1. 适用范围 / SCOPE

此份规格书仅涵盖1206T系列产品.
This specification covers only 1206T series products.

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

2-1 产品名称/ TYPE NUMBER

1206T	****A	***V	c UL us
(1)	(2)	(3)	(4)

（1）系列号: 1206T (尺寸: 0.12×0.06; 熔断特性:慢断)
Series Number: 1206T (Size: 0.12×0.06; Melting characteristic: Slow-Blow)

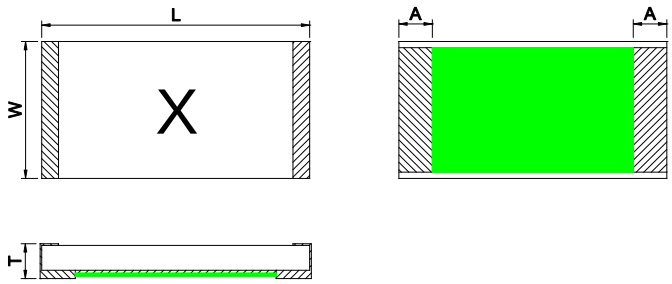
（2）额定电流: (例如:3.5A=3.5 安培)
Rating Current : (Ex. :3.5A = 3.5 Ampere)

（3）额定电压: (例如:63V=63 伏特)
Rating Voltage : (Ex. :63V = 63 Volt)

（4）安规认证 / Safety Approval

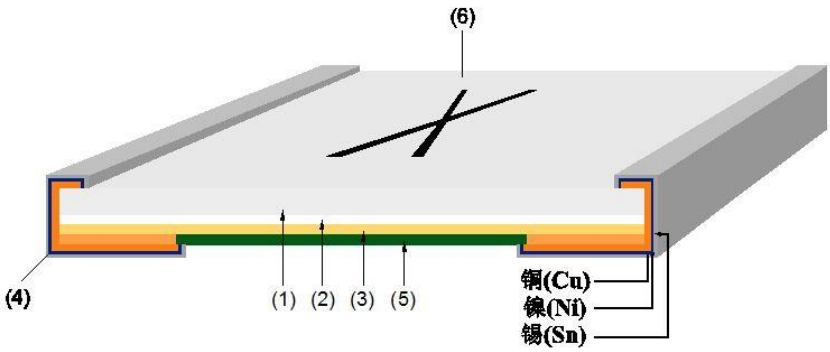
3. 产品尺寸和结构 / SIZE AND STRUCTURE

3-1 尺寸（单位: mm）/ SIZE (Unit: mm)



型号 / Type number	W	L	T	A
1206T****A***V	1.60±0.25	3.20±0.25	0.60±0.15	0.58±0.20

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



编号 No.	组件 Component	材质 Material	数量 Quantity
(1)	基板 Substrate	氧化铝陶瓷 Alumina Ceramic	1
(2)	粘着层 Adhesion layer	环氧树脂 Epoxy	1
(3)	熔丝本体 Fuse element	铜合金/锡 Cu Alloy / Sn	1
(4)	端电极 Terminal electrode	铜/镍/锡 Cu / Ni / Sn	2
(5)	保护防焊层 Protective coating	防火级环氧树脂 Flame-retardant epoxy	1
(6)	文印防焊层 Marking coating	防火级环氧树脂 Flame-retardant epoxy	1

4. 基本信息/ ORDERING INFORMATION

● approved ○ pending

型号 Type Number	标示 Marking	额定电流 Rated Current (ADC)	额定电压 Rated Voltage (VDC)	阻值 Nominal Resistance (Ω)	I^2t Nominal Melting I^2t (A^2s)	安规认证 Safety Approval
1206T 1A 63V	P	1.0	63	0.2200	0.259	●
1206T 1.25A 63V	Q	1.25	63	0.1550	0.405	●
1206T 1.5A 63V	Q1	1.5	63	0.1100	0.583	●
1206T 2A 63V	S	2.0	63	0.0620	1.036	●
1206T 2.5A 63V	T	2.5	63	0.0305	1.619	●
1206T 3A 63V	T1	3.0	63	0.0250	2.332	●
1206T 3.5A 63V	U1	3.5	63	0.0180	3.174	●
1206T 4A 63V	V	4.0	63	0.0155	4.145	●
1206T 5A 63V	W	5.0	63	0.0110	6.477	●
1206T 6A 63V	W1	6.0	63	0.0128	9.327	●
1206T 6.3A 63V	X	6.3	63	0.0095	10.283	●
1206T 7A 63V	X1	7.0	63	0.0085	12.696	●
1206T 8A 63V	Y	8.0	63	0.0075	16.582	●
1206T 10A 63V	Z	10.0	63	0.0057	25.909	●

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 I^2t ” 的是指自通电至作动时间为 10ms 的过程所对应的 I^2t.

Nominal Melting I^2t measured at 10 m sec opening time ;

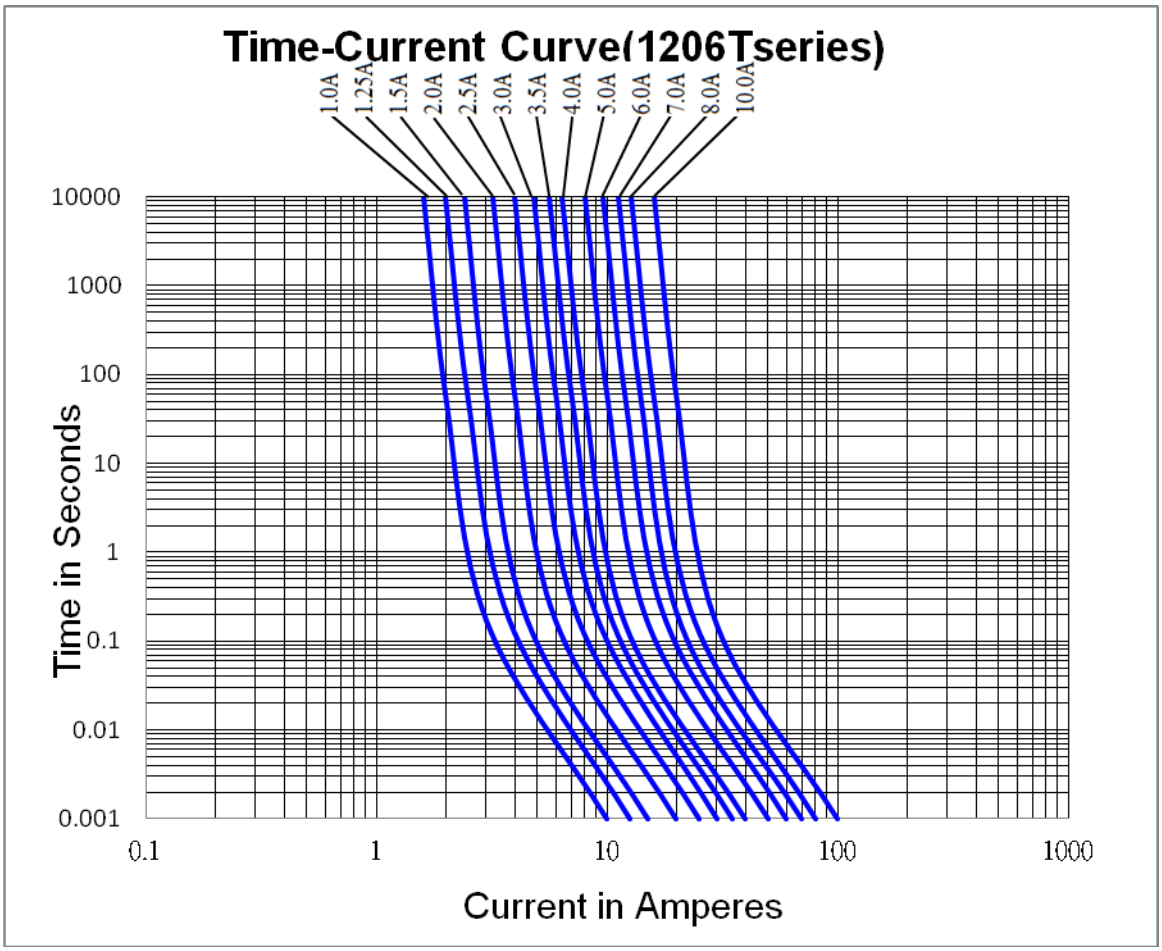
5. 电气特性 / ELECTRICAL CHARACTERISTICS

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

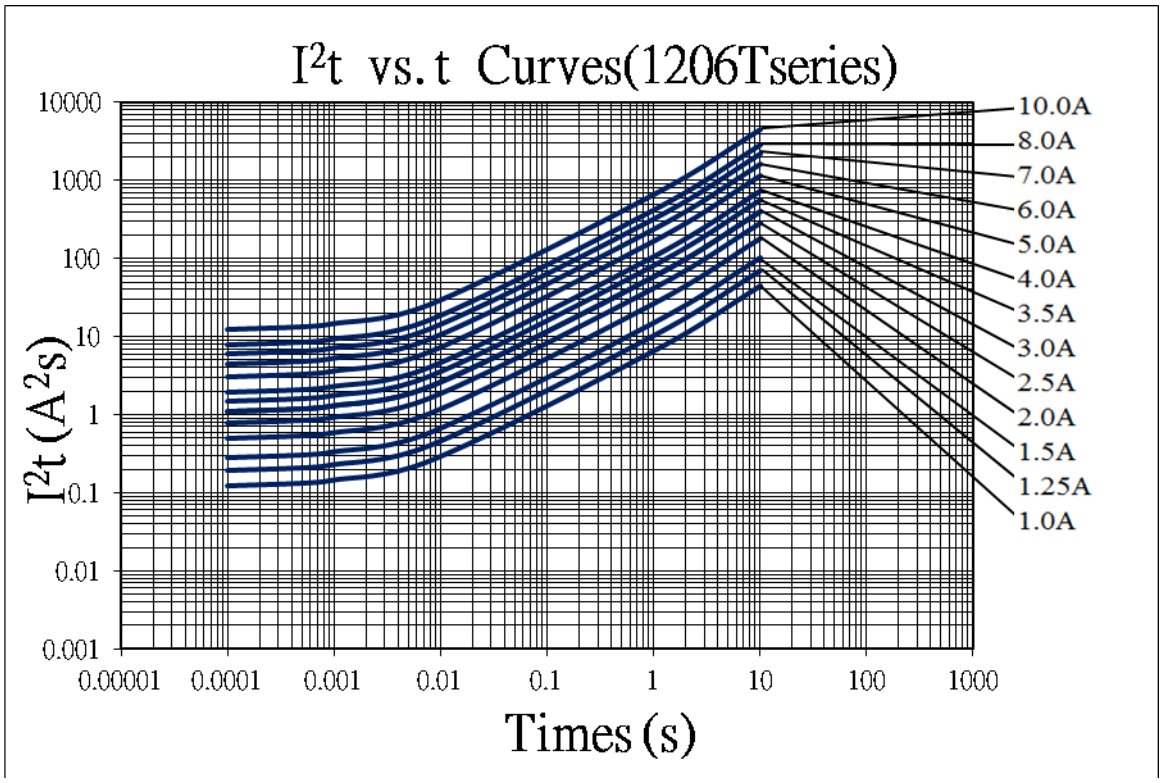
额定电流 RATED CURRENT	1.0In	2.0In	3.0In	8.0In	10.0In
1A to 10A	4hrs min.	1sec min ; 120sec max.	0.1sec min ; 3sec max.	2ms min ; 50ms max.	0.2ms min ; 20ms max.

In : 25℃下额定电流 / Rating Current at 25℃

时间-电流特性曲线 / Time-Current Curve:



5-2 I^2t-t 曲线/ I^2t-t Curve:



5-3 分断能力 / Breaking Capacity

额定电流 RATED CURRENT	分断能力 BREAKING CAPACITY
1A ~10A	V =63V DC ; I=50A

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、2.0In、3.0In、8.0In、10.0In电流，得出相对应的时间 I=1.0In ; 2.0In ;3.0 In ;8.0 In ;10.0 In and measure the value of time individually by meter ,	各电流条件下的时间参数符合规定值 Value of time measured in different currents is within spec. UL248-1/-14
2	分断能力测试 Breaking capacity	V = 63V/DC ; I=50A	没有持续电弧、燃烧、爆炸现象 No a permanent arcing, ignition, bursting UL248-1/-14
3	可焊性 Solder ability	熔锡温度245℃±5℃，浸锡时间5s±0.5s，浸入深度从基座面起2.0mm±0.5mm，放在20X的放大镜下检查T=245℃±5℃, t=5s±0.5s, magnifier : 20X	锡覆盖率≧95% Cover ≧95% MIL-STD-202 Method 208
4	抗焊性测试 Soldering heat resistance	熔锡温度/ T =250℃±5℃, 浸锡时间/ t =30±5s T=250±5℃, 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, △R<15% Marking is easily legible MIL-STD-202, Method 210F, Condition K
5	冷热冲击 Thermal Shock	-65℃,放置时间为15min,→ 25℃，,放置时间为5min→ 125℃放置时间15min 循环次数为100个 -65℃ 15min~25℃ 5min~ +125℃ 15min ; 100 cycles	外观无裂纹和损伤，前后阻值偏差<±10% No crack and damage, △R<10% MIL-STD-202, Method 107G conditionB-3
6	机械冲击 Mechanical Shock	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, △R<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 的范围均匀地变化的简谐运动.)	MIL-STD-202, Method 201A
8	高频振动测试 Vibration, High Frequency	20g's峰值，公差值为±10%，振动频率10Hz-2000Hz，总计时间为12h	MIL-STD-202, Method 204D, Condition D

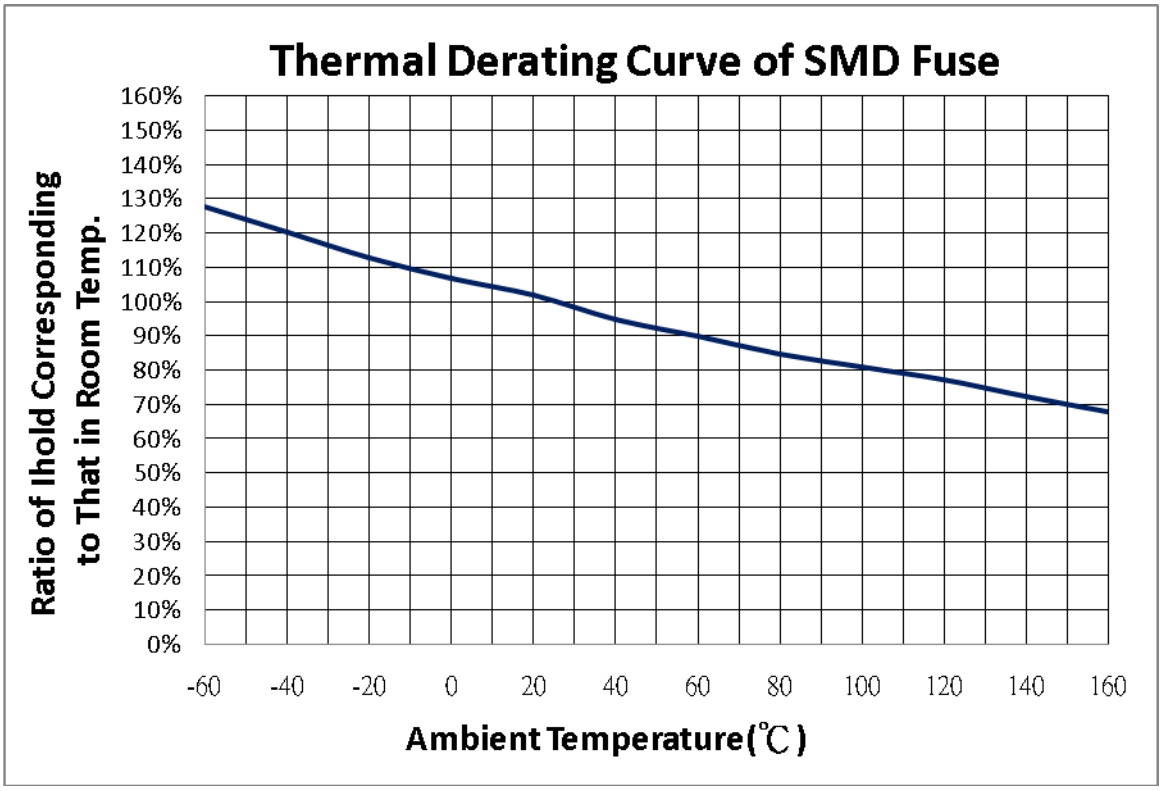
7. 环境特性 / ENVIRONMENTAL CHARACTERISTIC

7-1 操作温度范围: -55℃ ~ 150℃ / Operating Temperature:-55℃ ~ 150℃

若贵司操作环境温度超出25±5℃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 20~30℃, you should consider the environmental temperature's affection to fuses. please refer:

Temperature-Current curve:



7-2 存储条件 / Storage Conditions

在温度10℃~40℃、相对湿度≦75%的密闭条件下可存放2 年。

Under airtight in temperature10℃~40℃、relative humidity ≦75% can store 2 years.

在温度10℃~40℃、相对湿度为95%的非露天下最多可存放30 天。

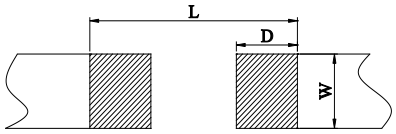
Without dew in temperature10℃~40℃、relative humidity be 95% maximum value for 30days.

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.

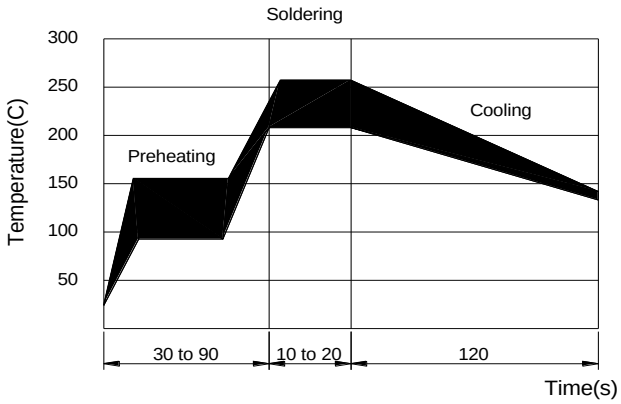
L	W	D	t
4.05mm	2.40mm	1.25mm	≧35μm

t : 组件焊垫金属层厚度 (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℃, max. 120 sec.
Preheating : 145 ± 15℃, max.120 sec.
焊锡段： min. 220℃, max. 60 sec.
Soldering: min. 220℃, max. 60 sec.
允许最高温度 : 260±5℃, max. 10sec.
Maximum temperature : 260±5℃, max. 10sec.



允许烙铁焊接条件(热风设备)：350℃, 3~5seconds
Rework Temperature （hot air equipment）: 350℃,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：尺寸均在规定标准范围内
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=1.0In ; 2.0In ; 3.0In; 8.0In ; 10.0In,量测出个别电流下的对应时间
Procedure : I=1.0In ; 2.0In ; 3.0In; 8.0In ; 10.0In and measure the value of time individually by meter at 25℃
标准：对应时间值值均在规定标准范围内
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 = 63V/DC ; I=50A, 利用此条件冲击组件
Procedure: V = 63VDC ; I=50A
标准：组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

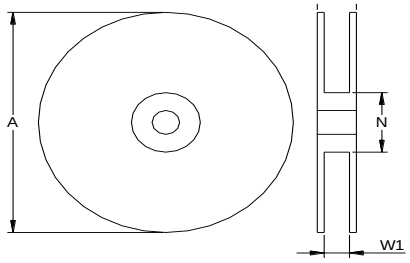
UL	E56092

11. 包装讯息 / PACKING INFORMATION

11-1 包装数量、重量 / QUANTITY & WEIGHT

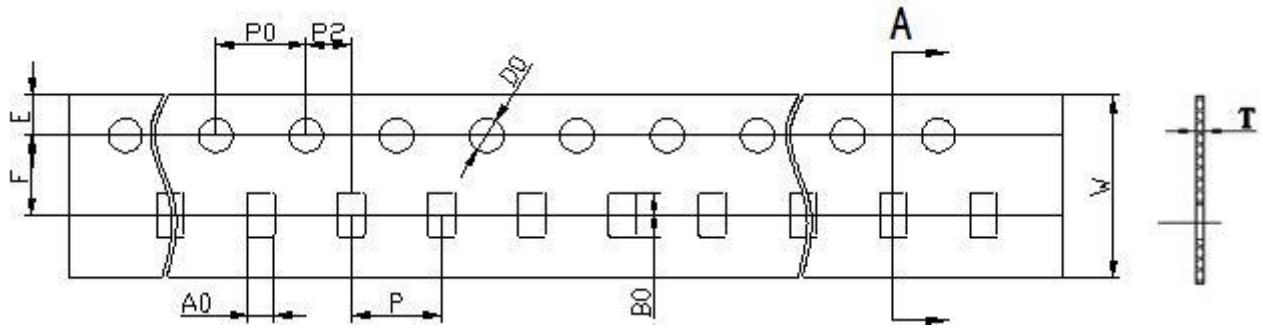
编码 Part Number	数量 (pcs) Quantity(pcs)	重量(g) Weight(g)
1206T****A***V	**5,000**	**140±20**

11-2 卷轮规格 / Reel & Tape specifications



Unit(mm)

A ± 5	N ± 2	W1 +1/-0
178	60	8.4

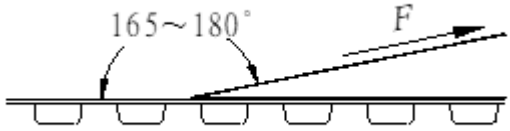


单位(mm)

W	8.00 ± 0.30	F	3.50 ± 0.10
P0	4.00 ± 0.10	E	1.75 ± 0.10
P	4.00 ± 0.10	T	0.87 ± 0.10
P2	2.00 ± 0.10	A0	2.05 ± 0.20
D0	1.50 ± 0.10	B0	3.65 ± 0.20

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

F = 剥离强度 : 0.1 – 1.0N (10 - 100gf)
F = Peeling Strength: 0.1 – 1.0N (10 - 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, Suzhou Walter Electronic Co., Ltd. shall amend it by mutual agreement between the parties.

UL iQ for Fuses

Fuses E56092

Guide Information

SUZHOU WALTER ELECTRONIC CO LTD

NO.99 Xinli Road, Fenhu Technic Development Zone, Wujiang Jiangsu 215211 CN

F92, 1206T

Supplemental micro fuses

Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
3.2 x 1.6 (0.13 x 0.06)	0.8	63Vdc	50
	1	63Vdc	50
	1.25 - 1.75	63Vdc	50
	2 - 6	63Vdc	50
	6.3 - 10	63Vdc	50
	0.8	24Vdc	50
	0.8	32Vdc	50
	1	24Vdc	50
	1	32Vdc	50
	1.25 - 1.75	24Vdc	50
	1.25 - 1.75	32Vdc	50
	2 - 6	24Vdc	50
	2 - 6	32Vdc	50
	6.3 - 10	24Vdc	50
	6.3 - 10	32Vdc	50

Report Date: 2010-07-13
Last Revised: 2019-07-22