



Opto Plus LED Corp.
OPL-3014LET-30
3 mm Dia LED Lamp

● **EDIT HISTORY**

Version A: Feb. 17, 2021

Preliminary Spec.



Opto Plus LED Corp.

OPL-3014LET-30

3 mm Dia LED Lamp

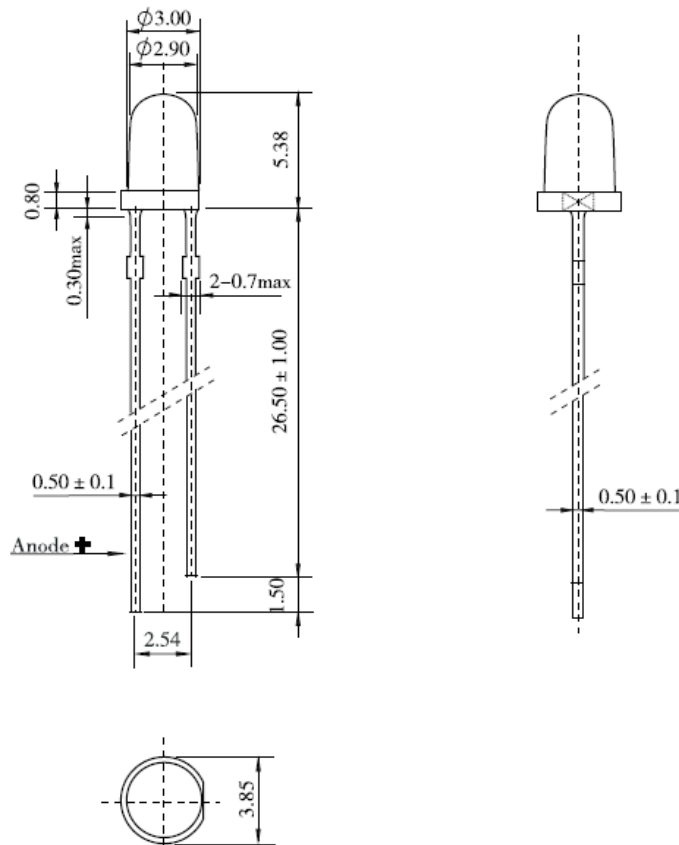
● FEATURES

- Low power consumption.
- High efficiency
- Round type
- With Flange
- Solder leads without stand-off
- Compliant with RoHs

● DESCRIPTION

- Chip Material : AlGaInP/GaAs
- Emitting Color : Ultra Orange
- Lens Color : Red Transparent

● PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise noted.



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● LE: SUPER BRIGHT RED (AlGaInP/GaAs)

ABSOLUTE MAXIMUM RATING AT Ta=25°C

| Parameter | Symbol | Ultra Orange | Unit |
|----------------------------|------------------|--------------|-------|
| Power dissipation | P _{AD} | 80 | mW |
| Reverse voltage | V _R | 5 | V |
| Continuous forward current | I _{AF} | 30 | mA |
| Temperature coefficient | I/C | 0.4 | mA/°C |
| Pulse current | I _{PF} | 100 | mA |
| Operating temperature | T _{OPR} | -25 to +85 | °C |
| Storage temperature | T _{STG} | -40 to +100 | °C |
| Soldering Condition | T _{sd} | 260°C/5set | °C |

ELECTRICAL - OPTICAL CHARACTERISTICS AT Ta=25°C

| Characteristic | Symbol | Condition | Min. | Typ. | Max. | Unit |
|------------------------------|----------------|----------------------|------|------|------|------|
| Forward voltage | V _F | I _F =20mA | - | 2.0 | 2.4 | V |
| Reverse current | I _R | V _R =5V | - | - | 50 | μA |
| Peak wavelength | λ _P | I _F =20mA | - | 632 | - | nm |
| Dominant wavelength | λ _D | I _F =20mA | - | 624 | - | nm |
| Luminous intensity | I _V | I _F =20mA | - | 1800 | - | mcd |
| Spectral radiation bandwidth | Δλ | I _F =20mA | - | 20 | - | nm |
| Viewing Angle | 2θ 1/2 | I _F =20mA | - | 30 | - | deg |



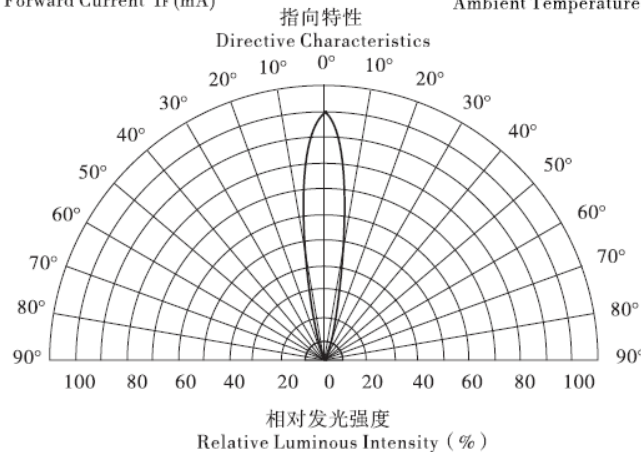
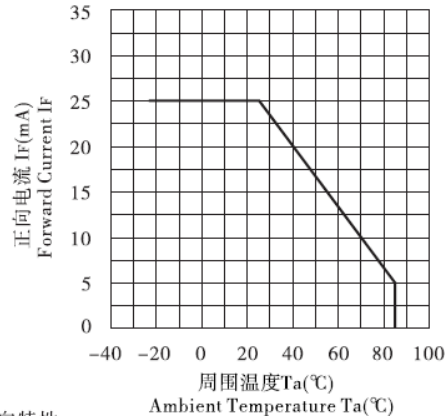
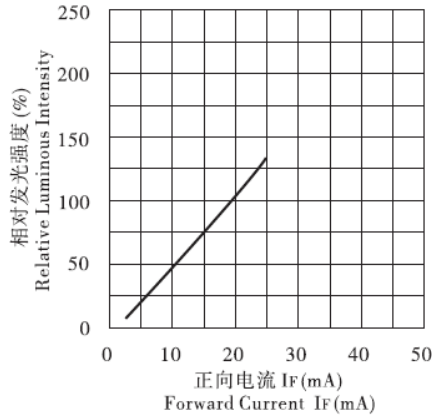
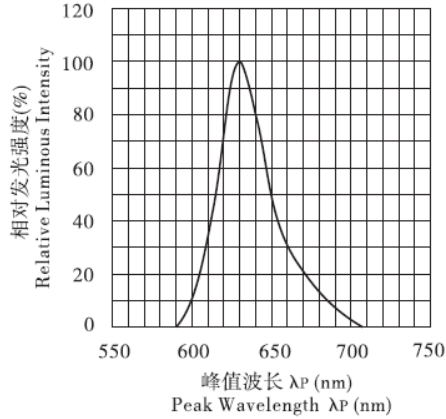
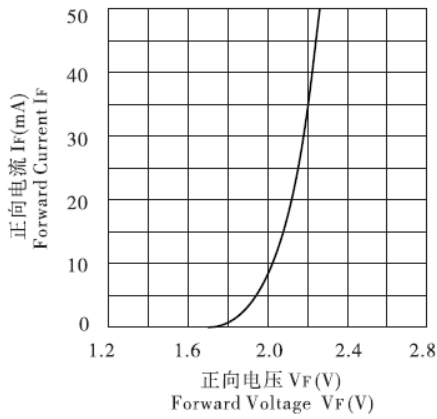
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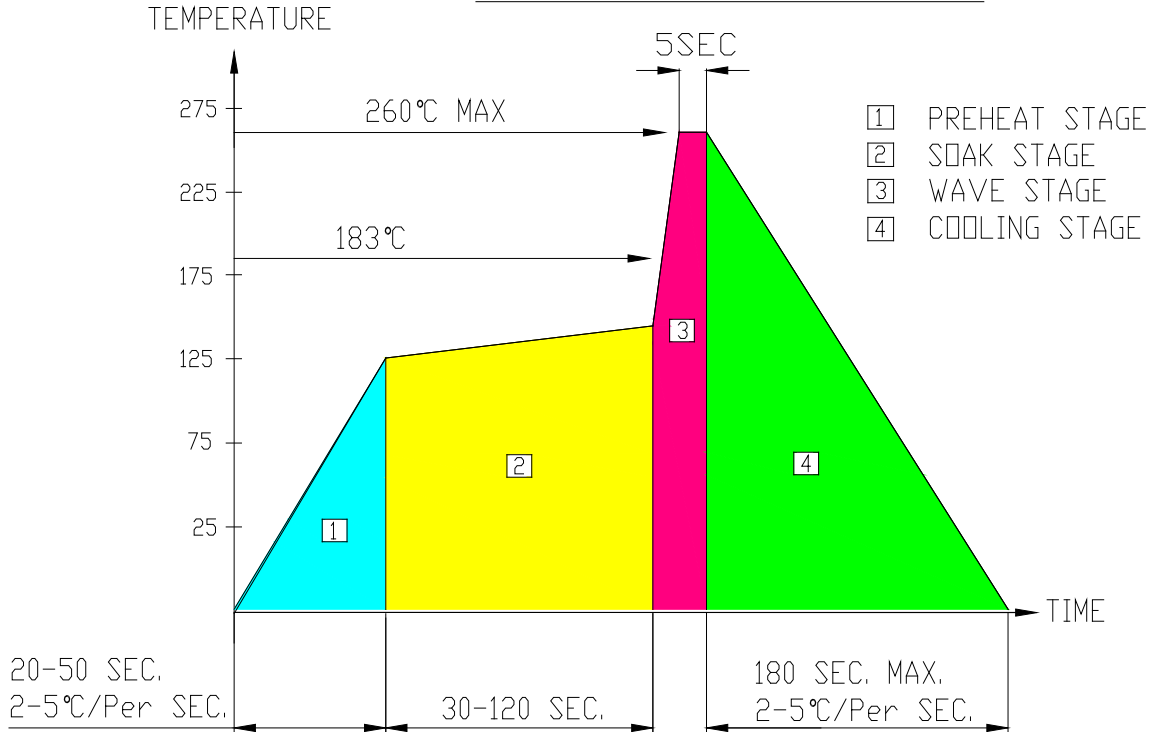
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Typical Electro-optical Characteristic Curves
(25 °C Free Air Temperature Unless Otherwise Specified)



● **RECOMMEND SOLDERING PROFILE**

WAVE SOLDER PROFILE



● **Note:**

- Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
- Peak wave soldering temperature between 245°C ~ 225°C for 3 sec (5 sec max)
- No more than one wave soldering pass

● **SOLDERING IRON**

Basic spec is ≤ 4 sec when 260°C. If temperature is higher, time should be shorter (+10°C→1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

● **REWORK**

Customer must finish rework within ≤ 3 sec under 350°C. The head of soldering iron cannot touch copper foil.