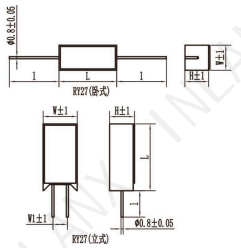
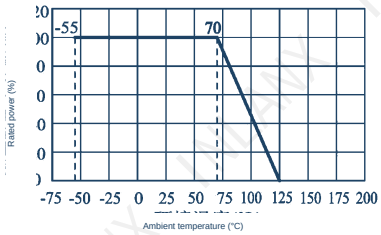
RY27 / RY27L1 Ceramic Power Resistor

Outline Drawing



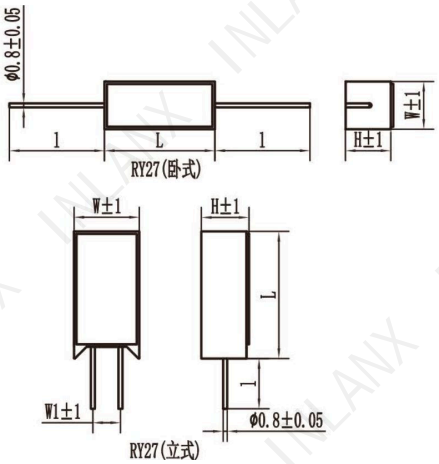
Derating Curve





Grades QB and J. Detail specification Q/RU 234-2014; general specification GB/T 5729-2003. RY27 and RY27L1 remain one group as in source.

Horizontal and Vertical Outline Drawings (enlarged)



Dimensions • mm

Drawing also marks Φ0.8±0.05 lead, H±1 and W±1 where shown.

Model	Power/form W	L	H	l	W	W1
RY27	2 horizontal	18±1	6.4	22±3	6.4	—
RY27	3 horizontal	22±1	8	22±3	8	—
RY27	5 horizontal	22±1	9.5	25±3	9.5	—
RY27	5 vertical	26±1	9.5	10±2	13	5.5
RY27	7/8 horizontal	35±1.5	9.5	25±3	9.5	—
RY27	7/8 vertical	39±1	9.5	10±2	13	5.5
RY27	10 horizontal	48±2	9.5	22±3	9.5	—
RY27	10 vertical	51±1	9.5	10±2	13	5.5
RY27L1	10 vertical	35±1.5	13	4.5 +2/-1	16	7.5

Electrical Specifications

TCR ±350 ×10□□/K.

Model	Power W	Resistance Ω	Tolerance %	Limit V
RY27	2	291–150k	±5, ±10	350
RY27	3	681–150k	±5, ±10	500
RY27	5	1.1k–150k	±5, ±10	600
RY27	7/8	1.6k–100k	±5, ±10	750
RY27	10	2.5k–100k	±5, ±10	750
RY27L1	10	681–150k	±5, ±10	750

RY27 / RY27L1 Ceramic Power Resistor

Main Inspection Items

Item	Test method	Requirement
Solderability	260±5°C, 2±0.5s	Free solder flow and lead wetting
Overload	min(2.5UR,2Umax), 5s	ΔR≤±(1%R+0.05Ω)
Lead strength	Pull 10N; bend twice; twist 180° twice	ΔR≤±(1%R+0.05Ω)
Soldering heat	350±10°C, 3.5±0.5s	ΔR≤±(1%R+0.05Ω)
Rapid temperature change	-55 to 125°C, 5 cycles	ΔR≤±(1%R+0.05Ω)
Shock	490m/s², 11ms	ΔR≤±(1%R+0.05Ω)
Vibration	10–500Hz, min(0.75mm,98m/s²), 6h	ΔR≤±(1%R+0.05Ω)
Climatic sequence	GB/T 5729-2003 clause 4.23	ΔR≤±(5%R+0.1Ω), Ri≥100MΩ
Damp heat	40±2°C, RH90–95%, 21d	ΔR≤±(5%R+0.1Ω), Ri≥100MΩ
Endurance	70±2°C, UR, 1000h	ΔR≤±(5%R+0.1Ω), Ri≥1GΩ
Upper-category endurance	125°C, 1000h	ΔR≤±(5%R+0.1Ω), Ri≥1GΩ
Temperature rise	GB/T 5729-2003 clause 4.14	≤250°C

Ordering Information

RY27-10W-47kΩ-J

RY27 or RY27L1 / power and form / nominal resistance / tolerance code J±5%, K±10%.