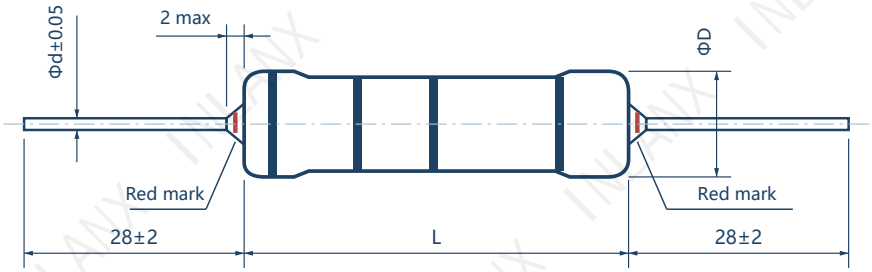
RI40 High-Ohmic Cermet Resistor

Outline Dimensions • mm

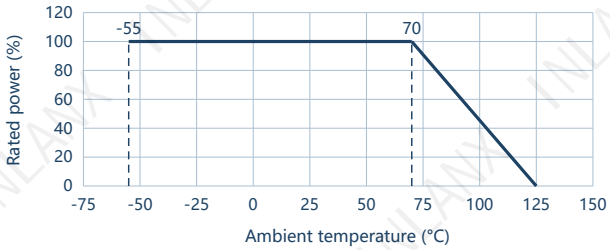




Electrical Specifications and Dimensions

Power W	Resistance range Ω	L mm	ΦD mm	Φd mm	Limiting element voltage • V	Voltage proof V
0.25	1.5k-10M	7 max	2.5 max	0.6	350	500
0.5	220-33M	10.5 max	3.9 max	0.7	500	750
1	330-56M	14 max	5.5 max	0.8	700	1000
2	1k-100M	17 max	6.5 max	0.8	700	1000

Power Derating



Common Specifications and Standards

Item	Specification
Resistance tolerance	±5% (J); ±10% (K)
Temperature coefficient	±500 ppm/K
Quality grade	G
Detail specification	Q/RU 236-1999; QZJ 84061
Generic specification	GB/T 5729-2003

Main Inspection Items

Test	Requirement	Test method
Voltage proof	No breakdown or flashover	V-block method; 60 s±5 s; apply the voltage in the electrical table.
Solderability	Good tinning: solder flows freely and wets the leads.	(235±5)°C; (2±0.5) s
Overload	ΔR ≤ ±(1%R + 0.05Ω)	2.5Ur or 2Umax, whichever is lower; 5 s for 0.25 W / 0.5 W; 10 s for other ratings.
Terminal strength		Tension: 10 N; bending: 2 times; twisting: 180°, 2 times.
Vibration		10-500 Hz; 0.75 mm or 98 m/s², whichever is lower; 6 h.
Soldering heat		(350±10)°C; (3.5±0.5) s
Rapid temperature change		-55 to 125°C; 5 cycles.
Damp heat, steady state	ΔR ≤ ±(5%R + 0.1Ω)	(40±2)°C; RH (93±3)%; 56 d
Climatic sequence		Dry heat: 125°C, 16 h; damp heat cyclic: 25-55°C, 24 h; cold: -55°C, 2 h; low pressure: 8.5 kPa, 15-35°C, 1 h; damp heat cyclic: 25-55°C, 24 h.
Load endurance		(70±2)°C; Ur or Umax, whichever is lower; 1000 h.
Upper category temperature endurance		U = 0; 125°C; 1000 h
Flame resistance	Burning time after flame removal: less than 10 s.	Flame method; 15 s; 5 times.
Surge test	ΔR ≤ ±50%R	R≥1 MΩ; U=10 kV; period: 5 s; 50 times.

Ordering Information

RI40 - 0.25W - 100kΩ - J

Model / Power / Nominal resistance / Tolerance; J: ±5%, K: ±10%.