



## 20.0mm Round Big LED Lamp

PART NO. 1100SURD/S530-A3 ECN :            Page: 1/5

### ■ Features :

- Graphic stacking allow-able.
- High luminous intensity.
- Solid state reliability.

### ■ Applications;

- Audio equipment
- Instrument panels
- Digital read out display

### ■ Descriptions :

- The EL-1100 series consists of 20.0mm diameter big lamps.design for viewing distances up to 7 meters.
- There are separate anodes and cathodes for each light segment and choice of five colors is offered.
- These device are available with red offering a wide possibility in design.

| PART NO.         | Chip     |               |
|------------------|----------|---------------|
|                  | Material | Emitted Color |
| 1100SURD/S530-A3 | AlGnInP  | Hyper Red     |

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL : 886-2-2267-2000,2267-9936

FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>

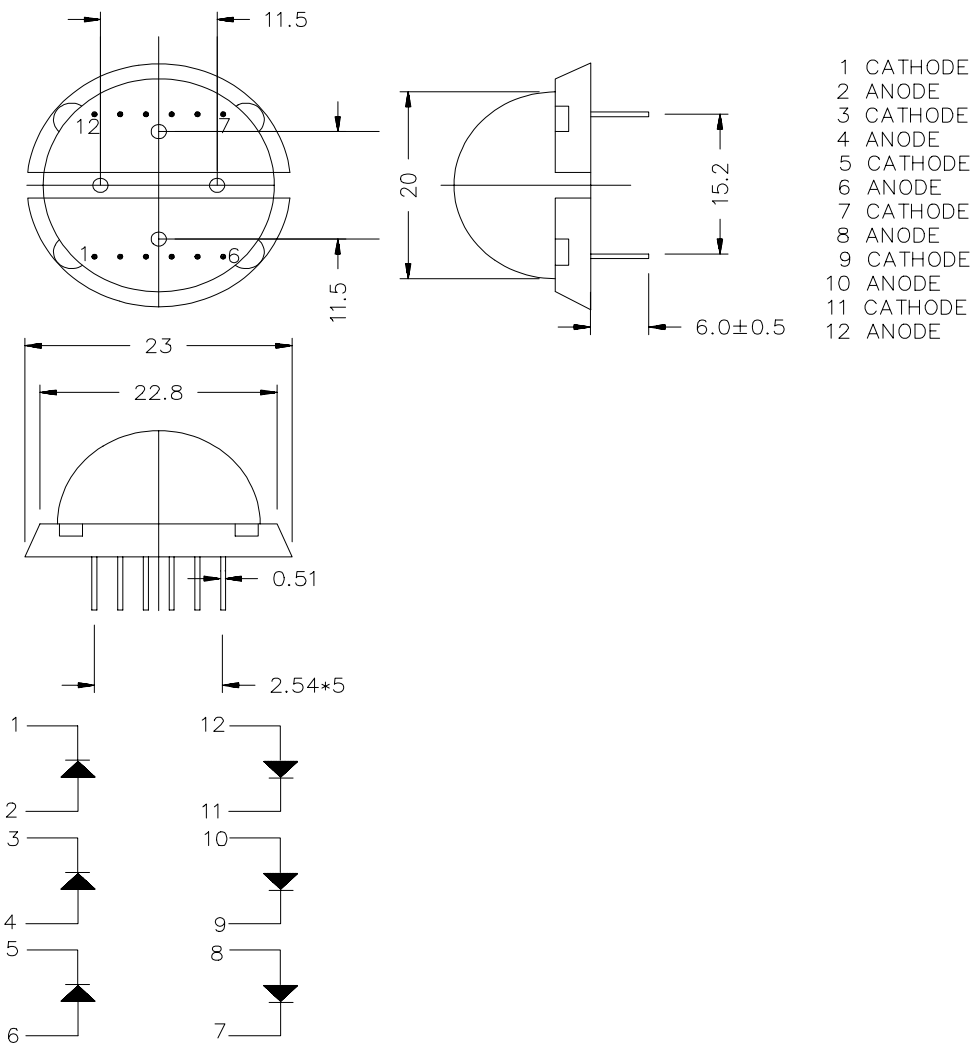
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### ■ Package Dimensions:



### ■ Notes:

- 1.All dimensions are in millimeters tolerance is 0.25mm unless otherwise noted.
- 2.Above specification may be changed without notice.  
Supplier will reserve authority on material change for above specification.



Device Number : CDD-110-020 REV: 1

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■ Absolute maximum ratings at Ta = 25℃ :

| Parameter                                 | Symbol   | Rating      | Unit |
|-------------------------------------------|----------|-------------|------|
| Reverse Voltage                           | VR       | 5           | V    |
| Forward Current                           | IF       | 25          | mA   |
| Operating Temperature                     | Topr     | -40 to +85  | ℃    |
| Storage Temperature                       | TsTg     | -40 to +100 | ℃    |
| Soldering Temperature                     | Tsol     | 260 ± 5     | ℃    |
| Electrostatic Discharge                   | ESD      | 2000        | V    |
| Power Dissipation                         | Pd       | 60          | mW   |
| Peak Forward Current(Duty<br>1/10 @ 1KHZ) | IF(Peak) | 160         | mA   |

■ Electronic optical characteristics :

| Parameter                         | Symbol | Min. | Typ. | Max. | Unit | Condition |
|-----------------------------------|--------|------|------|------|------|-----------|
| Luminous Intensity<br>Per segment | Iv     | 3.0  | 4.8  |      | mcd  | IF=2mA    |
|                                   |        | 15.0 | 24.0 | ---- |      | IF=10mA   |
| Peak Wavelength                   | λ p    | ---- | 632  | ---- | nm   | IF=20mA   |
| Dominant Wavelength               | λ d    | ---- | 624  | ---- | nm   | IF=20mA   |
| Spectrum Radiation Bandwidth      | △ λ    | ---- | 20   | ---- | nm   | IF=20mA   |
| Forward Voltage                   | VF     | ---- | 2.0  | 2.4  | V    | IF=20mA   |
| Reverse Current                   | IR     | ---- | ---- | 10   | μ A  | VR=5V     |

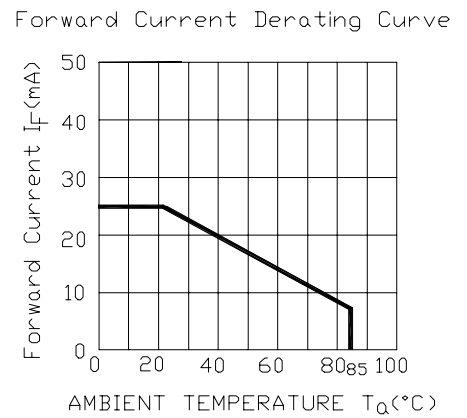
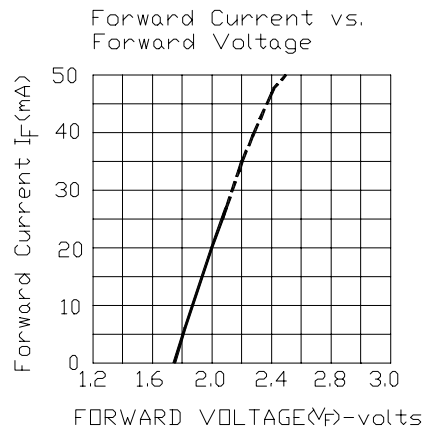
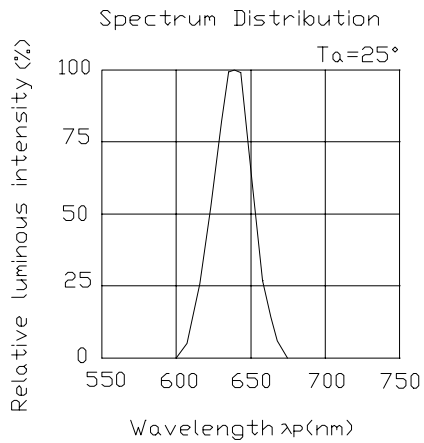


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## Typical Electro-Optical Characteristic Curves:

<SUR>





REV: 1

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| NO | Item                             | Test Conditions                               | Test Hours/Cycle | Sample Size | Ac/Re |
|----|----------------------------------|-----------------------------------------------|------------------|-------------|-------|
| 1  | Solder Heat                      | TEMP : 260°C ± 5 °C                           | 5 SEC            | 76 PCS      |       |
| 2  | Temperature Cycle                | H : +85°C 30min<br>∫ 5 min<br>L : -55°C 30min | 50 CYCLE         | 76 PCS      | 0/1   |
| 3  | Thermal Shock                    | H : +100°C 5min<br>∫ 10 sec<br>L : -10°C 5min | 50 CYCLE         | 76 PCS      | 0/1   |
| 4  | High Temperature Storage         | TEMP : 100°C                                  | 1000 HRS         | 76 PCS      | 0/1   |
| 5  | Low Temperature Storage          | TEMP : -55°C                                  | 1000 HRS         | 76 PCS      | 0/1   |
| 6  | DC Operating Life                | IF = 10 mA                                    | 1000 HRS         | 76 PCS      | 0/1   |
| 7  | High Temperature / High Humidity | 85°C/85% RH                                   | 1000 HRS         | 76 PCS      | 0/1   |