

RXF21-D surge-proof wire-wound fuse resistors



Features

- Good lightning surge resistance (1KV-3KV)
- Low fusing current (1.5-2 times rated current) to cut off the protection line when the line is abnormal.
- No burning boards and melting shells to meet Huawei's primary side half short-circuit requirements.

Applications

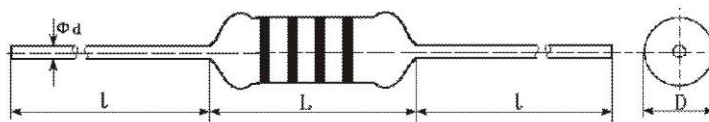
- Various types of high-power switching power supply, lightning protection module, home appliances and smart home control boards, lighting, plugs and various types of protection lines in.

半短路特性

Satisfy the Huawei primary-side half-short-circuit test standard:

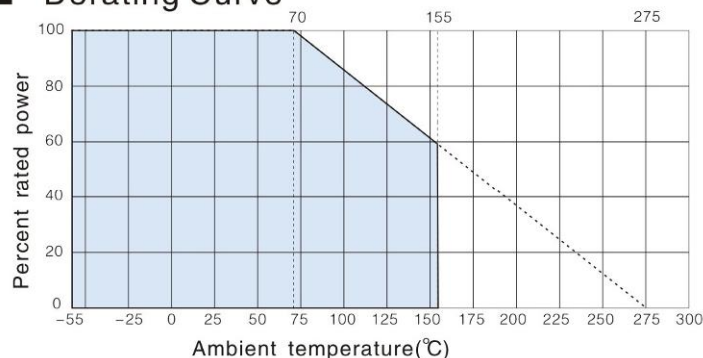
In the high-voltage circuit and the primary ground in parallel with the impedance of 100 Ω (high-power external) analogue resistance, the input voltage is set so that the insurance resistor (filament) flows through the current for the rated current of the voltage to start power aging, observe the changes in the shell until no new anomalies will not appear, and then every 2V voltage increments, point-by-point testing to confirm the shell condition, until the insurance resistor (filament) within 1S melting until the charger can not appear to melt through the shell phenomenon. The charger can not be melted through the shell phenomenon until the fuse resistor (wire) is melted within 1S.

Dimensions(mm)



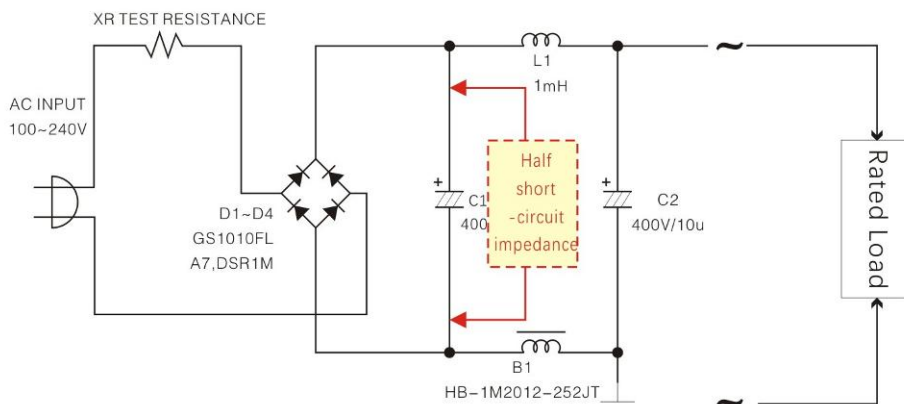
Type	Dimensions(mm)			
	Lmax mm	D ± 0.5mm	l min	Φd ± 0.05
RXF21-D-1W	10	3.5	25	0.55
RXF21-D-2W	12	4.0	25	0.6

Derating Curve



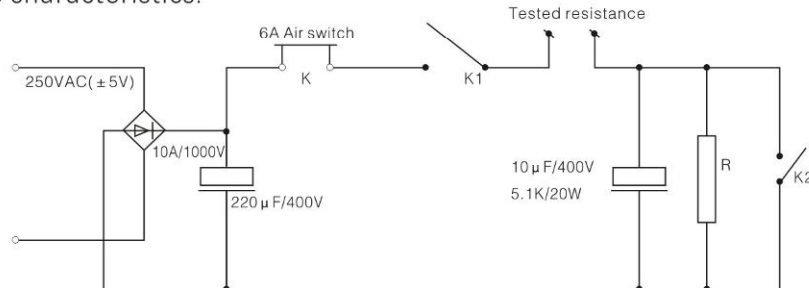
Technical Specifications

Type	Resistance Value	Resistance Accuracy	Fusing current	Operating temperature range
RXF21-D-1W	0.1R-100R	± 5%	1.5 times rated current	-55°C ~ +160°C
RXF21-D-2W	0.1R-200R	± 5%	1.5 times rated current	-55°C ~ +160°C



Key technical indicators

1. Impact resistance characteristics:



As shown in the figure: close the air switch K. Disconnect K2, will K1 repeated on and off 10000 times, the resistor does not open circuit.

2. Short-circuit explosion-proof characteristics:

The resistor will be directly connected to the AC90V-AC264V power supply, the resistor instantaneous failure, no obvious sparks and blowing and large sound. (Explosion-proof resistors are applicable)

3. Lightning surge characteristics:

The test resistor will be connected to the lightning surge tester, the resistor is placed in the non-conductive plane 0.1m above the ground reference surface, in order to apply voltage in accordance with the requirements of the IEC61000-4-5, Waveform: 1.2/50ps; Coupling method: direct output: surge voltage is: 1kV- 3KV; polarity: positive, negative: each surge interval: 60s: each phase 5 times, a total of 40 times. At the end of the experiment, the test resistor should not be open circuit.

4. Fusing characteristics:

Connect the test resistor into the constant current source, and the resistor will fuse within 60s at 1.5 times the rated current. Main test items and performance requirements.

Mostly test item、 methods and performance :

Test Item	Test Methods	Performance
Solderability	235 ± 2°C 2 ± 0.5S	Solder wetting of the lead-in and free-flowing overloads
Overload	$\sqrt{10}$ PRV 5S	$\Delta R \leq \pm (2\%R + 0.05 \Omega)$
Terminal tensile strength	Tensile : 10N	$\Delta R \leq \pm (1\%R + 0.05 \Omega)$
Endurance at room	70°C $V = \sqrt{PR}$ 1000h	$\Delta R \leq \pm (5\%R + 0.1 \Omega)$

How To Order

Example

Type	Power	Nominal Value	Tolerance	Packaging
RXF21-D	1W 2W	1R 300R	J	T52 Tubing Bulk Forming Vertical Taping