## Technical Data Sheet 5.0mm Cylindrical Type LED Lamps

|   |          | 423-2ASU                               | BC/S400-A6  |  |  |  |  |
|---|----------|--|-------------|--|--|--|--|
| Features :  |          | â                                      |             |  |  |  |  |
| • Popular T-1 diameter pack   | age.     |  |             |  |  |  |  |
| • Reliable and robust.  |          |  |             |  |  |  |  |
| • Pb free .   |          |  |             |  |  |  |  |
| <ul><li>The product itself will rem</li><li>ESD-withstand voltage: up</li></ul> |          | it version                             |             |  |  |  |  |
| Descriptions :  |          |  |             |  |  |  |  |
| • The series is specially desig   | gned for |  |             |  |  |  |  |
| Applications requiring high   | ner      | ·************************************* |             |  |  |  |  |
| Brightness  |          | 2 12 St CT                             |             |  |  |  |  |
| • The LED lamps are availab   | le with  | i som                                  |             |  |  |  |  |
| Different colors, intensities,  | epoxy    |  |             |  |  |  |  |
| colors,etc.   |          |  |             |  |  |  |  |
| Applications :  |          |  |             |  |  |  |  |
| • TV set  |          |  |             |  |  |  |  |
| <ul><li>Monitor</li><li>Telephone</li></ul>                                     |          |  |             |  |  |  |  |
| Computer  |          |  |             |  |  |  |  |
| PART NO.  | Material | Emitted Color                          | Lens Color  |  |  |  |  |
| 423-2ASUBC/S400-A6  | GaN      | Super Blue                             | Water Clear |  |  |  |  |

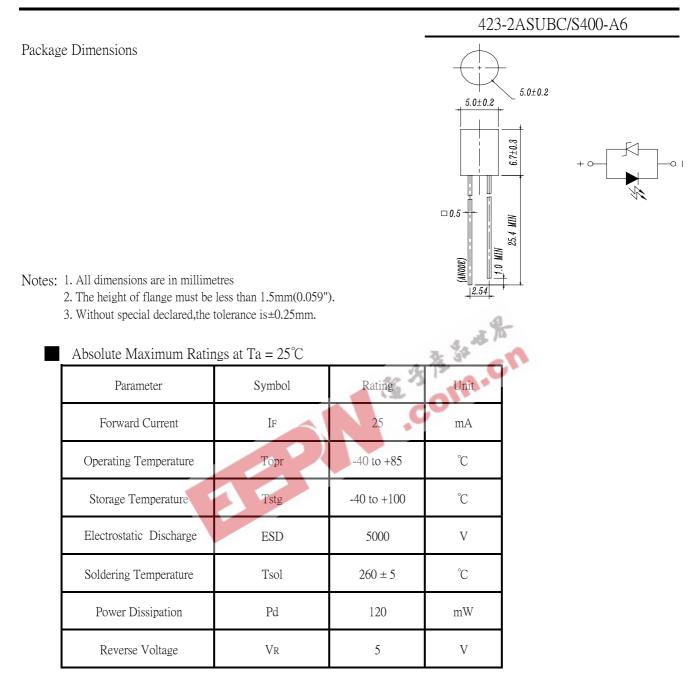
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Device Number:

CDLE-042-087

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Note: \*1:Soldering time  $\leq$  5 seconds.

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#### Electro-Optical Characteristics (Ta=25°C)

| Parameter                       | Symbol         | Condition              | Min.    | Тур. | Max. | Unit |
|---------------------------------|----------------|------------------------|---------|------|------|------|
| Forward Voltage                 | VF             | $I_F$ = 20 mA          | /       | 3.0  | 4.0  | V    |
| Reverse Current                 | IR             | V <sub>R</sub> = 5 V   | /       | /    | 50   | μA   |
| Luminous Intensity              | Iv             | $I_F$ = 20 mA          | 85      | 120  | /    | mcd  |
| Viewing Angle                   | 2 <i>0</i> 1/2 | I <sub>F</sub> = 20 mA | 3 12 34 | 85   | /    | deg  |
| Peak Wavelength                 | λp             | I <sub>F</sub> = 20 mA | com     | 468  | /    | nm   |
| Dominant Wavelength             | λd             | I <sub>F</sub> = 20 mA | /       | 470  | /    | nm   |
| Spectrum Radiation<br>Bandwidth | Δλ             | $I_F$ = 20 mA          | /       | 35   | /    | nm   |

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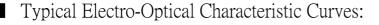
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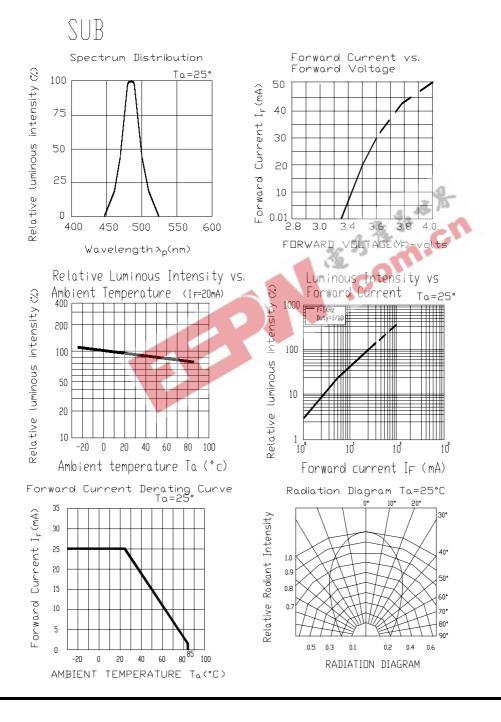
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# Reliability test items and conditions:

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

Confidence level: 97%

LTPD: 3%

| NO | Item                                | Test Conditions                               | Test<br>Hours/Cycle | Sample Size | Failure Judgment<br>Criteria                        | Ac/Re |
|----|-------------------------------------|---|---------------------|-------------|---|-------|
| 1  | Solder Heat                         | TEMP: $260^{\circ}C \pm 5^{\circ}C$           | 10 SEC              | 76 PCS      |   | 0/1   |
| 2  | Temperature Cycle                   | H:+100°C 15min<br>∫ 5 min<br>L:-40°C 15min    | 300 CYCLES          | 76 PCS      | ] [   | 0/1   |
| 3  | Thermal Shock                       | H : +100°C 5min<br>∫ 10 sec<br>L : -10°C 5min | 300 CYCLES          | 76 PCS      | I. (I. 110.5  | 0/1   |
| 4  | High Temperature<br>Storage         | TEMP: 100°C                                   | 1000 HRS            | 76 PCS      | $V \leq Vt*0.5$ or<br>$Vf \geq U$ or<br>$Vf \leq L$ | 0/1   |
| 5  | Low Temperature<br>Storage          | TEMP : -40°C                                  | 1000 HRS            | 76 PCS      |   | 0/1   |
| 6  | DC Operating Life                   | TEMP : 25°C<br>IF = 20mA                      | 1000 HRS            | 76 PCS      |   | 0/1   |
| 7  | High Temperature /<br>High Humidity | 85℃ / 85% RH                                  | 1000 HRS            | 76 PCS      |   | 0/1   |

Note : Ivt : To test Iv value of the chip before the reliablility test

Iv : The test value of the chip that has completed the reliablility test

U: Upper Specification Limit

L: Lower Specification Limit

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|----------------------------|--------------|----|--|
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## Technical Data Sheet 5.0mm Cylindrical Type LED Lamps

## 423-2ASUBC/S400-A6

CPN: Customer's Production Number

MADE IN TAIWAN: Production Place

P/N: Production Number

QTY: Packing Quantity

HUE: Dominant Wavelength

CAT: Ranks

**REF:** Reference

LOT No: Lot Number

#### Packing Quantity Specification

1. 500PCS/1Bag , 5Bags/1Box

2. 10Boxes/1Carton

Label Form Specification



MADE IN TAIWAN

Notes

thority on 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

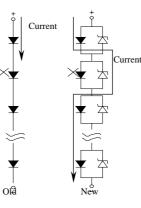
any damage resulting from use of the product which does not comply with the absolute

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.

4. When the LED is connected using serial circuit, if either piece of LED is no light up but current can't flow through causing others to light down. In new design, the LED is parallel with zener diode. if either piece of LED is no light up but current ca



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