

# DATA SHEET

**PART NO. : IE-5E34G13D-1B2**

**DATE : 2015/11/25**

**DEPARTMENT : R&D**

**REVISION : 1.0**

|   |          |         |          |
|---|----------|---------|----------|
| <b>RECEIVED</b>                                     |          |         |          |
| <input checked="" type="checkbox"/> MASS PRODUCTION |          |         |          |
| <input type="checkbox"/> PRELIMINARY                |          |         |          |
| <input type="checkbox"/> CUSTOMER DESIGN            |          |         |          |
| DEVICE NUMBER :                                     |          |         |          |
| PAGE : 4  |          |         |          |
| CUSTOMER  | DESIGNER | CHECKER | APPROVER |
|   |          |         |          |

|      |             |              |
|------|-------------|--------------|
|      |             |              |
|      |             |              |
|      |             |              |
|      |             |              |
|      |             |              |
| REV. | DESCRIPTION | RELEASE DATE |

Device Number: \_\_\_\_\_

REV: 1.0

## 4.1\*5.0mm Elliptical Wide Angle LED Lamps

Model No.: **IE-5E34G13D-1B2**

ECN: \_\_\_\_\_

Page: 1/4

### ■ Features :

- High radiant intensity
- Choice of various viewing angles
- Reliable and robust

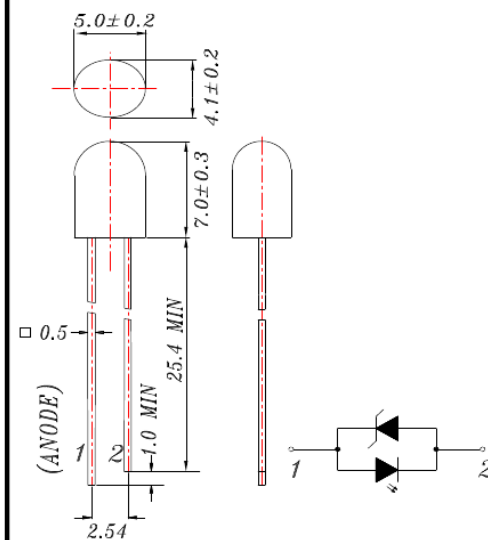
### ■ Descriptions :

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

### ■ Applications :

- TV set
- Monitor
- Telephone
- Computer

### ■ Package Dimensions:



**Notes:** 1. All dimensions are in millimetres

2. An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.

3. Tolerances unless Dimension  $\pm 0.25$ mm.

| PART NO.        | Chip     |               | Lens Color      |
|-----------------|----------|---------------|-----------------|
|                 | Material | Emitted Color |                 |
| IE-5E34G13D-1B2 | InGaN    | Super Green   | Tinted Diffused |

Device Number: \_\_\_\_\_

REV: 1.0

4.1\*5.0mm Elliptical Wide Angle LED Lamps

Model No.: **IE-5E34G13D-1B2**

ECN: \_\_\_\_\_ Page: 2/4

■ Absolute Maximum Ratings at Ta = 25°C

| Parameter             | Symbol               | Rating      | Unit |
|-----------------------|----------------------|-------------|------|
| Forward Current       | I <sub>F</sub>       | 25          | mA   |
| Operating Temperature | T <sub>opr</sub>     | -40 to +85  | °C   |
| Storage Temperature   | T <sub>stg</sub>     | -40 to +100 | °C   |
| Soldering Temperature | T <sub>sol</sub>     | 260 ± 5     | °C   |
| Power Dissipation     | P <sub>d</sub>       | 120         | mW   |
| Peak Forward Current  | I <sub>F(Peak)</sub> | 120         | mA   |
| Reverse Voltage       | V <sub>R</sub>       | 5           | V    |

Note: \*1:IFP Conditions --Pulse Width ≤ 1msec and Duty ≤ 1/10.

\*2:Soldering time ≤ 5 seconds.

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

| Parameter                    | Symbol         | Condition              | Min. | Typ.           | Max. | Unit |
|------------------------------|----------------|------------------------|------|----------------|------|------|
| Forward Voltage              | V <sub>F</sub> | I <sub>F</sub> = 20 mA | /    | 3.1            | 3.5  | V    |
| Reverse Current              | I <sub>R</sub> | V <sub>R</sub> = 5 V   | /    | /              | 10   | μA   |
| Luminous Intensity           | I <sub>v</sub> | I <sub>F</sub> = 20 mA | 8500 | 9500           | /    | mcd  |
| Viewing Angle                | 2θ 1/2         | I <sub>F</sub> = 20 mA | /    | (X)40(Y)<br>20 | /    | deg  |
| Peak Wavelength              | λ <sub>p</sub> | I <sub>F</sub> = 20 mA | /    | 520            | /    | nm   |
| Dominant Wavelength          | λ <sub>d</sub> | I <sub>F</sub> = 20 mA | /    | 527            | /    | nm   |
| Spectrum Radiation Bandwidth | Δλ             | I <sub>F</sub> = 20 mA | /    | 31             | /    | nm   |

Device Number: \_\_\_\_\_

REV: 1.0

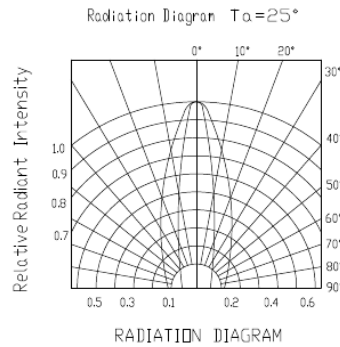
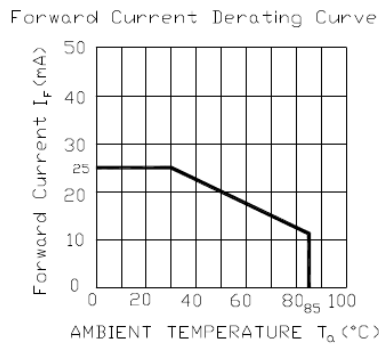
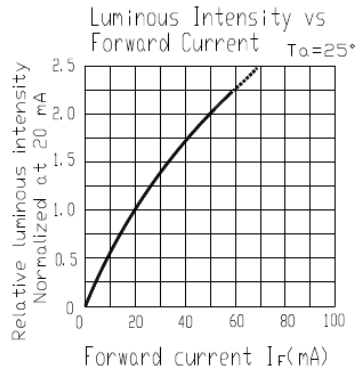
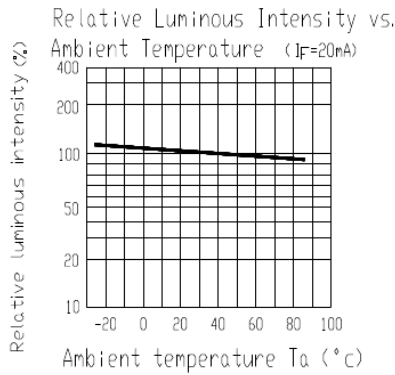
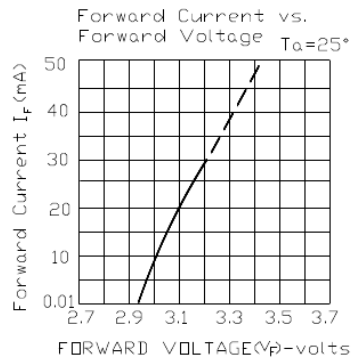
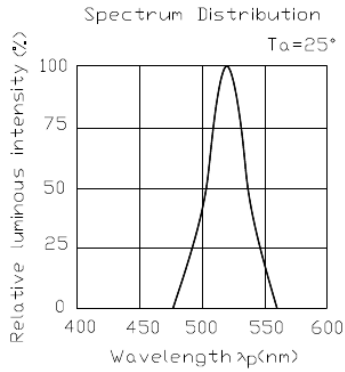
### 4.1\*5.0mm Elliptical Wide Angle LED Lamps

Model No.: **IE-5E34G13D-1B2**

ECN: \_\_\_\_\_

Page: 3/4

#### ■ Typical Electro-Optical Characteristic Curves:



Device Number: \_\_\_\_\_

REV: 1.0

4.1\*5.0mm Elliptical Wide Angle LED Lamps

Model No.: **IE-5E34G13D-1B2**

ECN: \_\_\_\_\_

Page: 4/4

■ Reliability test items and conditions:

| NO | Item                               | Test Conditions                                | Test Hours/Cycle | Sample | Ac/Re |
|----|------------------------------------|--|------------------|--------|-------|
| 1  | Solder Heat                        | TEMP : 260°C ± 5 °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 : +85°C 5min<br>∩ 10 sec<br>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<br>IF = 20mA                       | 1000 HRS         | 76 PCS | 0/1   |
| 7  | High Temperature/<br>High Humidity | 85°C / 85% RH                                  | 1000 HRS         | 76 PCS | 0/1   |