

闻亭信息

The IIOWT logo, consisting of the letters "IIOWT" in a bold, sans-serif font, enclosed within a rectangular border.

产品规格书

上海闻亭信息技术有限公司

www.iiowt.com

Specification of IIOWT Validation version

IIOWT 验证板规格书

Part Number: IIOWT-3505L2

Product Spec.: 35*5-L2

Prepared 拟制	Checked 审核	Approved 批准
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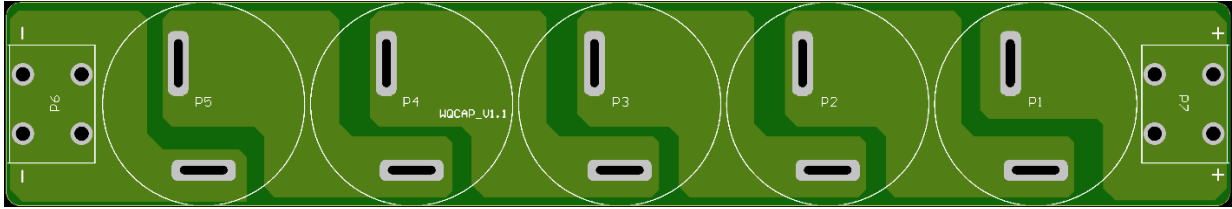
AMENDMENT RECORDS

修改履历

Ver. No. 版本	Description 内容	Date 日期	Checked 审核
WT00	Initial Release	30/11/2019	耿梦梵

1. General Characteristics/一般特性

器件面:



上图方框和圆圈标识为器件分布区

本方案适用于本公司的直径为35毫米的L型电容器，两端采用大电流接线端子以方便本验证模组的串联和并联。两端正负极标识仅适用我司产品。

本方案为采用电容本体自主均压，无外部均压部件。

自主均压电压建议如下（下表适用于5个单体全部安装的状态）

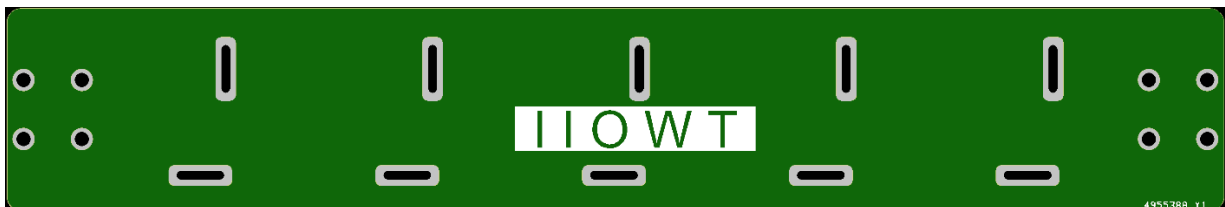
单体电压	建议电压	电压上限	击穿电压
2.7V	12.5V	13.5V	14.25V
3.0V	13.5V	15.0V	16.25V

电容单体及接线端子购买链接:

名称	型号	立创编号	商城链接
3V 600F	WTR3V0600FZ-3570L2	C701354	https://item.szlcsc.com/737588.html
2.7V 400F	WTR2V7400FZ-3560L2	C879297	https://item.szlcsc.com/939354.html
2.7V 600F	WTR2V7600FZ-3570L2	C879298	https://item.szlcsc.com/939355.html
接线端子	DG135T-10.16-02P	C708738	https://item.szlcsc.com/746471.html

下图图标识“IIOWT”字符的为焊接施工面。

焊接面:



本方案可以通过两端的接线端子对制成模组进行串联和并联，便于维护。操作时请严格按照各部件说明书（规格书）使用。

注意事项和使用指导 **Handling Precautions and Guidelines**

For safety application, please contact IOWT directly for any technical specifications, handling precautions and guidelines critical to application.

为安全起见，当设计的设备需要使用电容器时，请与闻亭信息直接联系咨询技术规格、安装注意事项和使用要求。

1.1 Precautions 注意事项

(1) Prohibition of disassembly 禁止拆卸

The disassembling may generate internal short circuit in the cell, which may cause gassing, leakage, explosion, or other problems.

拆卸电容会导致内部短路，可能导致产气，泄漏，爆炸或其他问题。

Electrolyte is harmful: In case the electrolyte comes into contact with the skin, or eyes, physicians shall flush the electrolyte immediately with fresh water and medical advice is to be sought.

电解液是有害的：如果电解液接触到皮肤或眼睛，应立即用清水冲洗并寻求医生的治疗。

(2) Prohibition of dumping of cells into fire 禁止将电容投入火中

These may cause explosion of the cells, which is very dangerous and is prohibited.

这可能会导致电容爆炸，这是非常危险的，是被禁止的。

(3) Prohibition of cells immersion into liquid 禁止将电容浸入液体

The cells shall never be soaked with liquids such as water, seawater, drinks such as juices, coffee or others.

电容不能用水、海水、果汁、咖啡或其他饮料等液体浸泡。

(4) Prohibition of use of damaged cells 禁止使用损坏的电容

The cells might be damaged during shipping by shock. If any abnormal features of the cells are found such as damages in the cell package, smelling of an electrolyte, an electrolyte leakage and others, the cells shall never be used any more.

在运送过程中，电容可能因受到冲击而损坏。如果发现电容有任何异常情况，如包装破损、电解液气味、电解液泄漏等，请勿使用该电容。

The Cells with a smell of the electrolyte or a leakage shall be placed away from fire to avoid firing or explosion.

有电解液味道或泄漏的电容应放置在远离火的地方，以避免起火或爆炸。

1.2 Handling Guidelines 使用指导

(1) It is not suitable that cell is used under such conditions: AC circuit and wave filtering.

不可以用于以下场合：交流电路和滤波电路。

(2) Work voltage of cell should not exceed Max. work voltage of cell during using. Otherwise, will shorten shelf life, even cause swelling, leakage or crack.

电容的工作电压不应超过电池额定最高工作电压。否则，会导致缩短使用寿命，甚至引起气胀、泄漏或开裂。

(3) Please check the polarity before using. If working under reverse polarity, cell will not only shorten shelf life, but also heavy damage, such as swelling, electrolyte leakage etc.

使用前请检查极性。如果在反极性下工作，电容不仅会缩短使用寿命，甚至还会造成严重的损坏，如气胀、电解液泄漏等。

(4) Environment 环境

Work temperature will have an influence on shelf life of cell. As usual, higher work temperature will shorten shelf life. So, it is better that cell works under as possible as low environmental temperature.

工作温度会影响电容的使用寿命。通常，较高的工作温度会缩短使用寿命。因此，最好是在低环境温度下工作。

Work temperature of cell should consider internal work temperature in the unit and temperature rise when cell works.

电容的工作温度应考虑机组内部工作温度和电容工作时的内部温升。

(5) IR drop IR 下降

When main power sources shut down, cell will change into work mode from failure mode, at the same time, OCV will decrease due to IR drop. So please choose proper product type according to impedance specified in product datasheet and applied current.

当主电源关闭，电容会从电源失效检测模式转变为后备电源工作模式，此时由于瞬间启动电流和电容内阻会导致开路电压下降。因此，请根据产品规格书和应用电流中指定的阻抗选择合适的产品类型。

(6) Cells in series connection 串联连接的电容

When cells in series connection for higher work voltage, it should be assured that work voltage of any single cell must not exceed Max. work voltage of single cell, otherwise, will shorten shelf life, even cause swelling, leakage or crack.

当多个单体电容串联使用以提高工作电压时，应保证每个电容的工作电压不得超过电容的

最大工作电压，否则会缩短寿命，甚至引起气胀、泄漏或开裂。

(7) Soldering 焊接

Manual Soldering: The recommended temperature of the soldering rod tip is less than 350 °C and the soldering duration should be less than 4 seconds. Minimize the time that the soldering iron is in direct contact with the terminals of the capacitor, as excessive heating of the leads may lead to higher ESR.

手工焊接：推荐的钎头温度低于 350 °C，焊接时间不超过 4 秒。尽量缩短烙铁与电容器端子直接接触的时间，因为引线过热可能导致更高的 ESR。

Reflow Soldering : Do not use reflow soldering, infrared or convection methods on EDLC.

回流焊：不要在 EDLC 上使用回流焊、红外线或对流方法。

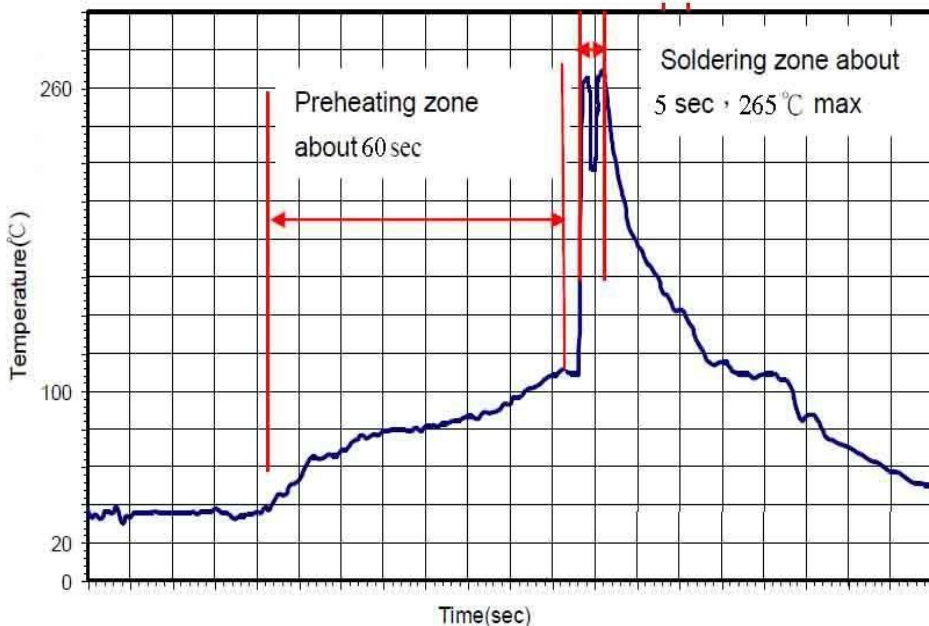
Wave Soldering : Use a maximum preheating time of 60 seconds for PC board 0.8mm or thicker. Preheating temperature should be limited to less than 100 °C.

波峰焊：对于 0.8 毫米或更厚的 PC 板，最长预热时间为 60 秒。预热温度应限制在 100 °C 以下。

Use the following table for wave soldering on leads only:

仅在导线上使用下表进行波峰焊接：

Soldering Bath Temperature(°C)	Recommended Solder Exposure (s)	Maximum Solder Exposure(s)
220	7	9
240	7	9
250	5	7
265	3	5



(8) Storage 存储说明

It is recommended that EDLC be stored at ambient temperature of 5°C to 35°C and a relative humidity of 75% or below.

建议 EDLC 保存在环境温度 5°C~35°C，相对湿度 75%或以下。

If the product has not been used for 2years or more, please confirm the product performance or contact us before use, as its characteristics may have been affected by environmental conditions.

如果产品放置 2 年或 2 年以上未对其施加电压，请在使用该零件前确认产品性能或者与我们联系，因为其特性可能受到环境条件的影响。

www.iiowt.com

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