

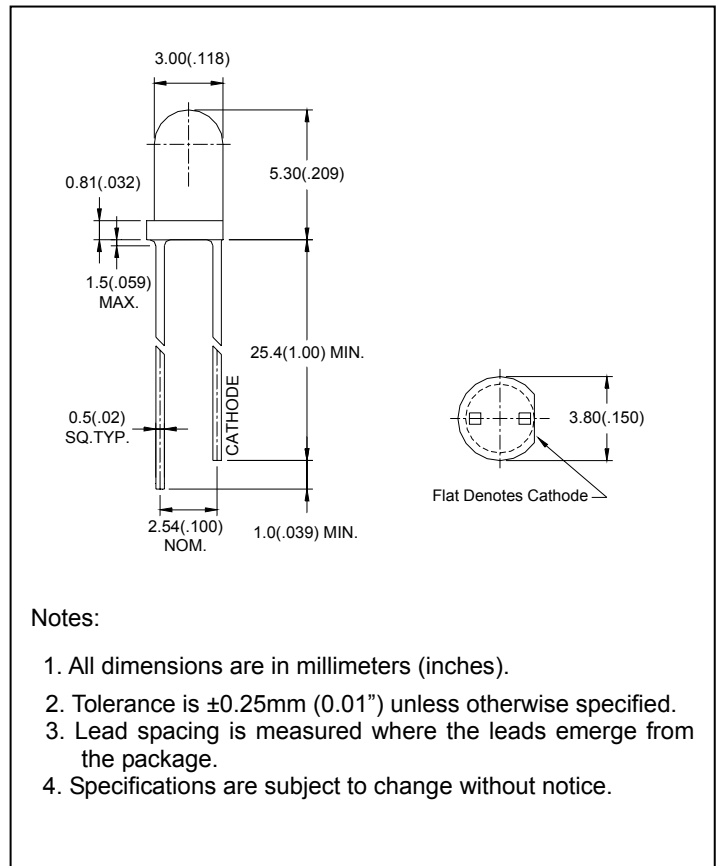
## ● Features:

1. Chip material: AlInGaN
2. Emitted color : Green
3. Lens Appearance : Water Clear
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 3mm diameter package.
9. This product don't contained restriction substance, compliance ROHS standard.

## ● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

## ● Package dimensions:



## ● Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

| Parameter                          | Symbol    | Rating                                    | Unit |
|------------------------------------|-----------|-------------------------------------------|------|
| Power Dissipation                  | $P_d$     | 120                                       | mW   |
| Forward Current                    | $I_F$     | 30                                        | mA   |
| Peak Forward Current <sup>*1</sup> | $I_{FP}$  | 150                                       | mA   |
| Reverse Voltage                    | $V_R$     | 5                                         | V    |
| Operating Temperature              | $T_{opr}$ | $-40^\circ\text{C} \sim 80^\circ\text{C}$ |      |
| Storage Temperature                | $T_{stg}$ | $-40^\circ\text{C} \sim 85^\circ\text{C}$ |      |
| Soldering Temperature              | $T_{sol}$ | $260^\circ\text{C}$ (for 5 seconds)       |      |

<sup>\*1</sup>Condition for  $I_{FP}$  is pulse of 1/10 duty and 0.1msec width.

## Electrical and optical characteristics(Ta=25°C)

| Parameter                | Symbol          | Condition         | Min. | Typ. | Max. | Unit          |
|--------------------------|-----------------|-------------------|------|------|------|---------------|
| Forward Voltage          | $V_F$           | $I_F=20\text{mA}$ | -    | 3.5  | 4.0  | V             |
| Luminous Intensity       | $I_v$           | $I_F=20\text{mA}$ | -    | 4000 | -    | mcd           |
| Reverse Current          | $I_R$           | $V_R=5\text{V}$   | -    | -    | 100  | $\mu\text{A}$ |
| Peak Wave Length         | $\lambda_p$     | $I_F=20\text{mA}$ | -    | 525  | -    | nm            |
| Dominant Wave Length     | $\lambda_d$     | $I_F=20\text{mA}$ | 520  | -    | 530  | nm            |
| Spectral Line Half-width | $\Delta\lambda$ | $I_F=20\text{mA}$ | -    | 35   | -    | nm            |
| Viewing Angle            | $2\theta_{1/2}$ | $I_F=20\text{mA}$ | -    | 25   | -    | deg           |

## Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

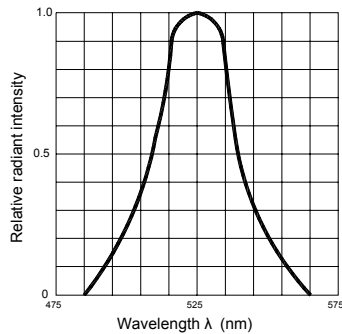


Fig.2 Forward current derating curve vs. Ambient temperature

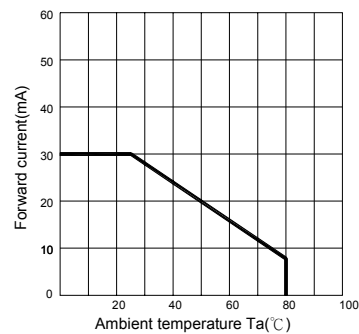


Fig.3 Forward current vs. Forward voltage

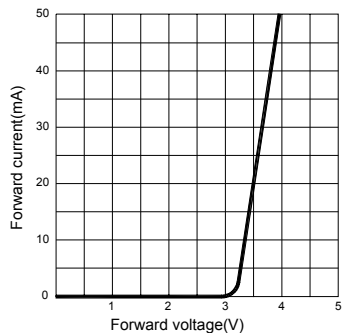


Fig.4 Relative luminous intensity vs. Ambient temperature

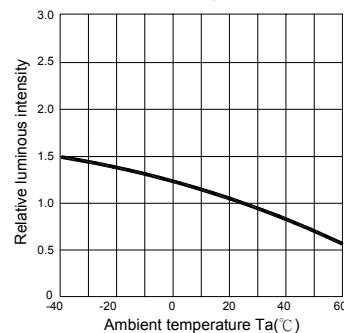


Fig.5 Relative luminous intensity vs. Forward current

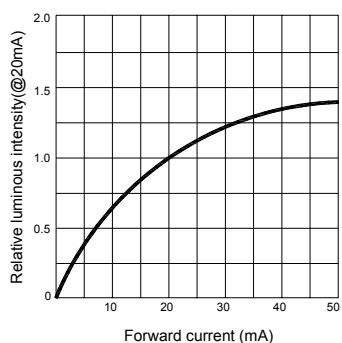
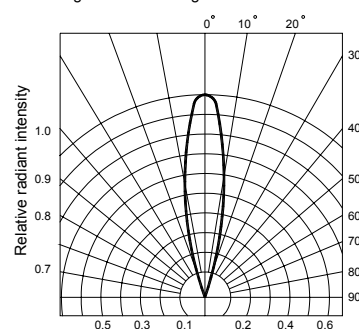


Fig.6 Radiation diagram



## ● Bin Limits

### 1. Intensity bin limits (At $I_F = 20\text{mA}$ )

| Bin Code | Min. (mcd) | Max. (mcd) |
|----------|------------|------------|
| :        | :          | :          |
| X        | 1390       | 2760       |
| Y        | 2090       | 4260       |
| Z        | 3220       | 6440       |
| ZA       | 4880       | 9660       |
| ZB       | 7320       | 14490      |
| :        | :          | :          |

### 2. Color Bin Limits (At $I_F = 20\text{mA}$ ) : Dominant Wave Length $\lambda_d(\text{nm})$

| Bin Code | Min. (nm) | Max. (nm) |
|----------|-----------|-----------|
| 6        | 519       | 526       |
| 7        | 524       | 531       |

