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产 品 规 格 书

Technical Specification

客户名称/ Customer Name: _____

样品名称/ Sample Name: PD 充电器

产品型号/ Product Type: JX-2U103T

应用/Applications		版本记录/Version History		
部门	程序	版本	描述	日期

客户回签/ Customers back to the sign	
承认/Recognition	
批准/Approval	
日期/Date	
备注/Remarks	

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样
日
期

Departments	Program	Version	Description	Date
R&D	设计/ Design	A1	发行/Issue	2025-03-29

/ The sample date: 2025-03-29

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1.0 描述/ DESCRIPTION:

JX-2U103T 是一款 PD 和 QC 共享输出的伸缩式 PD 快充充电器，PD 输出线为 80cm，使用时可以以把线材拉出来使用，不使用时轻拉线，线材会缩放在外壳里面，便于收纳。支持(PD3.0)、PPS、APPLE2.4A、Samsung-5V2A、QC3.0/2.0、DCP1.5A、QC4+、AFC、FCP、SCP，VOOC 等

产品特点：伸缩线设计，节省空间，便携使用，支持多协议

The JX-2U103T is a retractable PD fast charging charger with shared PD and QC outputs. The PD output cable is 80cm long. When in use, you can pull the cable out for use. When not in use, gently pull the cable and it will retract into the outer casing, which is convenient for storage. It supports (PD3.0), PPS, APPLE2.4A, Samsung-5V2A, QC3.0/2.0, DCP1.5A, QC4+, AFC, FCP, SCP, VOOC, etc.

Product features: Retractable cable design, space-saving, portable for use, and supporting multiple protocols.

2.0 输入特性/INPUT CHARACTERISTICS:

2.1 输入电压/Input Voltage:

额定电压/Rated Voltage:100~240Vac

调整范围/Variation Range:90-264Vac

2.2 输入频率/Input Frequency:

额定频率/ Rated Frequency: 50/60Hz.

调整频率/Variation Frequency:47-63Hz

2.3 输入电流/Input Current:

当输入交流电压为额定值的下限电压负载满载时,最大输入交流电流 1A.

1Amps max At any input voltage and rated, DC output rated load.

2.4 浪涌电流/Inrush Current:

当输出为额定负载,环境温度为 25℃,输入 240Vac 冷态起机时的最大浪涌电流小于 30A.

30 Amps Max. Cold start at 240Vac input, with rated load and 25℃ ambient.

2.5 AC 漏电流/Ac Leakage Current:

当输入电压 240Vac 时,最大漏电流为 0.25mA.

0.25mA Max.At240Vac input

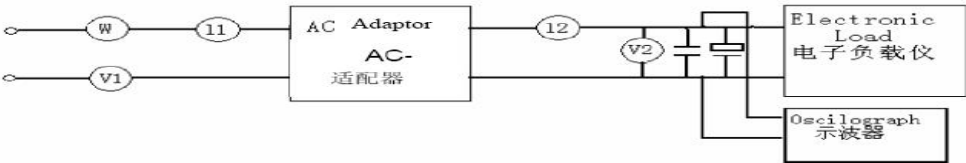
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3.0 输出特性/OUTPUT CHARACTERISTICS:

3.1 输出电压电流/Output voltage and current

输出电压 Output Voltage		输出电流 Output current	最小负载 Min. Load	额定负载 Rated. Load	满载电压 Full load Voltage	输出功率 Output power
PD(Cable)	5V	3A	0	3A	4.75-5.35V	30W MAX
	9V	3A		3A	8.45-9.45V	
	12V	2.5A		2.5A	11.4-12.6V	
	15V	2A		2A	14.5-15.6V	
	20V	1.5A		1.5A	19-20.8V	
QC(USBA)	5V	3A	0	3A	4.75-5.35V	30W MAX
	9V	3A	0	3A	8.45-9.45V	
	12V	2.5A	0	2.5A	11.4-12.6V	
	20V	1.5A	0	1.5A	19-20.8V	
PD+QC	5V	3A	0	3A	4.75-5.35V	15W MAX
PPS	5-11V	3A	0	3A	5-11V	30W MAX
	5-16v	2A	0	2A	5-16V	

3.2 电气特性,/测试电路 Electrical Characteristic/ Test Circuit



3.3 纹波和噪音 Ripple and Noise:

测试条件:在额定电压及额定负载条件下,使用示波器带宽为 20MHz 连接到充电器的输出端,同时输出端并联一个 10uF 的电解电容和一个 0.1uF 的瓷片电容.

Under nominal voltage and nominal load,the ripple and noise are as follows when measure with Max.Bandwidth of 20MHz and Parallel 47uF/0.1uF,crossed connected at testing point.

电压	最大纹波/最大噪音
Voltage	Ripple and Noise(Max.)
+5V-20Vdc	200mV p-p

3.4 启动延迟时间/Turn on delay time:

当输入 110Vac 和输出最大负载时,最大启动时间为 2S. 2Second Max.at 110Vac input and output Max.load.

3.5 上升时间/Rise time:

当输入 110Vac 和输出最大负载时最大时间为 80 mS. 80 mS Max.at 110Vac input and output Max load

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3.6 保持时间/Hold up time 当输入 110Vac 和输出最大负载时,最小保持时间为 5 mS .

5 mS Min.at 110Vac input and output Max.Load.

3.7 效率/Efficiency:

当输入 110ac/230Vac 和输出最大负载时,最小 86%.

87% Min. at 110Vac/230vac input and output Max.Load.

3.8 过冲/Overshoot:

在电源开启或关闭的时候,最大 15%.

15% Max.When power supply at turn or turn off.

4.0 保护功能/PROTECTION FUNCTION:

4.1 短路测试/Short circuit test:

该电源供给器在短路解除时能正常工作恢复.

The power supply will be auto recovered when short circuit faults remove.

4.2 过流保护/Over current Protection:

过流 3.8A &5V Max 故障排除后,电源将自动恢复正常工作.

The power supply will be auto recovered when over current 3.8A&5V Max faults remove.

4.3 过压保护/Over Voltage Protection:

当输出电压超过额定电压的 130%~150%时,电源将保护,故障排除后能恢复正常工作.

The power supply will auto recovered when faults remove 130%~150%.

5.0 环境要求/ENVIRONMENTAL REQUIREMET:

5.1 工作温度/Operating Temperature:

0°C-25°C,满载,正常工作.

0°C to 25°C,Full load, Normal operation.

5.2 储藏温度/Storage Temperature:-20°C to 80°C

带外壳/With package

5.3 工作湿度/Relative Humidity:

5%(0°C)~90%(40°C),72 小时,满载,正常工作.

5%(0°C)~90%(40°C)RH,72Hrs,Full load, Normal operating.

5.4 振动/Vibration:

1. 测试标准:国际电工电子委员会

Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm

加速度(9~200Hz,Acceleration 5m/S2)

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2. 运输/Transportation:

IEC 721-3-2 2M2

5-9Hz,A=3.5mm

9~200Hz,加速度 Acceleration=5m/S²

200~500Hz,加速度 Acceleration=15m/S²

3. 轴向振动/Axes,10 cycles per axis.

在测试过程中不能出现永久性的损坏.

No permanent damage may occur during testing.

在电源开启和关闭后,样机能够恢复到最初条件.

The SAMPLE has to restore to its original situation after power off/on..

5.5 跌落试验/Dropping Packed:

插墙式跌落高度为 1000mm、桌面式跌落高度为 1000mm;

1000mm for wallmount type and 1000mm for desktop type as above described;

测试台面是厚 13mm 的夹木板,离地面高 19-20mm

The horizontal surface consists of hardwood at least 13mm thick, mounted on two layers of plywood each 19mm to 20mm thick,all supported on a concrete or equivalent non-resilient floor.

6.0 安全及 EMI 要求/SAFETY AND EMI REQUIREMENT:

6.1 安全: 符合标准 CB,CE,ROHS,ERP, KC,FCC,CCC,UL/ETL (IEC 60950,IEC62368,GB4943)

Meet:CB,CE,ROHS,ERP, KC,FCC,CCC,UL/ETL

6.2 高压/DIELECTRIC STRENGTH Hi-Pot:

初级对次级/Primary to secondary:3000VaC/5mA/10S for type test.

6.3 绝缘抗阻/Insulation resistance:

初级对次级/Primary to secondary:100MΩ min at 500V DC.

6.4 爬电距离≥6.3mm

6.5 EMI 标准/EMI STANDARD

Meets the Limits of/测试符合

<1>.Fcc part15 class B rules

<2>.EN62368 class B rules

<3>.GB9254-1998,GB17625.1-2003

<4>.GB9706.1-2007, (参考标准)

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7.0 结构外观/MECHANICAL OUTLOOK DRAWING:

7.1 外观



8.0 输入接口/Input connector:

8.1 EU ,US ,KR,UK,CN plug

9.0 输出线/Output cable

9.1 拉线寿命: 10000 次 The service life of the pull wire is 10000 times

9.2.拉线力度: 5kg Pulling wire force: 5 kg

10.重要安全警告/Safety Warnings

10.1 禁止暴力拉扯，斜拉或突然猛拉线体/It is prohibited to pull the wire violently, pull it obliquely or pull the wire body suddenly and vigorously.

10.2 不当操作可能导致/ Improper operations may lead to:

线体断裂;内部结构损坏; 产品故障/Breakage of the wire body; damage to the internal structure; product malfunction.

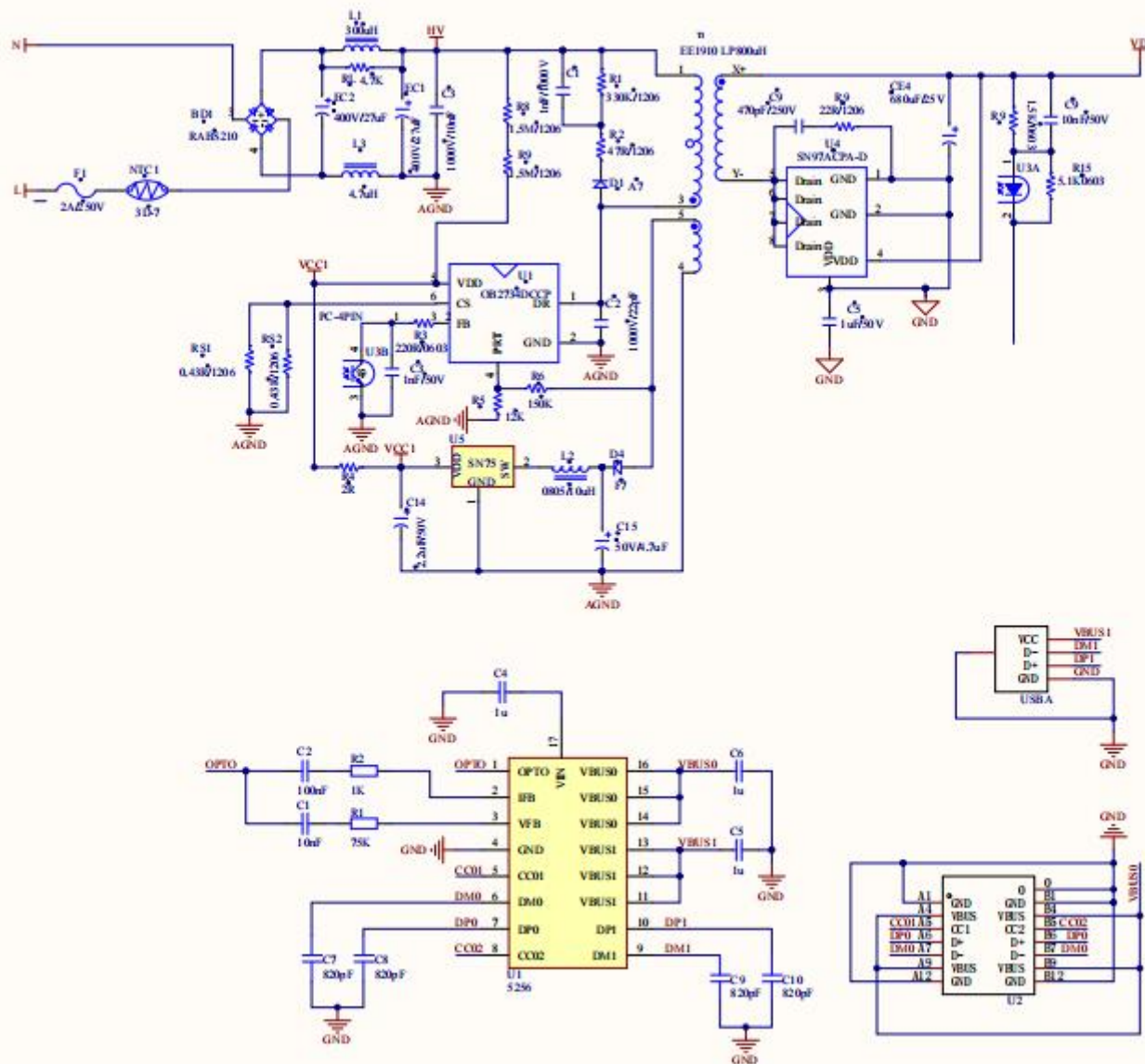
11.0 包装说明/PACKING

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12.0 测试报告/ELECTRICAL TEST REPORT:

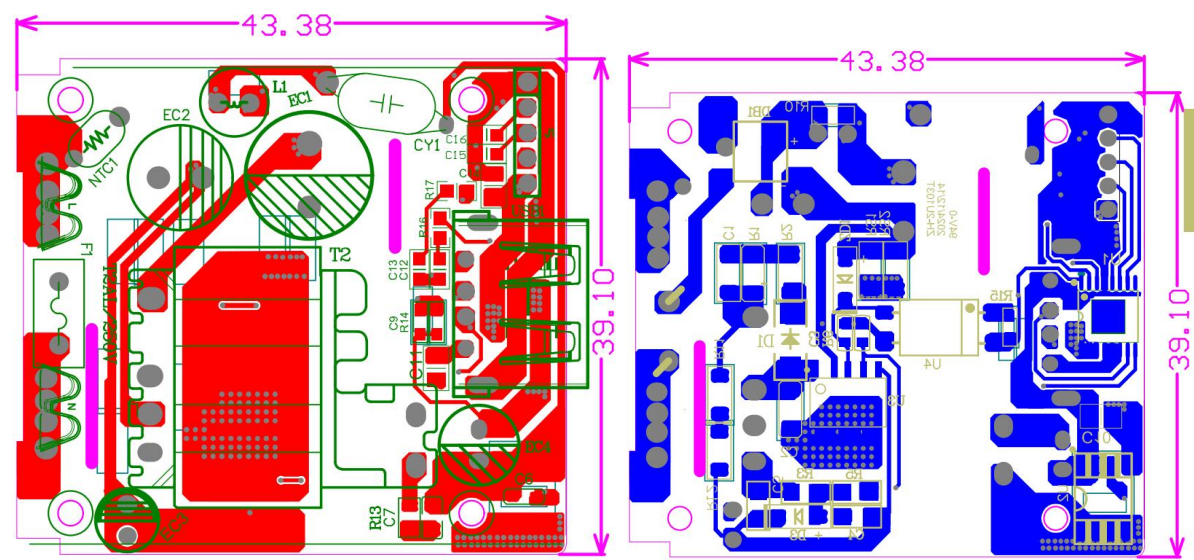
No 序号		Test condition 测试条件		Standard spec 标准规格	Test data 测试数据					Unit 单位	Judg e 判定
					1	2	3	4	5		
1	Test item 测试项目	PD	5V/0-3A	5V±0.35/3A	4.8	4.85	4.81	4.82	4.8	V	PASS
2			9V/0-3A	9V±0.45/3A	8.78	8.8	8.85	8.78	8.80		
3			12V/0-2.5A	12V±0.6/2.5A	12.08	12.21	12.05	11.98	11.96		
			15V/0-2.0A	15V±0.6/2.0A	15.11	15.28	15.16	15.18	15.3		
			20V/0-1.5A	20V±0.6/1.5A	20.14	20.4	20.32	20.18	20.4		
4		QC	5V/0-3A	5V±0.25/3A	5.09	5.08	5.1	5.13	5.2		
5			9V/0-3A	9V±0.45/3A	9.14	9.14	9.12	9.09	9.16		
6			12V/0-2.5A	12V±0.6/2.5A	12.18	12.23	12.17	12.2	12.2		
			20V/0-1.5A	20V±0.6/1.5A	20.20	20.4	20.3	20.22	20.3		
		PPS	3.3-16V2A	3.3-16V2A	3-16.2V						
			3.3-11V3A	3.3-11V3A	3-10.9V						PASS
7	Output power 输出功率	30W		30W MAX							PASS
8	Efficiency(Full load) 效率满载	Vin 115Vac 60Hz 输入 115Vac 60Hz		≥87%	89	89	89	89	89	%	PASS
9	Ripple&Noise mVp-p 纹波&杂讯	Vin100Vac 60Hz Full load 输入 100Vac 60Hz 满载		200mVp-p Max	72	80	100	85	92	mVp-p	PASS
10	Line Regulation 线性调整率	Vin=100V~240V Io=Rated Current 额定电流		/	/	/	/	/	/		PASS
11	Standby Power 待机功耗	Vin 115Vac 60Hz Io=0 输入 115Vac 60Hz		0.1W max	0.1	0.1	0.1	0.1	0.1	W	PASS
12	Short Circuit Protection/短路保护	The input power shall decrease when the output is short to GND, the power supply shall not damage, and shall be self-recovery when the fault condition is removed 当输出对地短路时,产品输入功率降低且不会损伤,当短路情况解除后,品将会自动恢复正常									PASS
13	OCP 过电流保护	Vin100Vac 60Hz 输入 100Vac 空载		3.8A Max&5V	3.67	3.61	3.63	3.68	3.7	A	PASS
14	Turn - on Delay Time/ 开机延迟时间	Vin100Vac 60Hz 输入 100Vac 空载		3S	2	2	2	2	2	S	PASS
15	Hold-up Time/关机维持时间	5msmin full load			8	8	8	8	8	ms	PASS
16	Hi-pot test 高压测试	高压/DIELECTRIC STRENGTH Hi-Pot:初级对次级/Primary to secondary:3000Vac/5mA/10S for type test			ok	ok	ok	ok	ok	ok	PASS
17	Burn in 老化	Input:110Vac/50Hz Full Load 4hrs 输入 110Vac/50Hz 满载 4 小时			ok	ok	ok	ok	ok	ok	PASS
18	Insulation resistance 绝缘阻抗	≥100M Ω			ok	ok	ok	ok	ok	ok	PASS
19	Temperature (CASE Surface) 温升	<77℃									
20	Drop test 跌落	Heigh:1m Three*fases(once on each plane) 高 1 米,6 个面,每面 1 次.			/	/	/	/	/	/	PASS
21	Vibration 振动	10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z 扫描频率: 10 to 300Hz, 加速度: 1.0G(位移: 3.5mm), X, Y, Z 三垂直坐标轴向各振动 1 小时			/	/	/	/	/	/	/
22	Appearance 外观				ok	ok	ok	ok	ok	ok	PASS
23	Packing 包装				ok	ok	ok	ok	ok	ok	PASS

13.0 原理图：ELEMENTS DRAWING:



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14.0 PCB 丝印图/PCB SILK-SCREEN DRAWING:



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15.0 安规证书/ SAFETY CERTIFICATE
CB,CE-LVD, CE-EMC, CCC