
 ZhongShan Lanbao Electrical Appliances Co., LTD	PRODUCT SPECIFICATION	FILE NO.:	LB-QF-2703-21
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Approval marking	制定 made	审核 checked	批准 approved
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适用标准 Apply the standard	IEC60127 and UL248	制定日期Establishment	2004-03-25
		生效日期 effect date	2004-03-25
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1. 适用范围(Scope):

本规格书适用于 RFI-20 SERIES FUSE 系列保险丝。

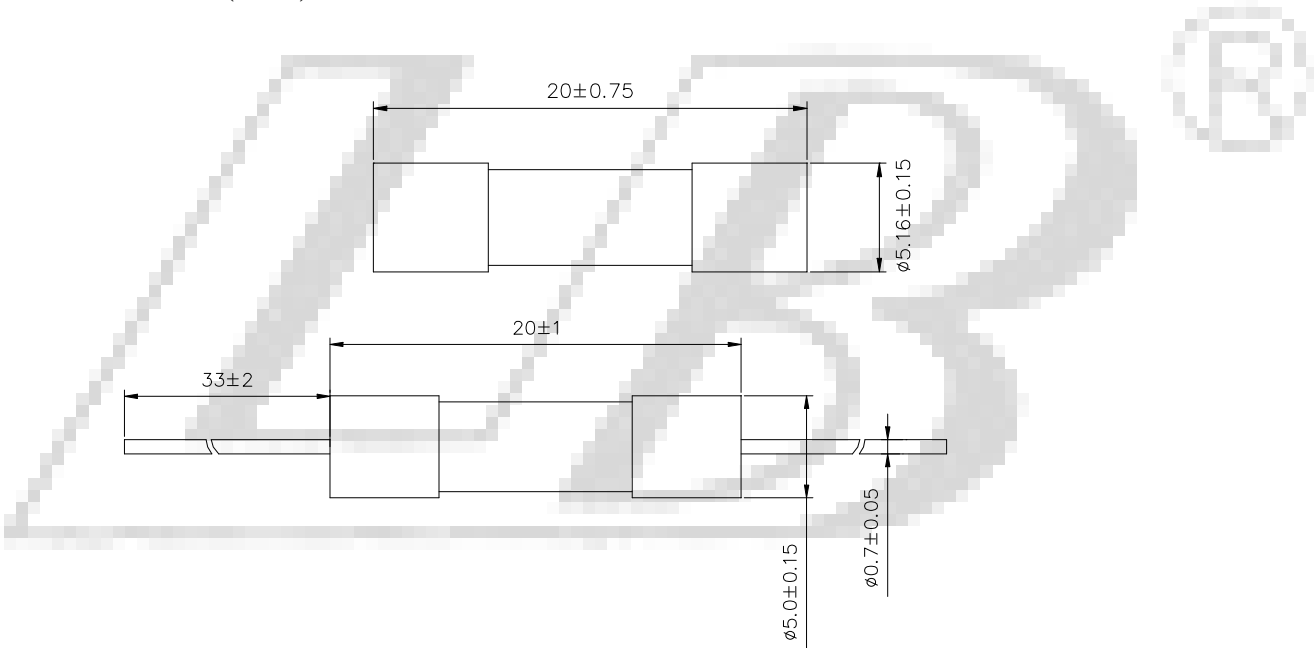
This Specification apply for RFI-20 series fuse.

2. 适用文件(Apply the standard):

2.1 符合 IEC60127/UL248 标准。(Apply IEC60127 and UL248 standards)

2.2 认证标识(Approval marking): 


3. 外型尺寸 (Size)



4. 材料 (Material) :

部件 (Parts)	材料 Material
铜帽 (Copper cap)	Ni plated brass
管(Tube)	() Glass tub () Ceramic tube
引线 (Lead pigtail)	Copper plated tin wire

熔断体(Fusing wire) alloy wire

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4.1 玻璃管 Glass tube （陶瓷管 Ceramic tube）

玻璃管或陶瓷管必须无缺陷、缺损、凹陷，明显脏污。（The glass tube should be of no blemish, no damage and no pollution.）

4.2 铜帽（Copper cap）

每个铜帽必须焊接牢固，导电性良好，表面镀层结合牢固，不易脱落，无损伤。浸入温度为 15-35℃ 的水中 24 小时，按标准的要求施加轴向拉力 5N，并持续 1 分钟，不会出现松动、松脱的情况。（Every copper cap must be welded tightly and have good electric conductivity. Also the outer coating can be very tight, perfect and not easily fallen off. It can be immersed in water with temperature between 15-35℃ for 24 hours. Every copper cap can stand axial pulling force 5N exercised by special equipment for minute.）

4.3 焊锡（solder）

焊料应具有良好的电接触性能，并且在正常使用时不应有熔化的迹象。（The welding materials should have good electric conductivity and not be melted at normal using.）


4.4 引线（Lead pigtail）

引线采用镀锡铜线，具有良好的可焊性能，导电性能。可焊性符合 GB2423.28-82 /IEC68-2-20 之标准。引线的尺寸以及形状可以根据客户的不同要求制作。（Lead should be tinned and have the performance of perfect welding and good contact with electricity. Jointing performance apply for GB2423.28-82/IEC68-2-20 standard）

5. 电气性能(Electricity function)

5.1 测试具备的环境条件如下(The environment condition of the test):

A. 温度(Temperature): 15-35℃

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5.2 测试仪器具备的条件如下(The requirement of the testing equipment):


- a) 测试机器应为直流恒流电源。(the testing equipment is a continued Stable power)
- B. 在测试过程中, 电流的变化误差应小于 $\pm 1\%$ 。(The current stability during the test shall be maintained within $\pm 1\%$ of the adjusted value)
- C. 并应使用符合标准的测试制具来安装保险丝。(The test fixtures must meet IEC60127 standard.)

5.3 时间/电流测试(Time/electrical characteristics test)

对保险丝通以 2.1 倍的额定电流时, 保险丝应该在 1800 s 之内动作; 通以 2.75 倍的额定电流时, 保险丝应该在 50ms~2s 之内动作; 通以 4 倍的额定电流时, 保险丝应该在 10ms~300ms 之内动作; 通以 10 倍的额定电流时, 保险丝应该在 20ms 之内动作; 并且已动作的保险丝不会出现再导通损坏的情况。

Fuse shall open in not more than 0.5hrs at 210% of rated current; Fuse shall open in not less than 50ms or more than 2s at 275% of rated current; Fuse shall not open in not less than 10ms or more than 300ms at 400% of rated current; Fuse shall open in more than 20ms or at 1000% of rated current. These opened fuse shall be no tracking or re-establishment of the circuit.

type	Rated current	210%	275%		400%		1000%
		max	min	max	min	max	max
RFI-20	100mA~6.3A	30 Min	50ms	2s	10ms	300ms	20ms
	6.3A~10A	30 Min	50ms	2s	10ms	400ms	40ms

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5.4 耐久性试验(Endurance test)

对保险丝通过 1.2In 电流 1 小时，然后断电 15 分钟，此为一个循环，如此经过 100 次循环后，再对保险丝通以 1.5In 持续 1 小时(大于 6.3A 时为 0.5 小时)，此测试完成后，再量保险丝两端的电压降，此数值不超出 10% 的变化。并且相关数据不能超出规格表中的要求。同时在测试过程中不能出现保险丝断开的情况。


Fuse shall carry 100% of rated current continuously for 1 hour. Immediately after, The current is switched off for 15 minutes. This cycle is repeated 100 times. After 100 cycles, Fuse shall carry 150% of rated current continuously for 1 hour.

Immediately after, Fuse shall carry 100% of rated current in order to measure the fuse voltage drop.

The voltage drop shall not be deviated from the value before endurance test by more than 10% and the value can not exceed the standard list. Meanwhile, the fuse can not open during the above tests.

规格表

额定电流 rated current	额定电压 rated voltage	最大电压降 Max voltage drop	最大持续功耗 Max sustained power dissipation
100mA	250V	4000 mV	1.6W
125mA		3500 mV	1.6W
160mA		2000 mV	1.6W
200mA		2000 mV	1.6W
250mA		1700 mV	1.6W
315mA		1400 mV	1.6W
400mA		1300 mV	1.6W
500mA		1200 mV	1.6W
630mA		1000 mV	1.6W
800mA		650 mV	1.6W
1A		240 mV	1.6W
1.25A		200 mV	1.6W
1.6A		190 mV	1.6W
2A		170 mV	1.6W
2.5A		170 mV	1.6W
3.15A		150 mV	2.5W
4A		130 mV	2.5W

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5.5 分断能力测试 (Breaking capacity test)

分断能力 35A OR 10In，选较大的值，相关线路应符合 IEC60127 之相关标准。

Rated breaking capacity: 35A or 10In, whichever is greater, tested with a.c and circuits apply for IEC60127.

5.6 盐雾测试 (Salt test)

将保险丝进行 4 小时的盐雾测试时，保险丝不会出现明显变色的现象。

The fuses shall remain in the humidity chamber when testing cannot be completed in a 4 hrs period.

6.标志(Marking):

6.1 额定电流(rated current):

6.2 额定电压(rated voltage):

6.3 认证标志 (approval marking) : 

6.4 动作特性 (action characteristic : F

6.5 商标 (trademark) :LB

6.6 环保标志 (Rohs mark) : 

6.7 分断能力类型: L