

# 承認書

## Samples approval sheet

客戶名稱 (Customer name) : \_\_\_\_\_

元件名稱 (Production name) : \_\_\_\_\_ 5730 藍色 0.5W

型 號 (Model) : \_\_\_\_\_ LS-5730-05UBC

編 號 (Part number) : \_\_\_\_\_

日 期 (Date) : \_\_\_\_\_ 2013-01-17

|                   |                  |                   |                     |
|-------------------|------------------|-------------------|---------------------|
|                   |                  |                   |                     |
| 編制<br>Prepared by | 審核<br>Checked by | 核准<br>Approved by | 市場部<br>Market Dept. |
| 陈钢                |                  |                   | 姚莉诗                 |

|                               |                  |                   |
|-------------------------------|------------------|-------------------|
| 客戶確認<br>CUSTOMER CONFIRMATION |                  |                   |
| 確認<br>Confirmed by            | 審核<br>Checked by | 核准<br>Approved by |
| 连承树                           |                  |                   |

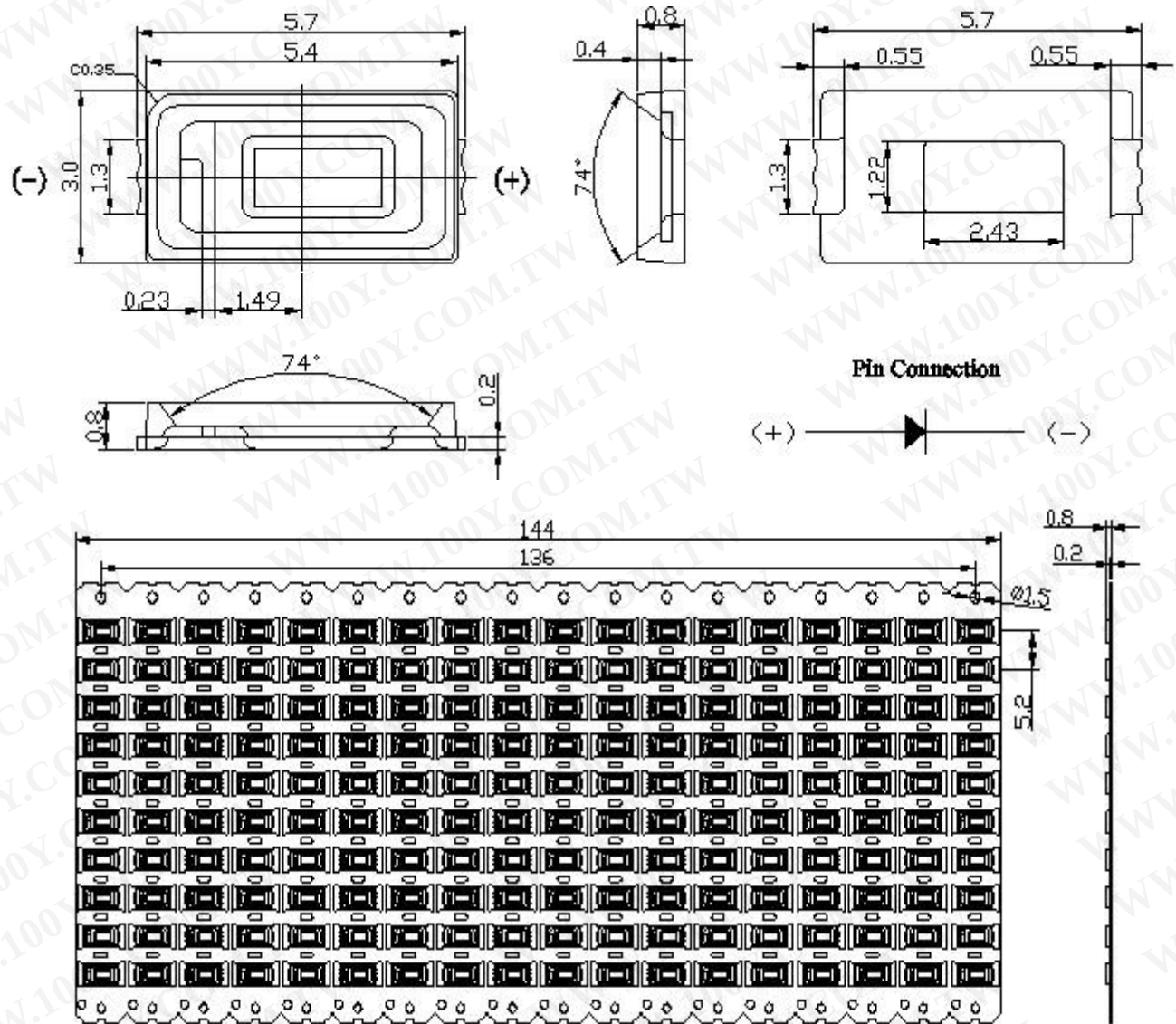
# 產品規格

型 號 Model :

LS-5730-05UBC

頁 碼 Page: 1/4

## 一、外形圖 Outline dimensions :



| 單位<br>Unit | 公差<br>Tolerance | 晶片品牌<br>Die material | 胶体顏色<br>Lens color | 發光顏色<br>Emission color |
|------------|-----------------|----------------------|--------------------|------------------------|
| mm         | ±0.2mm          | 三安                   | 透明                 | 藍色                     |

※備註：承認書之編號和型號可用于查詢，客戶如有需要，請提供相應的編號和型號。

Remark : P/N & Model in samples approval sheet can be used to inquire , please provide corresponding P/N& model if customer need .

# 產品規格

型 號 Model :

LS-5730-05UBC

頁 碼 Page : 2/4

## 二、光電參數 Photoelectricity Parameter

(環境溫度 Ambient temperature : 25℃ 濕度 humidity : RH60%)

| 項目<br>Item                        | 符號<br>Symbol     | 測試條件<br>Test condition | 最小值<br>Min | 典型值<br>Type | 最大值<br>Max | 單位<br>Unit |
|-----------------------------------|------------------|------------------------|------------|-------------|------------|------------|
| 正向電壓<br>Forward voltage           | VF               | IF=150mA               | 3.2        | —           | 3.4        | V          |
| 反向電流<br>Reverse current           | IR               | VR=5V                  | —          | —           | 10         | $\mu$ A    |
| 發光強度<br>Luminous intensity        | IV               | IF=150mA               | 10         | —           | 12         | LM         |
| 色溫/波段<br>Color Temperature        | CCT              | IF=150mA               | 460        | —           | 465        | nm         |
| 顯色指數<br>Color Rendering Index     | CRI              | IF=150mA               | —          | —           | —          | Ra         |
| 光譜半寬度<br>Spectrum line half width | $\Delta \lambda$ | IF=150mA               | —          | 60          | —          | nm         |
| 視 角<br>Viewing Angle              | $2\theta 1/2$    | IF=150mA               | —          | 120         | —          | deg        |

備註：亮度測試公差±15%、波長測試公差±1nm、正向電壓測試公差±0.05V

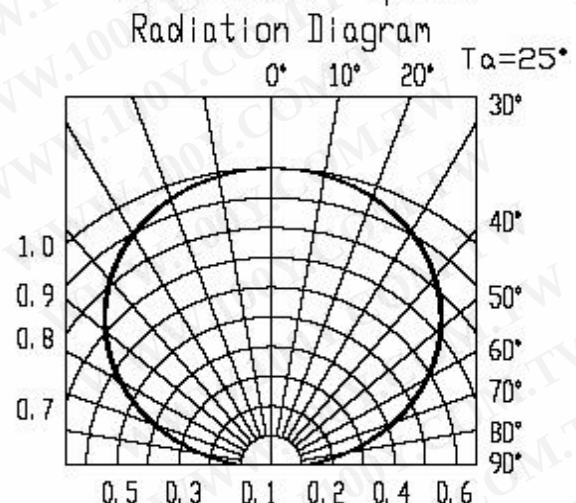
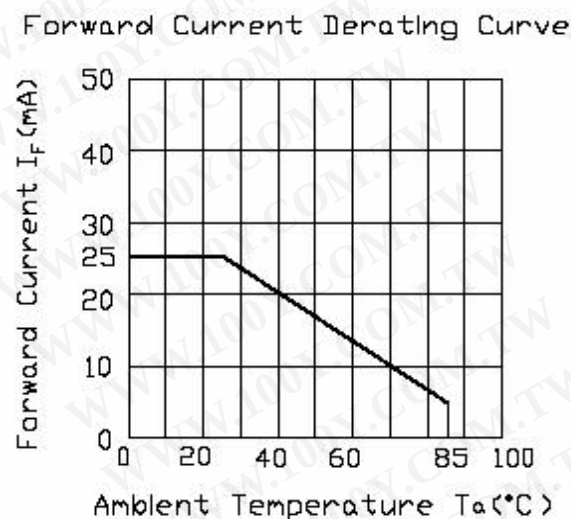
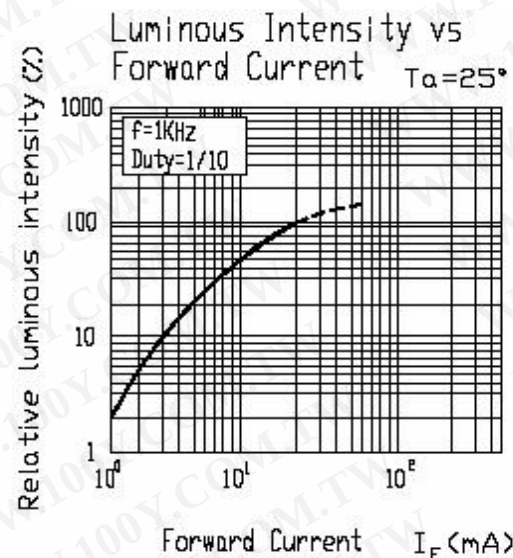
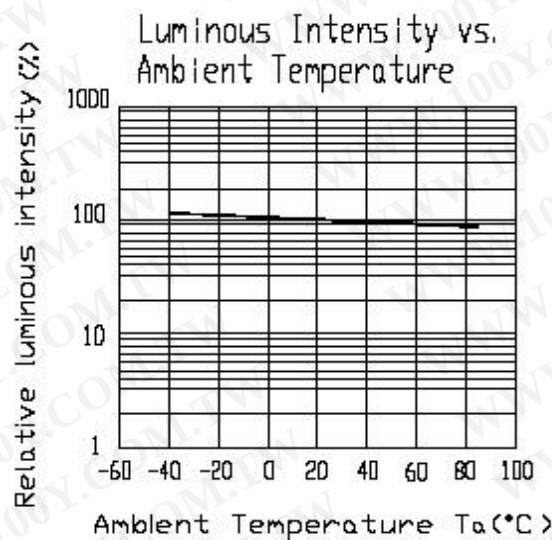
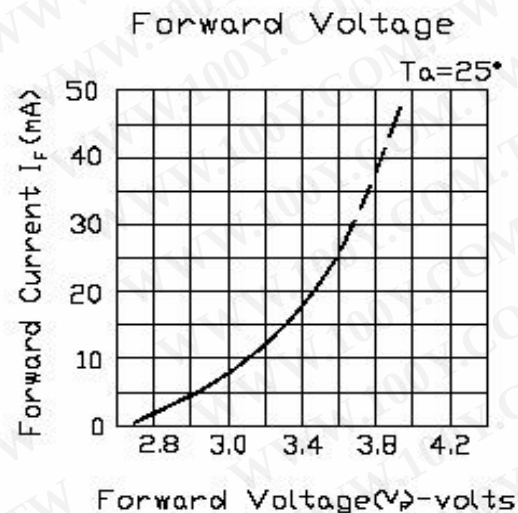
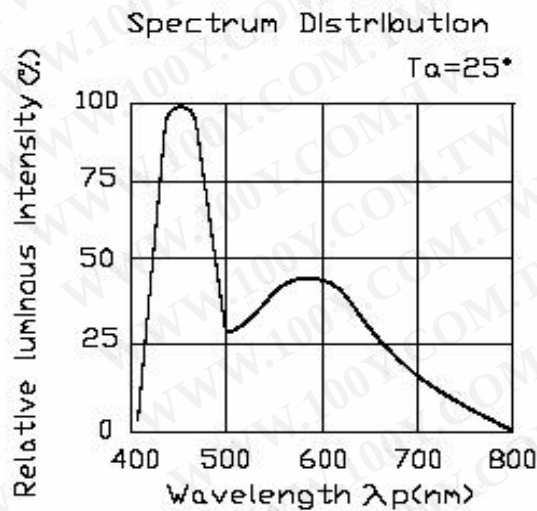
Remark : The tolerance of intensity:±15%, The tolerance of wave length:±1nm, The tolerance of forwards voltage: ±0.05V.  
Only reference for above data when testing.

## 三、極限參數 Absolute Maximum Rating

(環境溫度 Ambient temperature : 25℃ 濕度 humidity : RH60%)

| 項 目<br>Item                     | 符號<br>Symbol | 數值<br>Value | 單位<br>Unit | 備註<br>Remark                 |
|---------------------------------|--------------|-------------|------------|------------------------------|
| 正向電流<br>Forward Current         | IF           | 150         | mA         | ---                          |
| 正向峰值電流<br>Peck forward current  | IFM          | 200         | mA         | F=1KHZ, 占空比(duty cycle) 1/10 |
| 反向耐壓<br>Reverse Voltage         | VR           | 15          | V          | ---                          |
| 耗散功率<br>Power Dissipation       | Pm           | 500         | mW         | ---                          |
| 工作環境溫度<br>Operation temperature | Tamb         | -25 至 +80   | ℃          | ---                          |
| 貯藏溫度<br>Storage temperature     | Tstg         | +40 至 +60   | ℃          | ---                          |
| 焊接溫度<br>Soldering temperature   | Tsol         | 240         | ℃          | 焊接≤3S<br>Soldering≤3S        |

## 四、典型光電特性曲線圖 Typical photoelectricity characteristic curve chart



# 產品規格

型 號 Model :

LS-5730-05UBC

頁 碼 Page : 4/4

## 五、可靠性實驗項目 Reliability Test Project

| 描述<br>Description     | 項目<br>Item                                | 測試標準<br>Test criterion                              | 測試條件<br>Test condition                                           | 測試時間<br>Test time | 數量<br>Qty | 失效數量<br>Fail qty |
|-----------------------|-------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------|-------------------|-----------|------------------|
| 壽命測試<br>Life test     | 常溫壽命測試<br>Life test(room temperature)     | JIS7021:B4                                          | Ta=25°C±5°C , IF=60mA                                            | 1000Hrs           | 22        | 0                |
| 環境測試<br>Ambience test | 高溫存儲<br>High temperature store            | JIS7021:B10<br>MIL-STD-202:210A<br>MIL-STD-750:2031 | Ta=85°C±5°C                                                      | 1000Hrs           | 22        | 0                |
|                       | 低溫存儲<br>Low temperature store             | JIS7021:B12                                         | Ta=-35°C±5°C                                                     | 1000Hrs           | 22        | 0                |
|                       | 高溫高濕測試<br>High temperature/ humidity test | JIS7021:B11<br>MIL-STD-202:103D                     | Ta=85°C±5°C<br>RH=85%                                            | 1000Hrs           | 22        | 0                |
|                       | 冷熱衝擊測試<br>Cold / Heat strike test         | JIS7021::B4<br>MIL-STD-202:107D<br>MIL-STD-750:1026 | 30min<br>-10°C±5°C←→100°C±5°C<br>5min 5min                       | 50Cycles          | 22        | 0                |
|                       | 冷熱迴圈測試<br>Cold and heat cycle test        | JIS7021:A3<br>MIL-STD-202:107D<br>MIL-STD-705:105E  | 5min 5min 5min<br>-35°C~25°C~85°C~-35°C<br>30min 5min 30min 5min | 50Cycles          | 22        | 0                |

## 判斷標準 Judging criterion:

| 項目<br>Item         | 符號<br>Symbol   | 實驗條件<br>Experiment condition | 判斷標準<br>Criteria |                  |
|--------------------|----------------|------------------------------|------------------|------------------|
|                    |                |                              | Min.             | Max.             |
| Forward Voltage    | V <sub>F</sub> | I <sub>F</sub> =150mA        | ----             | Initial Datex1.1 |
| Reverse Current    | I <sub>R</sub> | V <sub>R</sub> =5V           | ----             | 30 μ A           |
| Luminous Intensity | I <sub>V</sub> | I <sub>F</sub> =150mA        | Initial Datex0.8 | ----             |