



Opto Plus LED Corp.

OPL-3014LAC-30

3 mm Dia LED Lamp

● EDIT HISTORY

Version A : Feb. 17, 2021

Preliminary Spec.



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OPL-3014LAC-30

3 mm Dia LED Lamp

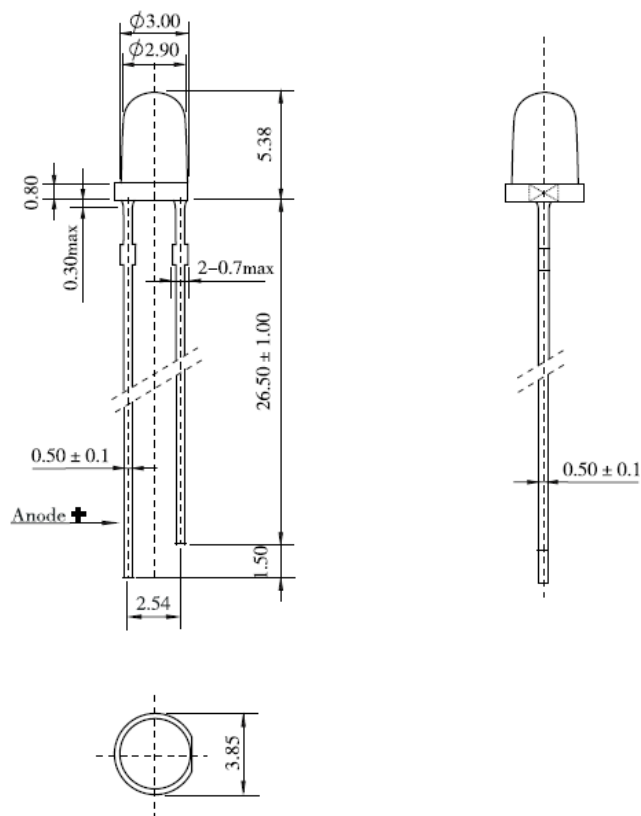
● FEATURES

- 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 Amber
- Lens Color : Water Clear

● PACKAGE DIMENSIONS



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

● **LA: SUPER BRIGHT AMBER (AlGaInP/GaAs)**

ABSOLUTE MAXIMUM RATING AT Ta=25°C

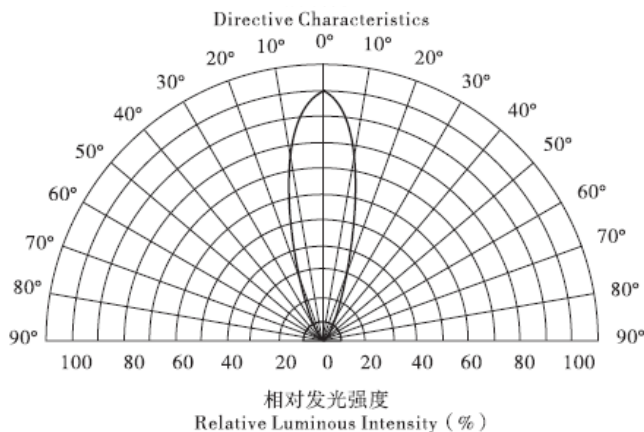
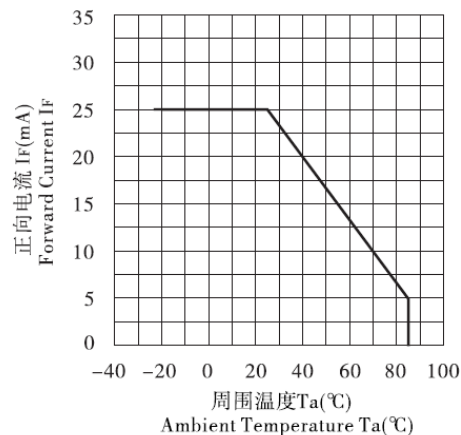
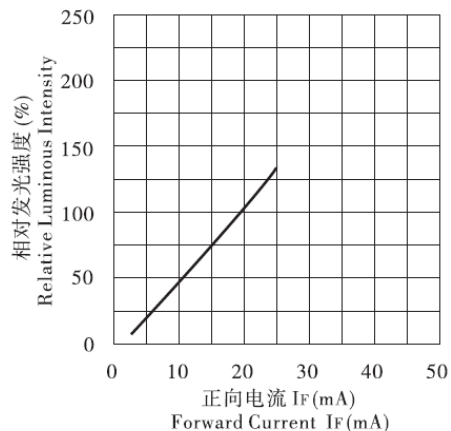
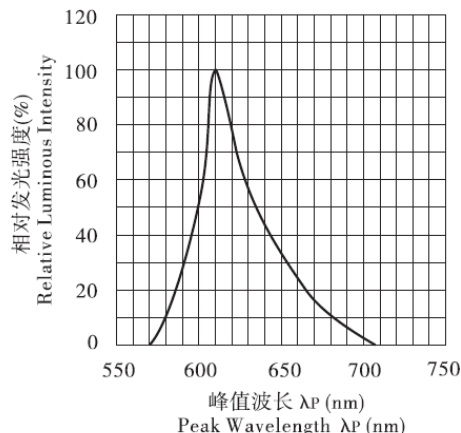
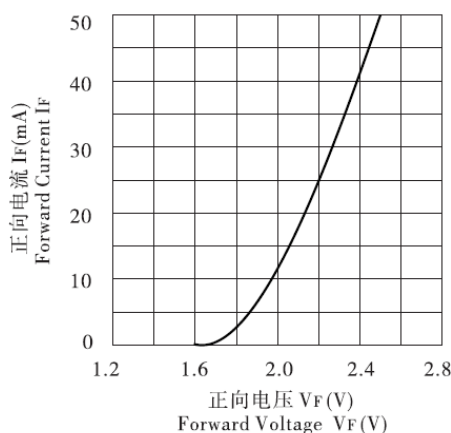
Parameter	Symbol	Maximum Rating	Unit
Power dissipation	P _{AD}	80	mW
Reverse voltage	V _R	5	V
Continuous forward current	I _{AF}	30	mA
Temperature coefficient	I/C	0.4	mA/°C
Pulse current	I _{PF}	100	mA
Operating temperature	T _{OPR}	-25 to +85	°C
Storage temperature	T _{STG}	-40 to +100	°C
Soldering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

ELECTRICAL - OPTICAL CHARACTERISTICS AT Ta=25°C

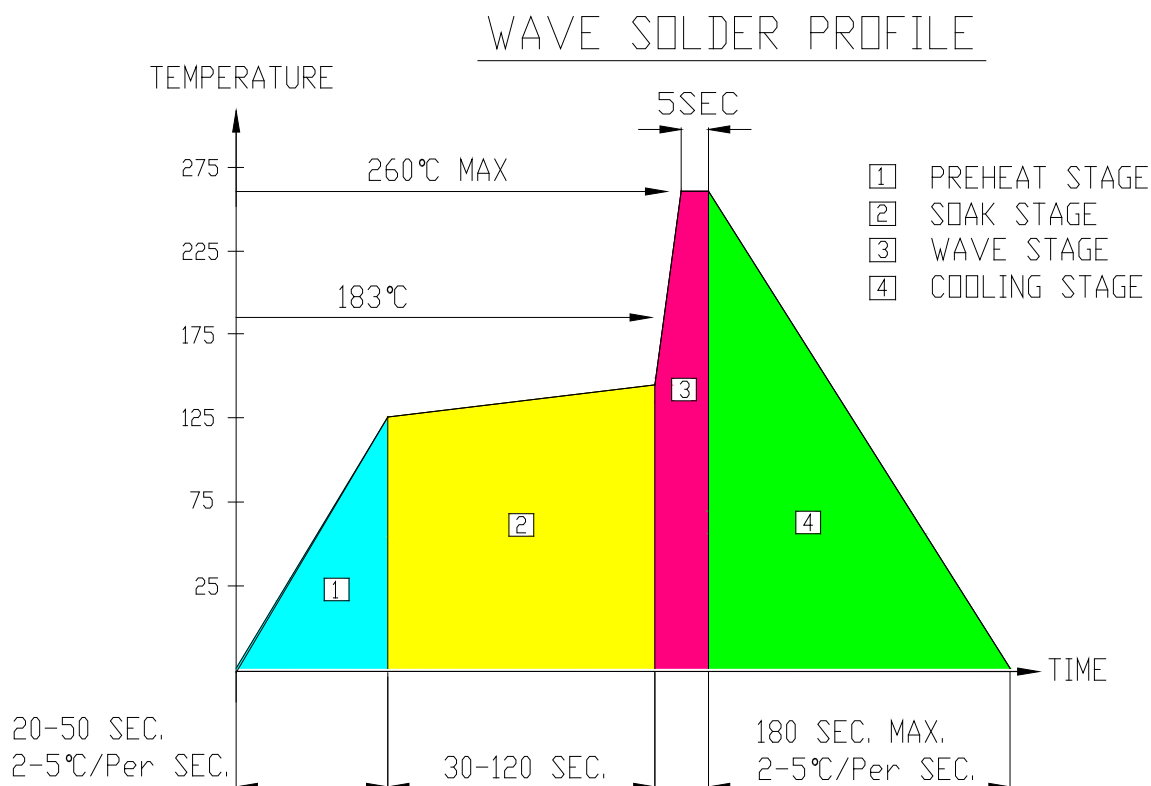
Characteristic	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F =20mA	-	2.0	2.4	V
Reverse current	I _R	V _R =5V	-	-	50	μA
Peak wavelength	λ _P	I _F =20mA	-	610	-	nm
Dominant wavelength	λ _D	I _F =20mA	-	608	-	nm
Luminous intensity	I _V	I _F =20mA	-	1800	-	mcd
Spectral radiation bandwidth	Δλ	I _F =20mA	-	20	-	nm
Viewing Angle	2θ1/2	I _F =20mA	-	30	-	deg

● LA: SUPER BRIGHT AMBER (AlGaInP/GaAs) CURVE

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



● RECOMMEND SOLDERING 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.