



東莞市威慶電子有限公司

DONGGUAN WEIQING ELECTRONIC CO., LTD

SPEC NO.:2021111804

REV:B

## 承認書

SPECIFICATION

客戶名稱(CUSTOMER) : 深圳立创商务电子有限公司

產品名稱(PRODUUCT NAME) : CBB21 薄膜电容

承認規格(APPROVE ITEM) : 103J/630V P=7.5MM

威慶料號(WEIQING PART NO.) : C312J103J07L230A60

樣品印字(SAMPLE PRINT) : CBB21/103J/630V

### 威慶確認表

WEIQING CONFIRM LIST

|             |         |          |
|-------------|---------|----------|
| APPROVED    | CHECKED | PREPARED |
| Base<br>工程部 | 陶贵能     | 何湘华      |

### 客戶承認結果

CUSTOMER ACKNOWLEDGE THE RESULT

地址：中國東莞松山湖高新技術產業開發區科技十路7號12棟

Add: 1<sup>st</sup> Floor Building 12, No.7 Tenth Road of Science & Technology, DongGuan SongShan Lake High-tech Industrial Development Zone China

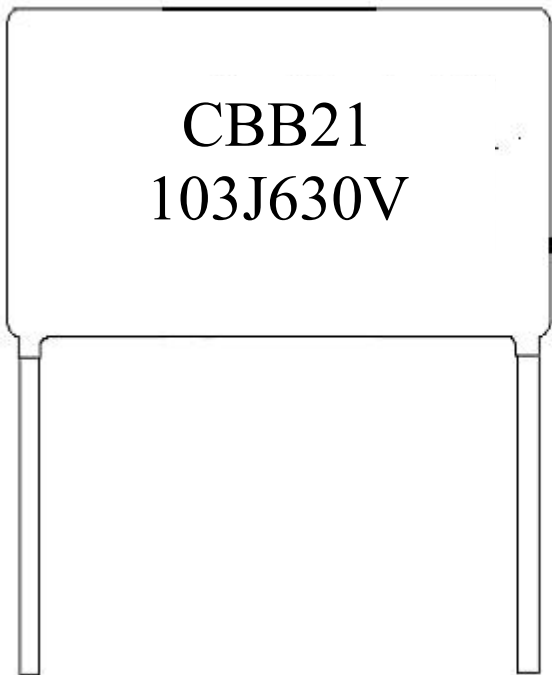
TEL : 0769- 88956188/88956198 FAX : 0769- 88956168

## 1. Specifications (IEC60384-16)

| No  | Test items                                   | Performance                                                                                           | Test Method                                                                                                                                           |
|-----|----------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-1 | Withstand voltage<br>(Between Terminals)     | Shall be no abnormality                                                                               | 100% Of Rated Voltage, 60sec.                                                                                                                         |
|     | Between terminal and<br>Enclosure            | Shall be no abnormality                                                                               | $UR \times 200\% + 1000VDC$ , 60sec.                                                                                                                  |
| 1-2 | Insulation resistance<br>(Between Terminals) | $CR \leq 0.33\mu F$ $IR \geq 15,000M\Omega$<br>$CR > 0.33\mu F$ $IR \geq 5,000 M\Omega \div C(\mu F)$ | Measured at $100 \pm 15VDC$ ,<br>For 60sec / $25^{\circ}C$                                                                                            |
| 1-3 | Capacitance                                  | Within the tolerance specified                                                                        | 1KHz, 1Vrms Max. at $25^{\circ}C$                                                                                                                     |
| 1-4 | Dissipation Factor                           | 0.001 (0.1%) Max.                                                                                     | 1KHz, 1Vrms Max. at $25^{\circ}C$                                                                                                                     |
| 1-5 | Tense Strength of<br>Terminal                | No wire breakage and No Damage of<br>Capacitor                                                        | 1. Load Force : 1.0 Kg<br>2. Holding Time : $10 \pm 1$ sec                                                                                            |
| 1-6 | Bending Strength of<br>Terminal              | No wire breakage and No Damage of<br>Capacitor                                                        | 1. Load Force : 0.5 Kg<br>2. Bending Time : $4 \times 90^{\circ}$ in 5sec                                                                             |
| 1-7 | Vibration                                    | (1) Appearance : No Visible Damage<br>(2) Contact : Normal                                            | a. Frequency change :<br>1min. per cycle 10~55~10Hz<br>b. Vibration distance : 1.5mm<br>c. course: X、Y、Z (axis)<br>d. Time : 2h / axis ( 6h in total) |

| No     | Test items          | Performance                                                                                                                                                                                               | Test Method                                                                                                                                                                                                              |
|--------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 - 8  | Solder-ability      | 95% Of The Surface Tinning                                                                                                                                                                                | a. Solder temperature: $270 \pm 5^{\circ}\text{C}$<br>b. Solder time: $2 \pm 0.5\text{sec}$                                                                                                                              |
| 1 - 9  | Heat Shock test     | (1) Appearance : No Visible Damage<br>(2) Withstand Voltage : Normal<br>(3) Capacitance Change : $\leq \pm 3\%$ of The Initial Value                                                                      | The terminal of capacitor shall be immersed in the melting solder.<br>a. Solder temperature: $270 \pm 5^{\circ}\text{C}$<br>b. Solder time: $3 \pm 0.5\text{sec}$<br>c. Test Voltage: 150% of The Rate Voltage For 1min. |
| 1 - 10 | Cold Resistance     | (1) Appearance : No Visible Damage<br>(2) Capacitance Change : $\leq 0 \sim -10\%$ of The Initial Value                                                                                                   | a. Test Temperature: $-40^{\circ}\text{C}$<br>b. Test Times: 2Hrs                                                                                                                                                        |
| 1 - 11 | Dry Heat Resistance | (1) Appearance : No Visible Damage<br>(2) Withstand Voltage : Normal<br>(3) Capacitance Change : $\leq +5 \sim -2\%$ Of The Initial Value<br>(4) Insulation Resistance:<br>$\geq 50\%$ of the rated value | a. TEST TEMPERATURE:<br>$105^{\circ}\text{C} \pm 2^{\circ}\text{C}$<br>b. Test Times: 2Hrs                                                                                                                               |

2. Marking:



|       |                                         |
|-------|-----------------------------------------|
| CBB21 | Metallized Polypropylene Film Capacitor |
| 103   | CAPACITANCE                             |
| J     | CAPACITANCE TOLERANCE                   |
| 630   | RATED DC VOLTAGE                        |
| V     | VOLTAGE SYMBOL                          |

3. PACKING:

| CAP  | R.V.   | Lead Style | L model-A section( ±3mm)<br>H.K.N.M model-A section<br>(±0.5mm) | P(±0.5mm) |
|------|--------|------------|-----------------------------------------------------------------|-----------|
| 103J | 630VDC |            |                                                                 | 7.5MM     |

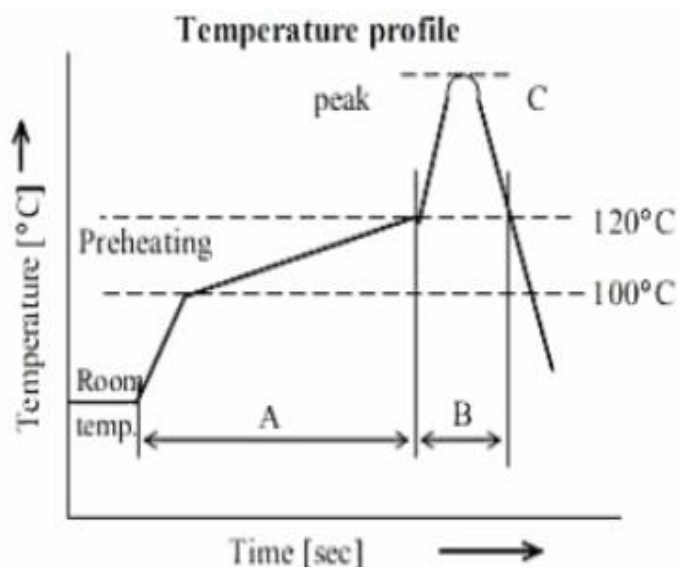
4.Storage conditions and duration

Packaged capacitors should be kept in clean, ventilated, dry coffers, not near the heat source, not subject to direct sunlight, is strictly prohibited and chemical reagents, acid and harmful gas storage together.  
Capacitor at a temperature within the range 20 ~ 25 °C, humidity less than 50% of the state of storage for one year.

## Lead Free wave soldering conditions

### Component: Film Capacitors

#### 1.Wave flow soldering



#### Recommendable condition

|   | Conditions           | Values    | Unit   |
|---|----------------------|-----------|--------|
| A | Heating time         | 50-100    | sec    |
|   | Heating temperature  | 100-120   | °C     |
|   | Temp. rise gradient  | 1-2       | °C/sec |
| B | Dipping time         | <10       | sec    |
| C | Peak temperature     | 260       | °C     |
|   | Peak-temp. hold time | Momentary | sec    |

#### 2.Requirement (Wave flow soldering):

Polypropylene film capacitors body temperature less than 105°C, 60sec

Polyester film capacitors body temperature less than 120°C, 60sec

此类薄膜系列电容在客户端过波峰焊操作时，绝对不能过回流焊和 2 次波峰焊，否则产品会因热收缩导致性能问题。

#### 3.Wave Flow soldering (solder dipping)

|                  |         |
|------------------|---------|
| Peak temperature | 260°C   |
| Dipping time     | <10 sec |
| Soldering        | 1 time  |

component for Insertion :Dipping to the lead joint of component

#### 4.Hand soldering

|                                |       |
|--------------------------------|-------|
| Soldering iron tip temperature | 350°C |
| Soldering time                 | 3 sec |