



# 产品承认书

|      |                        |
|------|------------------------|
| 产品代码 | LHF222M2A2550CZVG2S00  |
| 产品系列 | CD294                  |
| 产品规格 | 100V2200uF(-20%~ +20%) |
| 产品尺寸 | 25*50                  |

|    |            |      |    |     |
|----|------------|------|----|-----|
| 客户 |            | 供    | 拟制 | 吴洁  |
| 品名 | 铝电解电容器     | 星晨科技 | 批准 | 耿国瑞 |
| 型号 | CD294      | 工程   | 确认 |     |
| 日期 | 2023年4月23日 | 部    | 批准 |     |

盐城星晨科技有限公司

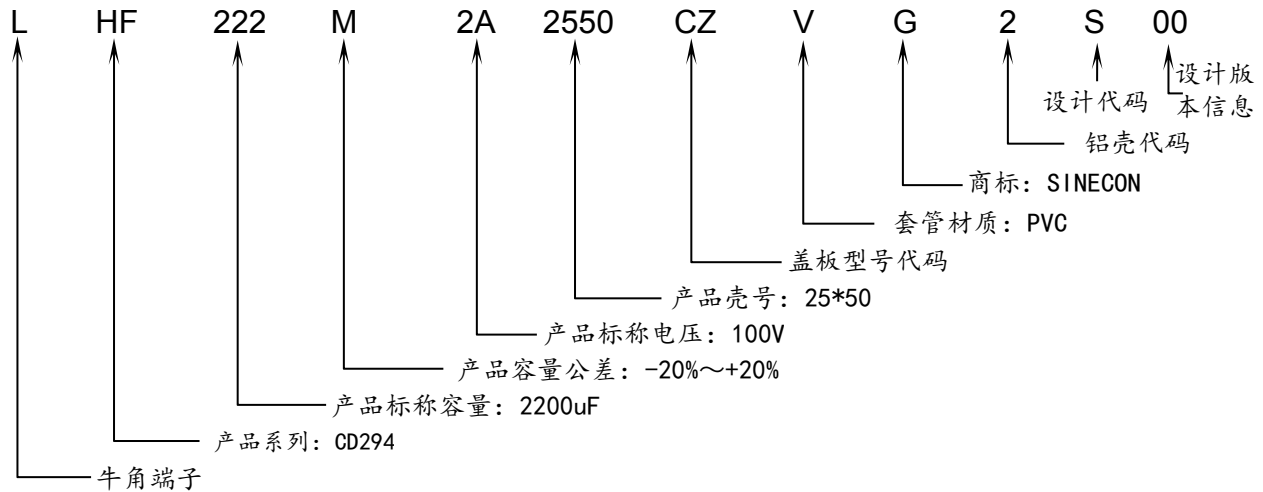
YANCHENG XINGCHEN TECHNOLOGY CO., LTD.

### 1、适用范围

本规格书适用于盐城星晨科技有限公司 105°C 2000h系列电解电容器产品的规定。

The product specification is adapted to 105°C 2000h series Aluminum Electrolytic Capacitors of YANCHENG XinGChen Technolog

### 2、部品编号 Part Number System LHF222M2A2550CZVGS00



### 3、电气特性 Electrical characteristics (表1)

| 额定电压<br>Rated Voltage<br>(V.D.C)        | 浪涌电压<br>Surge Voltage<br>(V.D.C) | 额定容量<br>Rated Capacitance<br>(uF) | 容量偏差<br>Capacitance Tolerance<br>(%) | 损耗角正切<br>Dissipation Factor (Max)<br>(%) | 等效串<br>联电阻(典型<br>值)<br>Typ ESR<br>(mΩ) | 漏电流<br>Leakage Current<br>(mA, MAX)<br>5min | 额定纹波电流<br>Rated ripple<br>current (A)<br>120Hz 105°C |
|---|----------------------------------|-----------------------------------|--------------------------------------|--|--|---|--|
| 100V                                    | 125V                             | 2200                              | -20 ~ +20%                           | 0.15                                     | 88.0                                   | 1.4   | 1.85   |
| at 120Hz 20°C                           |                                  |                                   |                                      |  |  |   |  |
| 气候类别 Environmental Category: 40/105 /21 |                                  | 工作温度 -40/+105°C                   |                                      | 储存条件                                     |  | 温度≤35°C;湿度≤75%RH                            |  |

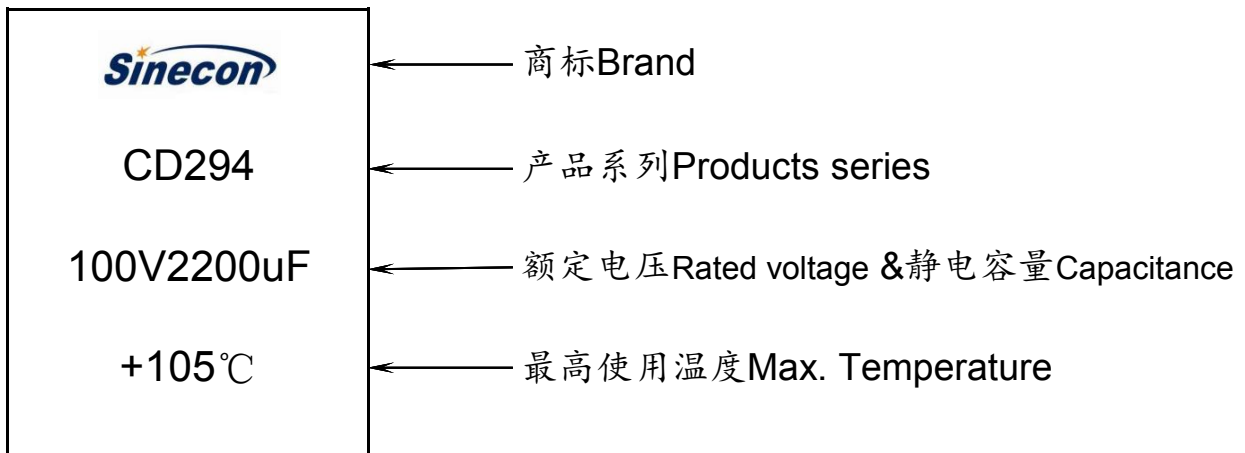
### 4、性能特性 Specifications

| No. | 项目 Item  | 特性 Characteristics   |
|-----|--|--|
| 1   | 外观检查<br>Visual examination, marking(Non-Destructive) | 外观: 无任何异常<br>Appearance: no remarkable abnormality   |
| 2   | 外形尺寸<br>Dimensions (Non-Destructive)                 | 见外形图<br>See to dimensions  |
| 3   | 漏电流<br>Leakage current (Non-Destructive)             | 见表1<br>See to table 1  |
| 4   | 容量<br>Capacitance (Non-Destructive)                  | 见表1<br>See to table 1  |
| 5   | 损耗角正切<br>Tangent of the loss angle(Non-Destructive)  | 见表1<br>See to table 1  |
| 6   | 振动<br>Vibration                                      | 频率范围Frequency range: 10-55Hz<br>振幅: 0.75mm Total Amplitude: 0.75mm<br>条件: X.Y.Z 方向各2 小时<br>Direction and duration of vibration: 3 orthogonal directions mutually each for 2 hours Total 6 hours<br>静电容量测试时无接触不良, 断线及短路, 端子无机械损伤<br>Capacitance: During the test, measured value to be stabilized Appearance: No remarkable abnormality<br>静电容量变化: 初始值的-5~+5%以内<br>Capacitance change: Within -5~+5% of the initial value   |
| 7   | 稳态湿热<br>Dump heat                                    | 温度: 40±2°C 湿度: 90-95%Rh 时间: 21 天<br>Test Temperature :40±2°C Relative Hwmidity:90-95%Rh Test time: 21 天<br>试验后常温放置1-2 小时<br>To expose in the atmospheric condition for 1 to 2 hours after completion of test<br>漏电流: 不超过规定值<br>Leakage current: Not more than the specified value<br>静电容量变化: 初始值的-10~+10%以内<br>Capacitance change: Within -10~+10%of the initial value<br>损耗角正切: 不超过规定值<br>Dissipation Factor: Not more than the specified value<br>绝缘电阻 (使用金属箔法): 大于100MΩ<br>Insulation Resistance (Using metal foil): ≥100MΩ |

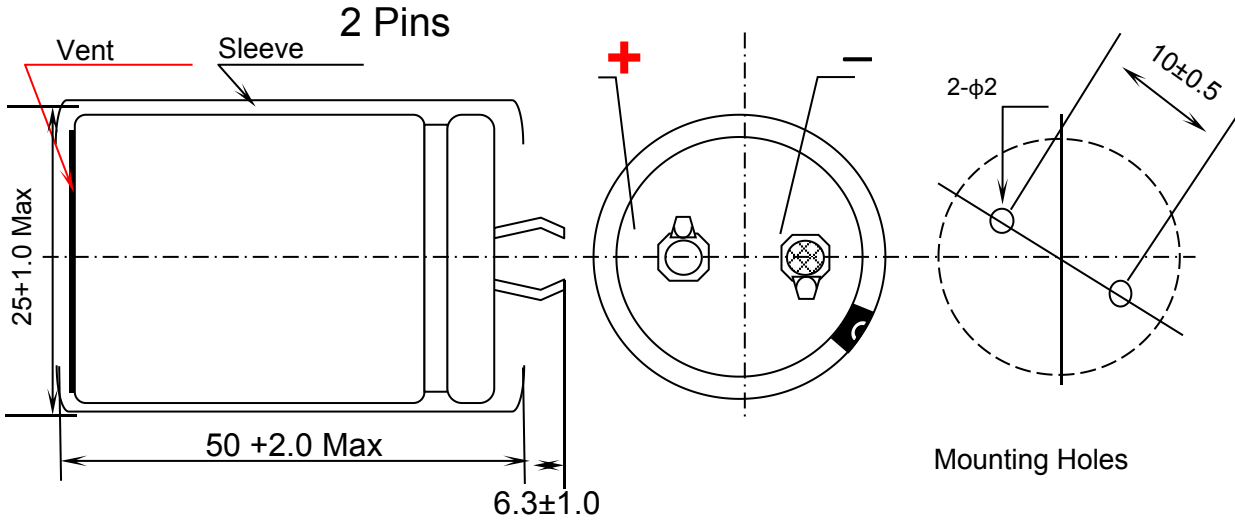
## 续表

| No. | 项目 Item  | 特性 Characteristics   |
|-----|--|--|
| 8   | 耐久性Endurance 105℃                                    | 时间(Time): 2000 h<br>电压: 额定电压 (叠加规定纹波电流) 试验后常温放置16h 测定<br>Applied Voltage: maximum value of DC voltage overlapped by an allowable ripple current.<br>The capacitors shall then be removed from the test chamber and stabilized at room temperature for 16 hrs. after.<br>漏电流: 不超过规定值<br>Leakage Current: Not more than the specified value<br>电容量变化: 初始值的-20~+20%以内<br>Capacitance change: within -20~+20% of the initial value<br>损耗角正切: 不超过规定值的2.0 倍<br>Dissipation Factor: Not more than 200% of the specified value                             |
| 9   | 浪涌<br>Surge  | 施加电压: 125VVDC 温度: 105±3℃<br>Test Voltage Test Temperature<br>周期: 6±0.5min 30±5sec 充电<br>A period: 6±0.5min(charging for 30±5sec)<br>充电电阻: 1000W 回数: 1000 times<br>Series protective resistance The number of times<br>漏电流: 不超过规定值<br>Leakage Current: Not more than the specified value<br>电容量变化: 初始值的±15%以内<br>Capacitance change: within ±15% of the initial value<br>损耗角正切: 不超过规定值的1.75 倍<br>Dissipation Factor: Not more than 175% of the specified value  |
| 10  | 压力释放<br>Pressure relief                              | 电容器上加 10A 逆向直流电, 防爆壳正常作动, 无金属片飞散, 起火, 爆炸。<br>The capacitor is shall be connected in inverse polarity, and applied DC current at 10A constant, The pressure relief device shall open in such a way as to avoid any danger of fire or explosion of capacitor   |
| 11  | 高温贮存<br>Storage at upper category temperature (105℃) | 时间(Time): 1000h<br>电压处理: 常温下电容器串联保护电阻(1KW), 加额定电压 30 分钟, 施加后放电, 常温放置16h<br>Condition: Following this period the capacitors shall be removed from the test chamber and be allowed to stabilize at room temperature. Next they shall be connected to a series limiting resistor (1KW), with DC.<br>漏电流: 不超过规定值<br>Leakage Current: Not more than the specified value<br>电容量变化: 初始值的±20%以内<br>Capacitance change: within ±20% of the initial value<br>损耗角正切: 不超过规定值的2.0 倍<br>Dissipation Factor: Not morn than 200% of the specified value GGS0712-16 |
| 12  | 绝缘耐压<br>insulation withstanding voltage              | 2500VAC 施加于短路的端子和套管之间, 1分钟不破坏<br>A voltage of 2500VAC is applied for one minute between the terminals shorted each other and the insulating sleeve covering the case, there shall not be damaged   |

## 5、标识 Marking

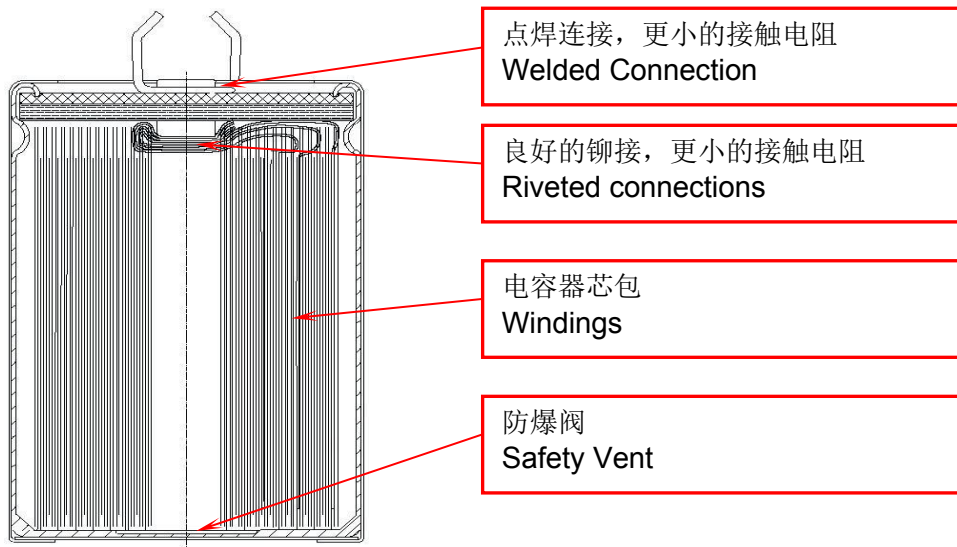


### 6、外型图 Dimensions

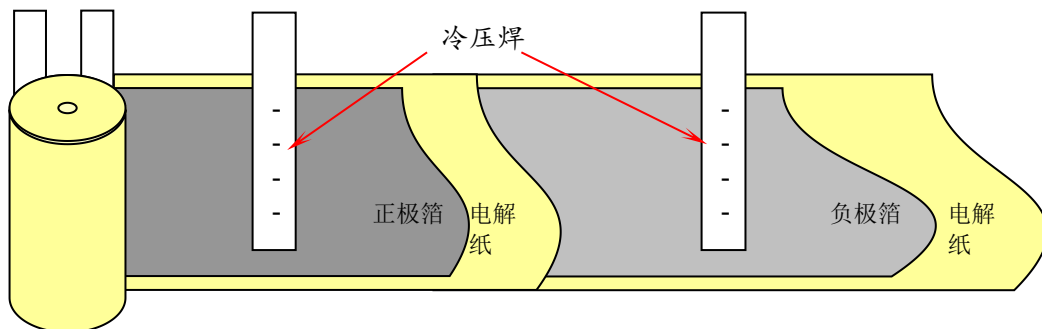


### 7、构造图及材料表(Frame drawing and material table)

7-1 构造图(Frame drawing)



7-2 工艺芯包分解图 (Element drawing)



7-3 材料表 (Material table)

| No | 构成部件 Parts         | 材质 Material                             | 厂家 Maker                                      |
|----|--------------------|---|---|
| 1  | 铝壳 Case            | 铝 Aluminum                              | 临安奥星 LINAN AOXING                             |
| 2  | 套管 Sleeve          | 聚氯乙烯 Polyvinyl                          | 苏州顺鹏 SUZHOU SHUNPENG                          |
| 3  | 封口板 End seal board | 组合盖板 Cover                              | 宁海天阳 NINGHAI TIANYANG<br>南通亚旺 NANTONG YAWANG  |
| 4  | 垫片 Bottom plate    | 聚氯乙烯 Polyvinyl                          | 新联电子 XINLIAN DIANZI                           |
| 5  | 隔离纸 Separator      | 电解电容器纸<br>Electrolytic Capacitors Paper | 浙江莱勒克 ZHEJIANG LAILEKE<br>浙江凯恩 ZHEJIANG KAIEN |
| 6  | 引线条 Lead Tab       | 铝 Aluminum                              | 飞乐天和 FEILE TIANHE                             |
| 7  | 正极箔 Anode Foil     | 铝 Aluminum                              | 新疆众和 XINJIANG ZHONGHE<br>东阳光 DONGYANGGUANG    |
| 8  | 负极箔 Cathode Foil   | 铝 Aluminum                              | 飞乐天和 FEILE TIANHE                             |
| 9  | 电解液 Electrolyte    | 有机溶剂 Organic Solvent                    | 自配<br>ZIPEI                                   |

8、纹波电流系数 Multiplier for ripple current

8-1 频率系数 Frequency Coefficient

| 频率(Hz)Frequency | 50   | 100(120) | 1K   | 10K  | ≥50K |
|-----------------|------|----------|------|------|------|
| 系数 Coefficient  | 0.95 | 1.00     | 1.13 | 1.18 | 1.25 |

8-2 温度系数 Temperature Coefficient

| 温度(°C)Temperature | 40  | 55  | 85  | 105 |
|-------------------|-----|-----|-----|-----|
| 系数 Coefficient    | 2.7 | 2.4 | 1.7 | 1.0 |

9、包装 Packaging

9-1 包装数 Packaging Quantity

电容器尺寸: 25\*50 579 只  
Capacitor case code: 25\*50 579 只

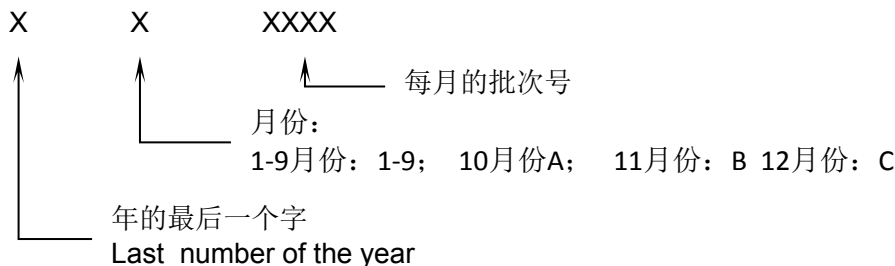
9-2 包装箱材质 Material of Packaging Box

瓦楞纸 Corrugated Cardboard

9-3 包装箱尺寸 Dimensions of Packaging Box

尺寸 Dimensions: 480\*300\*230 mm

10、生产日期的表示方法 Production date code



11、顾客特殊要求 The special requirement of customer

- 11-1
- 11-2
- 11-3
- 11-4