



1. 适用范围 / SCOPE

此份规格书仅涵盖JK1206FF系列产品.

This specification covers JK1206FF series devices, which is SMD Fuse.

2. 产品名称及编码 / TYPE NUMBER & PART NUMBER

2-1 产品名称/ TYPE NUMBER

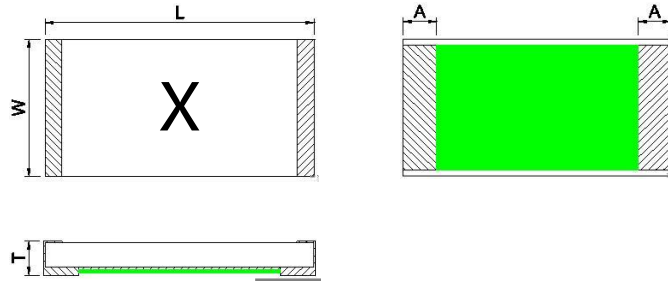
JK1206FF	****A	****V	UL
1	2	3	4

- (1) 系列号: JK1206FF (尺寸: 0.12×0.06; 熔断特性:快断)
Series Number: JK1206FF (Size: 0.12×0.06; Melting characteristic: Fast Acting)
- (2) 额定电流: (例如:3.5A=3.5 安培)
Rating Current : (Ex. :3.5A = 3.5 Ampere)
- (3) 额定电压: (例如:63V=63 伏特)
Rating Voltage : (Ex. :63V = 63 Volt)
- (4) 安规认证 / Safety Approval



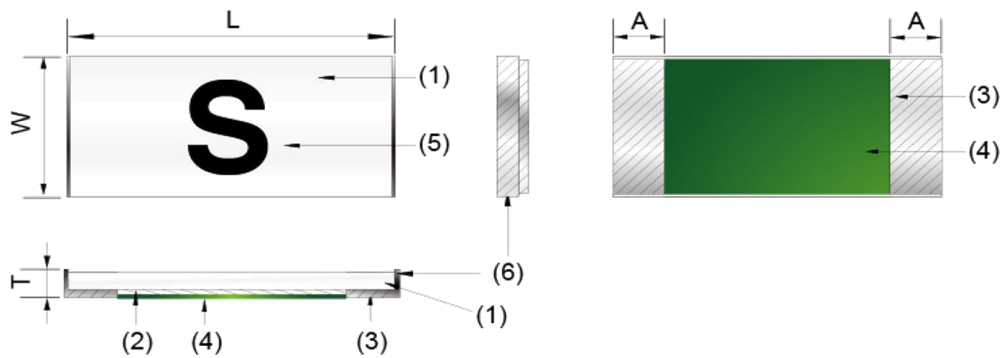
3. 产品尺寸和结构 / SIZE AND STRUCTURE

3-1 尺寸 (单位: mm) / SIZE (Unit: mm)



型号 / Type number	W	L	T	A
JK1206FF****A***V	60±0.20	3.20±0.20	0.65±0.20	0.50±0.20

3-2 产品结构及使用材料说明 / STRUCTURE & MATERIAL



编号 No	元件 Component	材质 Material	数量 Quantity
①	基板 Substrate	氧化铝陶瓷 Alumina Ceramic	1
②	涂层 Coating	玻璃浆 Glass cover	1
③	熔丝本体 Fuse element	银 Silver	1
④	保护防焊层 Protective coating	防火级环氧树脂 Flame-retardant epoxy	1
⑤	文印防焊层 Marking coating	防火级环氧树脂 Flame-retardant epoxy	1
⑥	端头 End Termination	镀银 Silver plated	2



4. 基本信息/ ORDERING INFORMATION

Part No. 料号	Rated Voltage 额定电压(AC/DC)		Rated Current 额定电流 (A)	Breaking Capacity(A) 分断能力	Typical Cold Resistance (mOhms) ² 标准冷电阻	Typical Pre-Arcing I ² T(A ² Sec) 熔化热值	Marking 标记		
1206FF250mA	AC 125V	DC 24V/32V/36V/48V/63V /72V/125V	250mA	DC 24V/32V/36V/48V@200A 63V/72V/125V@50A AC 125V@50A	3610	0.0004	.25		
1206FF375mA			375mA		1881	0.0008	E		
1206FF500mA			500mA		1029	0.0022	0.5		
1206FF630mA			630mA		-	-	-		
1206FF750mA			750mA		604	0.0057	.75		
1206FF1A			1A		493	0.1	H		
1206FF1.5A			1.5A		241	0.15	K		
1206FF2A			2A		134	0.41	N		
1206FF2.5A			2.5A		77	0.65	O		
1206FF3A			3A		49	1.39	P		
1206FF3.5A			3.5A		43	1.68	R		
1206FF4A			4A		35	1.73	S		
1206FF4.5A			4.5A		31	2.62	X		
1206FF5A			5A		24	2.89	T		
1206FF6A			6A		17	11	F		
1206FF7A			7A		14	12.5	7		
1206FF8A			8A		8	14	M		
1206FF10A			10A		6.5	20	U		
1206FF12A			DC 24V/32V/36V/48V		12A	DC 24V/32V/36V/48V @200A	6	11.5	12
1206FF15A					15A		4	16.5	15
1206FF20A	20A	1.6		47.17	20				
1206FF25A	25A	1.4		32	25				
1206FF30A	30A	1.35		43	30				
1206FF40A	DC 24V/32V/36V	40A	DC 24V/32V/36V@200A	0.85	160	XL			
1206FF50A		50A		-	-	50			

说明/Notes :

a. “一般电阻值”是在通以小于额定电流的 10%的弱电流条件下量测的阻抗。

Nominal Resistance measured with <10% rated current ;

b. “一般 I²t ”是指自通电至作动时间为 8ms 的过程所对应的 I²t.

Nominal Melting I²t measured at 8 m sec opening time ;



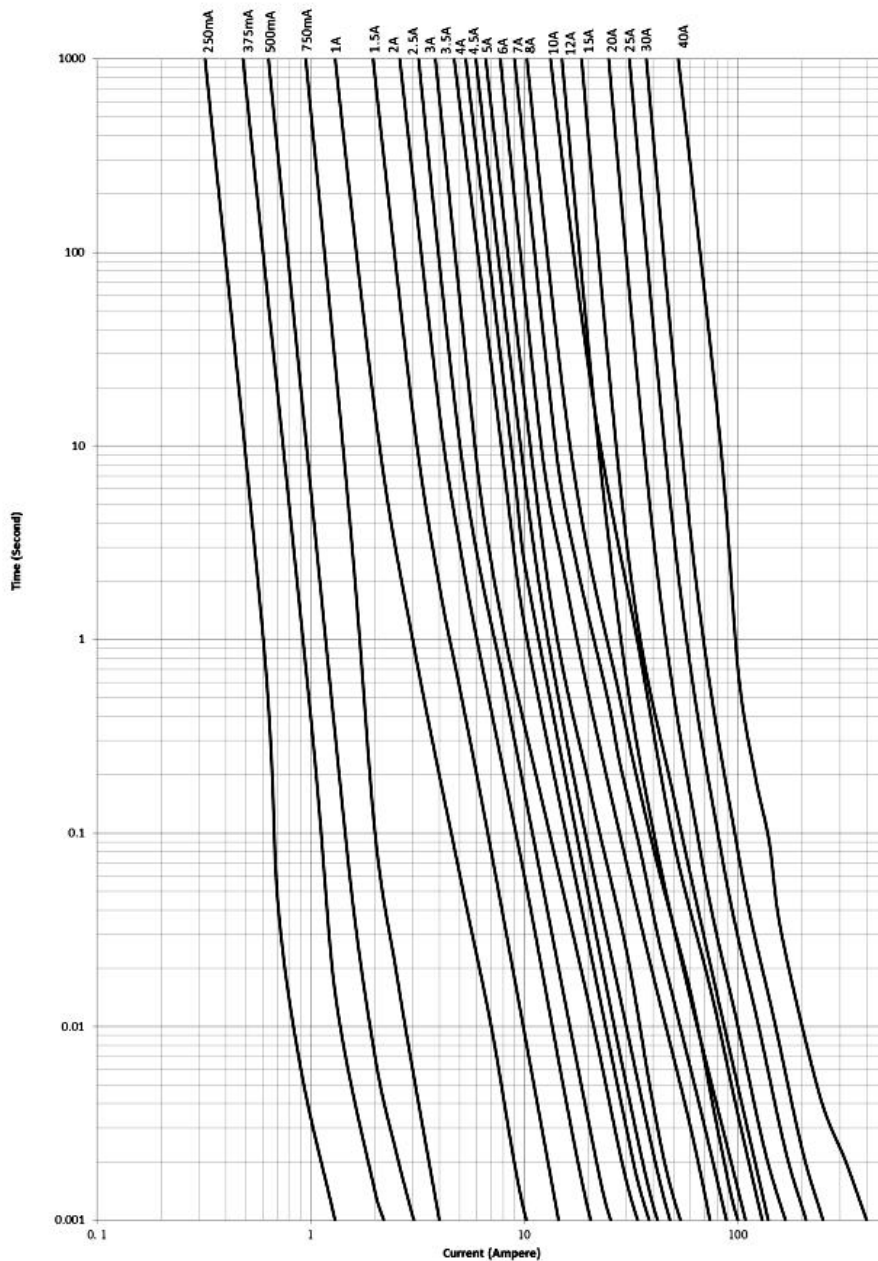
5. 电气特性 / ELECTRICAL CHARACTERISTICS

5-1 时间-电流特性/ Pre-Arcing Time-Current Characteristics (limits)

RATED CURRENT	1 IN/倍	2.5 IN/倍	3.5 IN/倍
	Min	Max.	Max.
250mA~5A	4Hr	5Sec	-
6A~50A		-	5Sec

In : 25°C下额定电流 / Rating Current at 25°C

时间-电流特性曲线 / Time-Current Curve:





5-2 分断能力 / Breaking Capacity

额定电流 RATED CURRENT	分断能力 BREAKING APACITY
250mA to 10A	50A@125Vac 50A@125Vdc 50A@72Vdc 50A@63Vdc 200A@48Vdc 200A@36Vdc 200A@32Vdc 200A@24Vdc
12A to 30A	200A@48Vdc 200A@36Vdc 200A@32Vdc 200A@24Vdc
40A to 50A	200A@36Vdc 200A@32Vdc 200A@24Vdc



6. 产品特性及信赖性测试规范/PRODUCT CHARACTERISTICS AND RELIABILITY TEST STANDARD

序号 No.	项目 Item	内容 Contain	判定标准 Criteria
1	时间/电流特性 Time/current characteristics	分别通以1.0In、2.5In、3.5In电流， 得出相对应的时间 I=1.0In、2.5In、3.5In and measure the value of time individually by	各电流条件下的时间参数符合规定值 Value of time measured in currents is within spec. UL248-1/- 14
2	分断能力测试 Breaking capacity	meter, V = 72 V DC /24V DC ; I=50/300A	没有持续电弧、燃烧、爆炸现象 No a permanent arcing, ignition, UL248-1/-14
3	可焊性 Solder ability	熔锡温度245°C±5°C，浸锡时间 5s±0.5s，浸入深度从基座面起 2.0mm±0.5mm，放在20X的放大 镜下 Cover ≥95%检查T=245°C ±5°C, t=5s±0.5s, magnifier : 20X	锡覆盖率≥95% MIL-STD-202 Method 208
4	抗焊性测试 Soldering heat resistance	熔锡温度/ T =250°C±5°C，浸锡时间 / t =30±5s T=250±5°C, t=30±5s	外观无裂纹和损伤，前后阻值偏差小于或 等于±15%；文印清晰可辨 No crack and damage, ΔR<15% Marking is easily legible MIL-STD-202, Method 210F, Condition K
5	冷热冲击 Thermal Shock	-65°C,放置时间为15min,→ 25°C, ,放置时间为5min→ 125°C放置时间15min 循环次数为 100个 -65°C 15min~25°C 5min~ +125°C	外观无裂纹和损伤，前后阻值偏差<±10% No crack and damage, ΔR<10% MIL-STD-202, Method 107G conditionB- 3
6	机械冲击 Mechanical Shock	15min : 100 cycles 峰值100 G,持续时间11ms,波形: 半正弦，五次脉冲 a=100G for 11ms, 5pulses	外观无裂纹和损伤，前后阻值偏差<± 10%。 No crack and damage, ΔR<10% MIL-STD-202, Method 213B
7	振动测试 Vibration	承受振幅为0.03 英寸(全程最大0.06 英寸),频率在大约10Hz到55Hz 的范 围内(约1/3倍频程的简谐运动) 20g/s 峰值,公差值为±10%, 振动 频率10Hz-2000Hz, 总计时间 12h	MIL-STD-202, Method
8	高频振动测试 Vibration, High Frequency	承受振幅为0.03 英寸(全程最大0.06 英寸),频率在大约10Hz到55Hz 的范 围内(约1/3倍频程的简谐运动) 20g/s 峰值,公差值为±10%, 振动 频率10Hz-2000Hz, 总计时间 12h	MIL-STD-202, Method 204D, Condition D



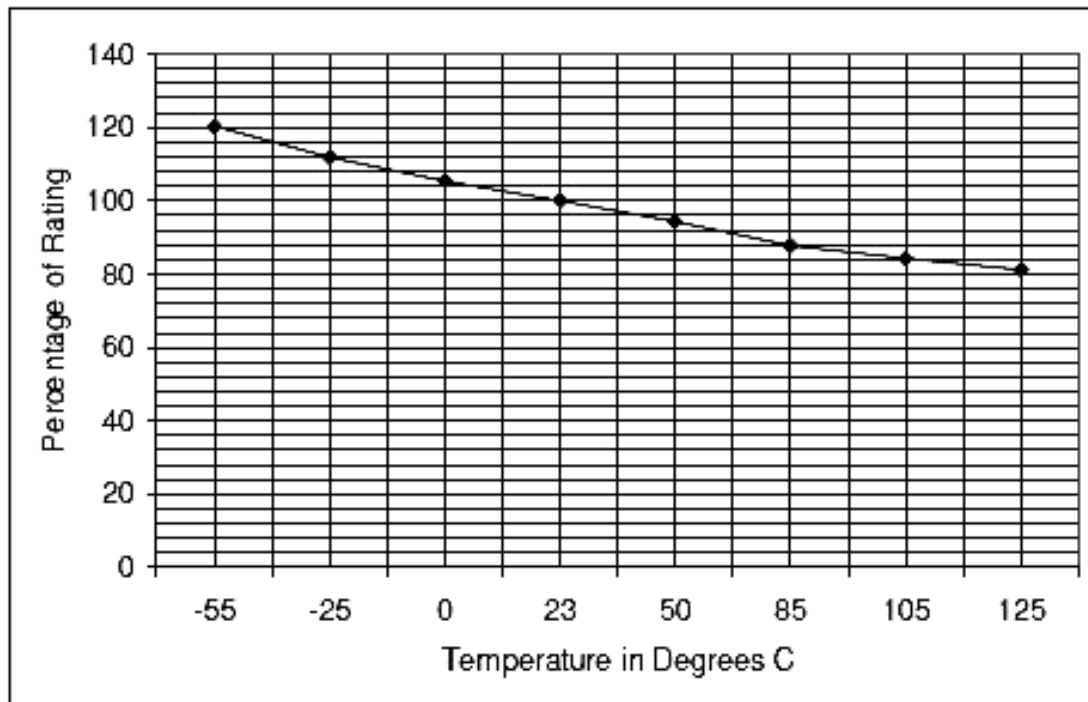
7. 环境特性 / ENVIRONMENTAL CHARACTERISTIC

7-1 操作温度范围: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ / Operating Temperature: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$

若贵司操作环境温度超出 $23 \pm 3^{\circ}\text{C}$ 范围, 在选用保险丝规格时, 需考虑操作环境温度对保险丝的影响。请参照: 温度-电流曲线图。

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from $20 \sim 26^{\circ}\text{C}$, you should consider the environmental temperature's affection to fuses.

Please refer Temperature-Current curve:



7-2 存储条件 / Storage

Conditions: $10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 、相对湿度 $\leq 75\%$ 的密闭条件下可存放 2 年。

Under airtight in temperature $10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 、relative humidity $\leq 75\%$ can store 2 years.

在温度 $10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 、相对湿度为 95% 的非露天下最多可存放 30 天。

Without dew in temperature $10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 、relative humidity be 95% maximum value for 30 days.

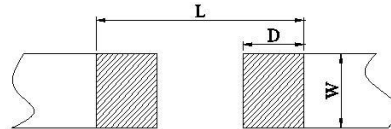


8. 焊垫尺寸及焊接条件 / SOLDER PAD SIZE AND WELDING CONDITIONS

8-1 焊垫尺寸建议 / Recommended Size of the Pad.

L	W	D	t
4.56mm	2.03mm	1.52mm	≥35μm

t : 元件焊垫金属层厚度 (min.) / t : Thickness of pad metal (min.)



8-2 焊接参数建议 / Recommended Customer Soldering Parameters

温度曲线 Temperature Condition

预热段 : 145 ± 15°C, max. 120 sec.

Preheating : 145 ± 15°C, max. 120 sec.

焊锡段 : min. 220°C, max. 60 sec.

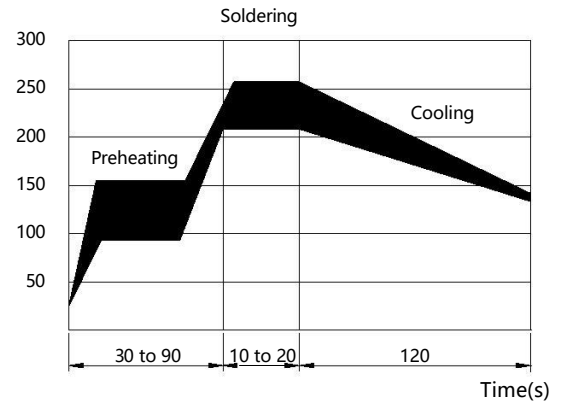
Soldering: min. 220°C, max. 60 sec.

允许最高温度 : 260±5°C, max. 10sec.

Maximum temperature : 260±5°C, max. 10sec.

允许烙铁焊接条件(热风设备): 350°C, 3~5seconds

Rework Temperature (hot air equipment) : 350°C, 3~5seconds



8-3 焊接方法建议 / Recommended Reflow

Methods 焊接热源方式可用红外线, 热蒸气, 热风

IR, vapor phase oven, hot air oven.

如果焊锡温度超过允许最高温度, 则产品本身会有功能损坏的疑虑

If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.



9. 批量生产出货测试项目 / LOT ACCEPTANCE TEST REQUIREMENTS

9-1 外观 / Visual

方法：利用放大镜进行检查

Procedure: Visual

标准：不能有脏污、不洁、文印错误、破损等

Acceptance Criteria: No parts are outstandingly stained.

9-2 尺寸 / Dimensions

方法：使用合适且经校正的标尺

Procedure: As appropriate, calipers, micrometers, optical comparator, or approved gages.

标准：尺寸均在规范标准范围内
Acceptance Criteria: No parts outside specific dimensions.

9-3 时间-电流特性 / Time-Current

Characteristics
方法：测试电流 $I=1.0I_n; 2.5I_n; 3.5I_n$ ，量测出个别电流下的对应时间

Procedure: $I=1.0I_n; 2.5I_n; 3.5I_n$ and measure the value of time individually by meter at 25°C

标准：对应时间值均在规范标准范围内 / Acceptance Criteria: All parts must within the specific .

9-4 分断能力 / Breaking Capacity

方法：测试电压\电流为 $V = 72V/63V/32V/24V DC ; I=50A/150A/300A$ ，利用此条件冲击元件

Procedure: $V = 72V/63V/32V/24V DC ; I=50A/150A/300A$

标准：元件不发生持续电弧燃烧及爆裂

Acceptance Criteria: No permanent arcing, ignition, bursting

10. 安全认证及编号 / STANDARDS AND APPROVALS

UL 编号 E528456

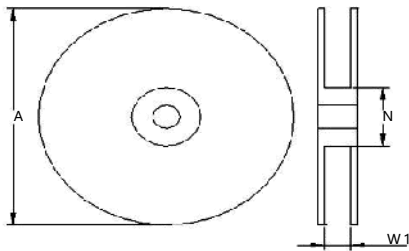


11. 包装讯息 / PACKING INFORMATION

11-1 包装数量、重量 / QUANTITY & WEIGHT

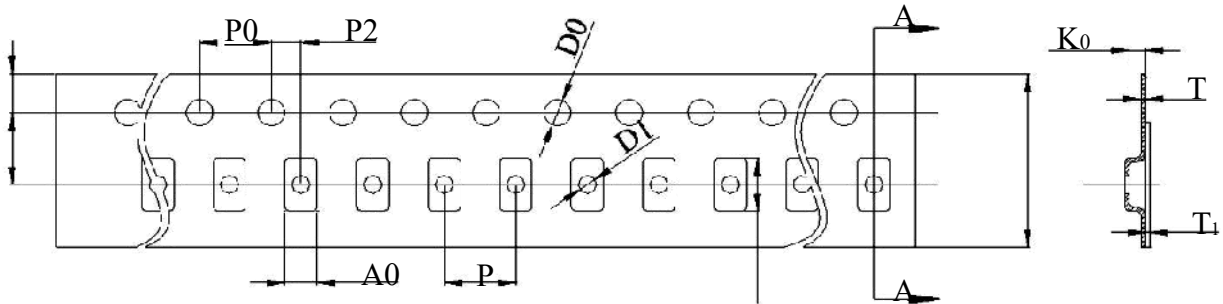
编码 Part Number	数量 (pcs) Quantity(pcs)	重量(g) Weight(g)
1206 FF * A *V	3,000	84±20

11-2 卷轮规格 / Reel & Tape specifications



Unit(mm)

A ± 5	N ± 2	W1 +1/-0
178	60	8.4



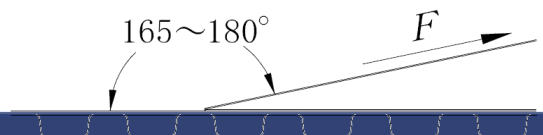
单位(mm)

W	8.00±0.10	E	1.75 ± 0.10
P0	4.00 ± 0.10	T	0.20±0.05
P	4.00 ± 0.10	T1	Max. 0.1
P2	2.00 ± 0.10	A0	2.05±0.10
D0	1.50 ± 0.10	B0	3.65±0.10
D1	1.00 ± 0.10	K0	0.85±0.10
F	3.50±0.10		

11-3 密封胶膜剥离强度要求 / Peeling Strength of Seal Tape

F = 剥离强度 : 0.3 – 1.0N (30 - 100gf)

F = Peeling Strength: 0.3 – 1.0N (30 - 100gf)





12. 其他 / OTHERS

12-1 如果在使用中有超出本规格书的要求，必须经由双方协商确认。

In the event that an impropriety is found beyond this specification ,it shall be fixed by mutual agreement between the parties.

12-2 如果本规格书有不适当的情况，必须通过双方协商并由本公司修改。

In the event that an impropriety is found in this specification , LANBAO ELECTRICAL APPLIANCES CO. LTD. shall amend it by mutual agreement between the parties.