



工程文件 製訂 / 變更 通知單
 Engineer document formulated or modified Notice

| | |
|--------------------------|---------------|
| 文件編號: (Device Number) | CDLE-033-1539 |
| ECN# | |

| | | | | | | | |
|----------------------|-------------------|------------|-----------------------------------|------------|------------|---------|----------------|
| 文件名稱: (Model No.) | 333-2UBGC/S400-A4 | 版次 REV. | 原 1 版變更為--版 raw edition change | 日期 date | 2005年9月21日 | 頁數 page | 共6頁 total 6 |
|----------------------|-------------------|------------|-----------------------------------|------------|------------|---------|----------------|

文件制訂/變更內容描敘:(篇幅不足,請以另紙附上):
 document workout / revise content

| | | |
|--|--|--|
| 製訂項目 Workout Item: | 變更項目 Revise Item: | 處理方式 Disposition: |
| <input type="checkbox"/> 新產品 New product | <input type="checkbox"/> 材料變更 change material | <input type="checkbox"/> 舊材料處理方式 Old material |
| <input type="checkbox"/> 衍生機種 Serial device | <input type="checkbox"/> 製程變更 change process | <input type="checkbox"/> WIP WIP |
| <input checked="" type="checkbox"/> 新制訂規格 New specification | <input type="checkbox"/> 設備、治具 fixture、tool | <input type="checkbox"/> 舊庫存 old storage |
| | <input type="checkbox"/> 規格變更 change specification | |

文件製訂/變更理由:(請詳細說明): File formulating/modifying reasons:(Please detailed explain)

規格依據(Specification basis):
 此規格依據客戶需求制作(Specification basis formulate on the customer sheweichile
 工程編號(Engineer Number) 業務編號(Sales umber):

| 品保審核 chqa check | 台北研一部 rd1 confirm | 台北品保 qp confirm | 維護審核 R/M check | 資材部 chpc | 業務部 cm check | 人資部 Chpn | 制一部 chpd1 | 制二部 chpd2 | 制三部 chpd3 | 複 印 c o p y | 生技 chie | 資材 chpc | 工程一 chrd1 | 工程二 chrd2 | 制一 chpd1 | 制二 chpd2 | 制三 chpd3 | 制六 chpd6 | |
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| / | / | / | / | / | / | / | / | / | / | | / | / | / | 1 | / | / | / | / | / |
| 擬案人 Designer | 部門主管 Department Charger | 工程一 chrd1 check | 工程二 chrd2 check | 生技 chie | 制六部 chie | | | | | | 品保 chqa | 維護 R/M | 業務 CM | 人資 chpn | | | | | 台北 TP |
| | | | / | / | / | | | | | 1 | / | / | / | | | | | 1 | |



EVERLIGHT ELECTRONICS CO.,LTD.

DATA SHEET

1.1000PCS/ PART NO. : 333-2UBGC/S400-A4

DATE : 2005/9/21

DEPARTMENT : CHR&D1

REVISION : 1

| | | | |
|---|----------|---------------|----------|
| RECEIVED | | | |
| <input checked="" type="checkbox"/> MASS PRODUCTION | | | |
| <input type="checkbox"/> PRELIMINARY | | | |
| <input type="checkbox"/> CUSTOMER DESIGN | | | |
| DEVICE NUMBER : | | CDLE-033-1539 | |
| PAGE : | | 6 | |
| CUSTOMER | DESIGNER | CHECKER | APPROVER |
| | | | |

| REV. | DESCRIPTION | RELEASE DATE |
|------|-------------|--------------|
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Technical Data Sheet

5.0mm Round Type LED Lamps

333-2UBGC/S400-A4

■ Features :

- Choice of various viewing angles
- Available on tape and reel.
- Reliable and robust
- Pb free
- The product itself will remain within RoHS compliant version.



■ Descriptions :

- The series is specially designed for applications requiring higher brightness
- The led lamps are available with different colors, intensities.

■ Applications :

- TV set
- Monitor
- Telephone
- Computer

| PART NO. | Material | Emitted Color | Lens Color |
|-------------------|-----------|---------------|-------------|
| 333-2UBGC/S400-A4 | InGaN/SiC | Bluish Green | Water Clear |

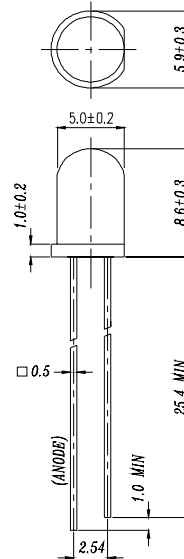


Technical Data Sheet

5.0mm Round Type LED Lamps

333-2UBGC/S400-A4

Package Dimensions



- Notes:
1. All dimensions are in millimetres
 2. The height of flange must be less than 1.5mm(0.059").
 3. Without special declared,the tolerance is ± 0.25 mm.

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|-------------------------|-----------|-------------|------------------|
| Forward Current | I_F | 30 | mA |
| Operating Temperature | T_{opr} | -40 to +85 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -40 to +100 | $^\circ\text{C}$ |
| Soldering Temperature | T_{sol} | 260 ± 5 | $^\circ\text{C}$ |
| Electrostatic Discharge | ESD | 1000 | V |
| Power Dissipation | P_d | 120 | mW |
| Reverse Voltage | V_R | 5 | V |

Note: *1:Soldering time ≤ 5 seconds.



Technical Data Sheet
5.0mm Round Type LED Lamps

333-2UBGC/S400-A4

Electro-Optical Characteristics (Ta=25°C)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|------------------------------|----------------|------------------------|------|------|------|------|
| Forward Voltage | V _F | I _F = 20 mA | 3.5 | / | 4.3 | V |
| Reverse Current | I _R | V _R = 5 V | / | / | 50 | μA |
| Luminous Intensity | I _v | I _F = 20 mA | 2500 | 4000 | / | mcd |
| Viewing Angle | 2θ 1/2 | I _F = 20 mA | / | 10 | / | deg |
| Peak Wavelength | λ _p | I _F = 20 mA | / | 502 | / | nm |
| Dominant Wavelength | λ _d | I _F = 20 mA | / | 505 | / | nm |
| Spectrum Radiation Bandwidth | Δλ | I _F = 20 mA | / | 25 | / | nm |



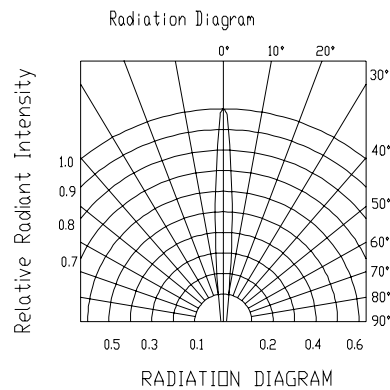
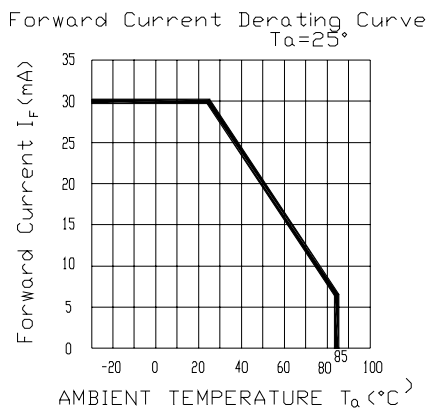
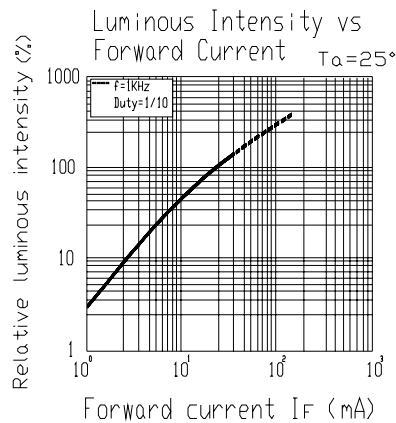
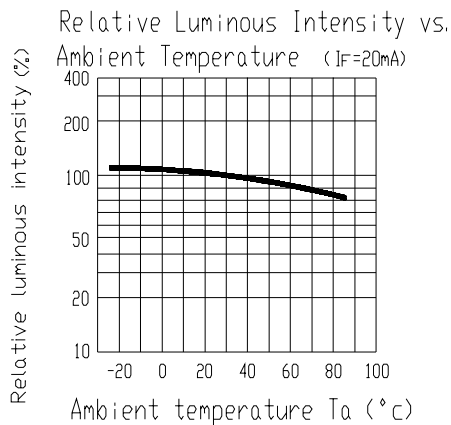
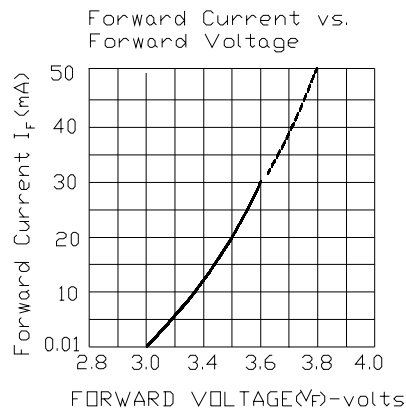
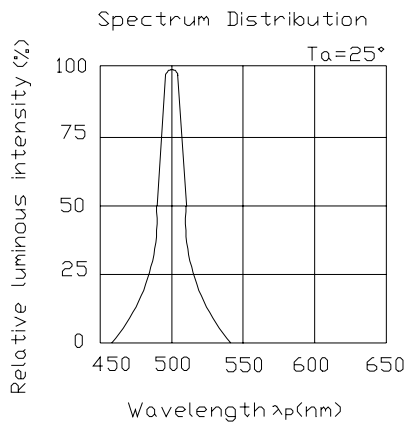
Technical Data Sheet

5.0mm Round Type LED Lamps

333-2UBGC/S400-A4

Typical Electro-Optical Characteristic Curves:

(UBG)





Technical Data Sheet

5.0mm Round Type LED Lamps

333-2UBGC/S400-A4

Reliability test items and conditions:

The reliability of products shall be satisfied with items listed below.

Confidence level : 97%

LTPD : 3%

| NO | Item | Test Conditions | Test Hours/Cycle | Sample Size | Failure Judgment Criteria | Ac/Re |
|----|----------------------------------|--|------------------|-------------|---|-------|
| 1 | Solder Heat | TEMP : 260°C ± 5 °C | 10 SEC | 76 PCS | $I_v \leq I_{vt} * 0.5$ or $V_f \geq U$ or $V_f \leq L$ | 0/1 |
| 2 | Temperature Cycle | H : +100°C 15min ∫ 5 min L : -40°C 15min | 300 CYCLES | 76 PCS | | 0/1 |
| 3 | Thermal Shock | H : +100°C 5min ∫ 10 sec L : -10°C 5min | 300 CYCLES | 76 PCS | | 0/1 |
| 4 | High Temperature Storage | TEMP : 100°C | 1000 HRS | 76 PCS | | 0/1 |
| 5 | Low Temperature Storage | TEMP : -40°C | 1000 HRS | 76 PCS | | 0/1 |
| 6 | DC Operating Life | TEMP : 25°C $I_F = 20mA$ | 1000 HRS | 76 PCS | | 0/1 |
| 7 | High Temperature / High Humidity | 85°C / 85% RH | 1000 HRS | 76 PCS | | 0/1 |

Note : I_{vt} : To test I_v value of the chip before the reliability test
 I_v : The test value of the chip that has completed the reliability test
 U : Upper Specification Limit
 L : Lower Specification Limit



Technical Data Sheet
5.0mm Round Type LED Lamps

333-2UBGC/S400-A4

Packing Quantity Specification

1.500PCS/1Bag · 5Bags/1Box

2.10Boxes/1Carton

Label Form Specification



CPN:

P/N:



333-2UBGC/S400-A4

QTY:

CAT:



HUE:

REF:

LOT NO: EL



CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Dominant Wavelength

REF: Reference

LOT No: Lot Number

MADE IN TAIWAN: Production Place

MADE IN TAIWAN

Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.

2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.

3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

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