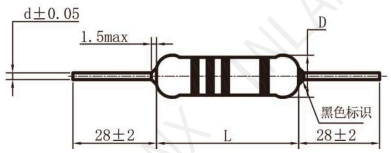
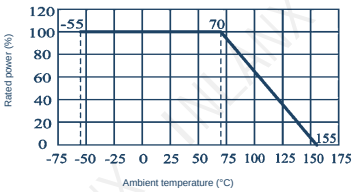
RF10S Coated Fusible Resistors

Outline Drawing



Derating Curve





Quality grades: YG and J; QB available. Detail specification Q/RU 290-2014; YG grade also uses QZJ 84061. Generic specification GB/T 5729-2003.

Outline Dimensions • mm

Power W	L	ΦD	Φd
0.5	7 +0.5/-1	2.5 +0.3/-0.3	0.6
1	10.5 +0.2/-1.5	3.9 +0.2/-0.6	0.65
2	14 +0/-2	5.5 +0/-1.7	0.8
3	17 +0/-2	6.5 +0.2/-1.2	0.8

Electrical Specifications

Power W	Resistance	Tolerance	Limit V	Dielectric V	TCR ×10^-6/K
0.5	0.33 Ω~1 kΩ	±5%, ±10%	250	350	±350
1	0.33 Ω~1 kΩ	±5%, ±10%	250	350	±350
2	0.33 Ω~1 kΩ	±5%, ±10%	350	500	±350
3	0.33 Ω~1 kΩ	±5%, ±10%	350	500	±350

RF10S Coated Fusible Resistors

Main Inspection Items

Item	Requirement	Test method
Solderability	Free solder flow; good wetting	(265±5)°C, (5±0.5)s
Overload	ΔR≤±(1.0%R+0.05Ω)	2.5UR, 5 s
Fusing ≤2Ω	Fusing time ≤60 s	R≤2Ω, 16×Pr
Fusing >10Ω	Fusing time ≤30 s	R>10Ω, 12×Pr
Lead strength	ΔR≤±(1.0%R+0.05Ω)	Pull 10 N; bend twice; twist 180° twice
Soldering-heat resistance	ΔR≤±(1.0%R+0.05Ω)	(350±10)°C, 3–4 s, 2–2.5 mm
Rapid temperature change	ΔR≤±(1.0%R+0.05Ω)	-55 to 155°C, 5 cycles
Vibration	ΔR≤±(1.0%R+0.05Ω)	10–500 Hz, min(0.75 mm, 98 m/s²), 6 h
Climatic sequence	ΔR≤±(5.0%R+0.10Ω)	GB/T 5729-2003 clause 4.23
Endurance	ΔR≤±(5.0%R+0.10Ω), R≥1 GΩ	(70±5)°C, UR, 1000 h
Damp heat, steady	ΔR≤±(5.0%R+0.10Ω), R≥1 GΩ	(40±2)°C, RH90–95%, 21 d
Upper-category endurance	ΔR≤±(5.0%R+0.10Ω), R≥1 GΩ	155°C, 1000 h
Intermittent overload	ΔR≤±(2.0%R+0.05Ω)	2.5UR, 1 s on/25 s off, 10000 cycles
Accidental overload	Wire mesh does not ignite	5, 10, 16×UR

Ordering Information

RF10S-1W-100Ω-J

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