0.5%, ±1%, ±5%	350	500	±100

Main Inspection Items

Item	Requirement	Test method
Dielectric withstand	No breakdown or flashover	V-block method, 1 min, voltage per table
Solderability	Solder coverage ≥95%	(245±5)°C, (5±0.5)s
Life	ΔR≤±(1%R+0.05Ω)	(70±5)°C, min(UR,Umax), 1000 h
Moisture resistance	ΔR≤±(1.5%R+0.05Ω)	-10 to 65°C, RH80–98%, min(UR,Umax), 240 h
Lead strength	ΔR≤±(0.2%R+0.05Ω)	Pull 5 N for RY23, 10 N for others; bend twice; twist 360° three times
Soldering-heat resistance	ΔR≤±(0.5%R+0.05Ω)	(350±10)°C, 3–3.5 s
Thermal shock	ΔR≤±(0.5%R+0.05Ω)	-65 to 150°C, 5 cycles
Low-temperature operation	ΔR≤±(0.5%R+0.05Ω)	-65°C, min(UR,Umax), 45 min
High-frequency vibration	ΔR≤±(0.5%R+0.05Ω)	10–2000 Hz, 0.75 mm or 15 m/s², 8 h
Overload	ΔR≤±(0.5%R+0.05Ω)	min(2.5UR,2Umax), 5 s
Solvent resistance	No mechanical damage; legible markings	Immerse 1 min, brush 10 times, 3 rounds

Ordering Information

RY24-0.5W-100Ω-F-S

YC grade: Model / Power / Nominal resistance / D±0.5%, F±1%, G±2%, J±5% / TCR R±50 or S±100×10^-6/K.

Other grades example: RY24-0.5W-100Ω-F; model / power / resistance / D±0.5%, F±1%, J±5%.