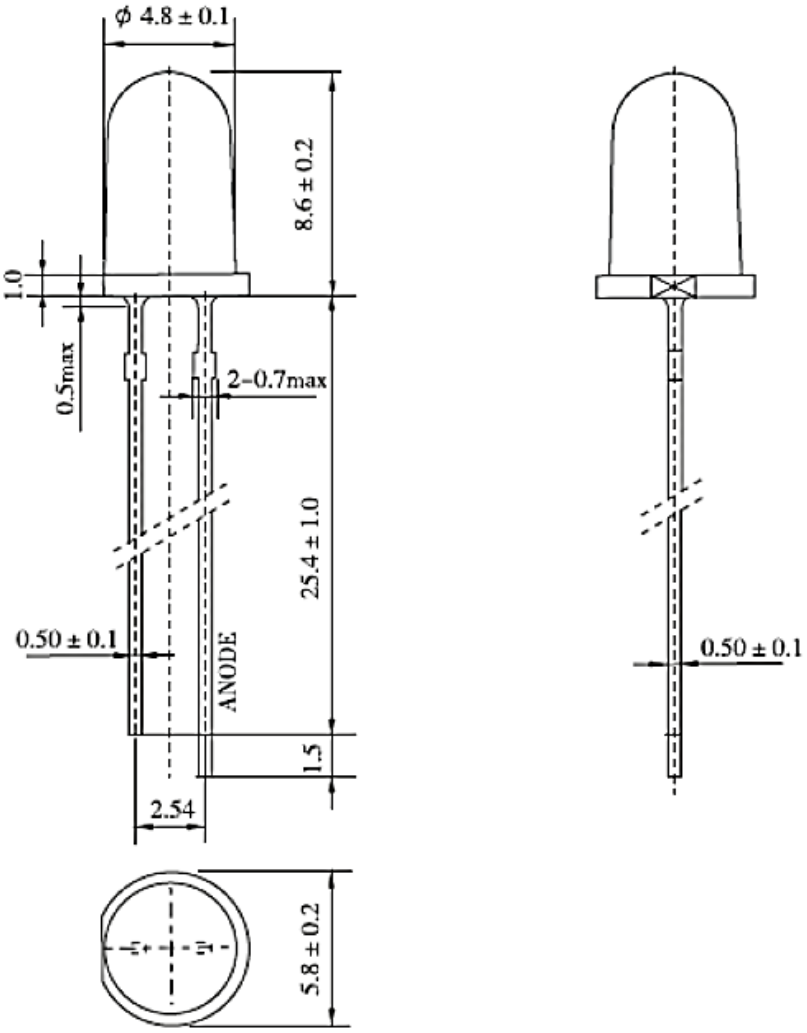
American Opto Plus LED Corp.
L513BC-30D
5mm Dia. LED Lamp

PACKAGE OUTLINES



ITEM	MATERIALS
Dice	InGaN/GaN
Emitted Color	Blue
Lens Color	Water Clear

Notes:
1. All dimensions are in millimeters
2. Lead spacing is measured where the leads emerge from the package.
3. Tolerance is ±0.25mm unless otherwise specified.

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

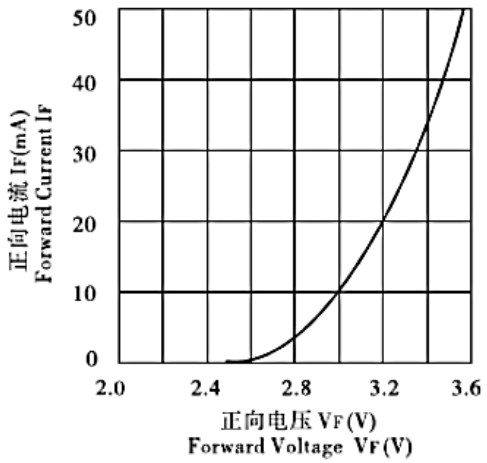
Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	P_D	120	mW
Reverse Voltage	V_R	5	V
Continuous Forward Current	I_{FC}	30	mA
Temperature Coefficient	I/C	0.4	mA/°C
Pulsed Forward Current	I_{FP}	100	mA
Operating Temperature Range	T_{OPR}	-25 ~ +85	°C
Storage Temperature Range	T_{STG}	-40 ~ +100	°C
Solder Temperature	T_{SOL}	265°C for 5sec	

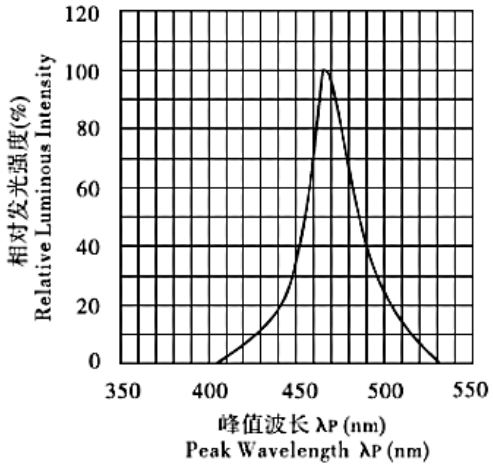
OPTICAL-ELECTRICAL CHARACTERISTICS (Ta = 25°C)

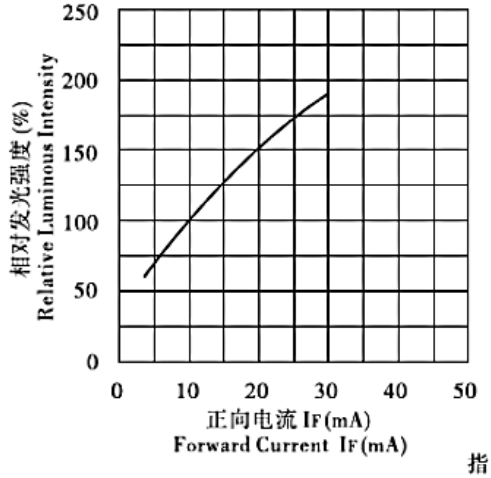
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=20mA	--	3.2	3.6	V
Reverse Current	I_R	V_R=5V	--	--	50	μA
Peak Wavelength	λ_P	I_F=20mA	--	468	--	nm
Dominant Wavelength	λ_D	I_F=20mA	--	465	--	nm
Luminous Intensity	I_V	I_F=20mA	1100	1820	--	mcd
Spectral Radiation Bandwidth	Δλ	I_F=20mA	--	30	--	nm
Viewing Angle	2θ½	I_F=20mA	--	30	--	deg

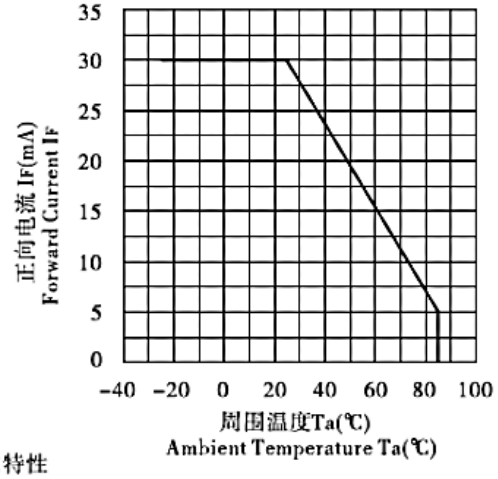
- Measurement Uncertainty of Luminous Intensity: ±10%
- 2θ½ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- The peak wavelength is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

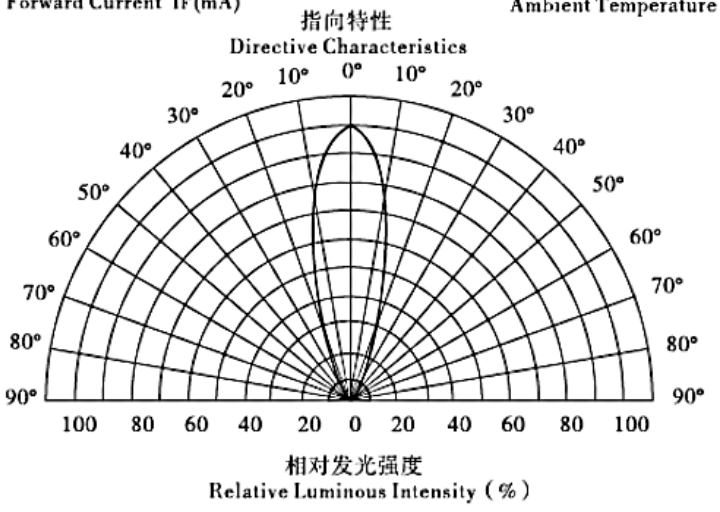
OPTICAL-ELECTRICAL CHARACTERISTICS (T_a = 25°C)











BIN GRADE (Unit: mcd / I_F=20mA)

BIN CODE	Min.	Max.
ZA	4500	5400
ZB	5400	6480
ZC	6480	7770
ZD	7770	9300
ZE	9300	11160

Note: tolerance for each bin limit is ±15%