



CIEL LIGHT CO., LTD.

PRODUCT SPECIFICATION

Customer: _____

Customer's Model No.: _____

Customer's Drawing No.: _____

Model No.: CL - 5043UAC1C - 001

Drawing No.: _____

产品应用 Applications

各种指示灯 General Purpose Indicators

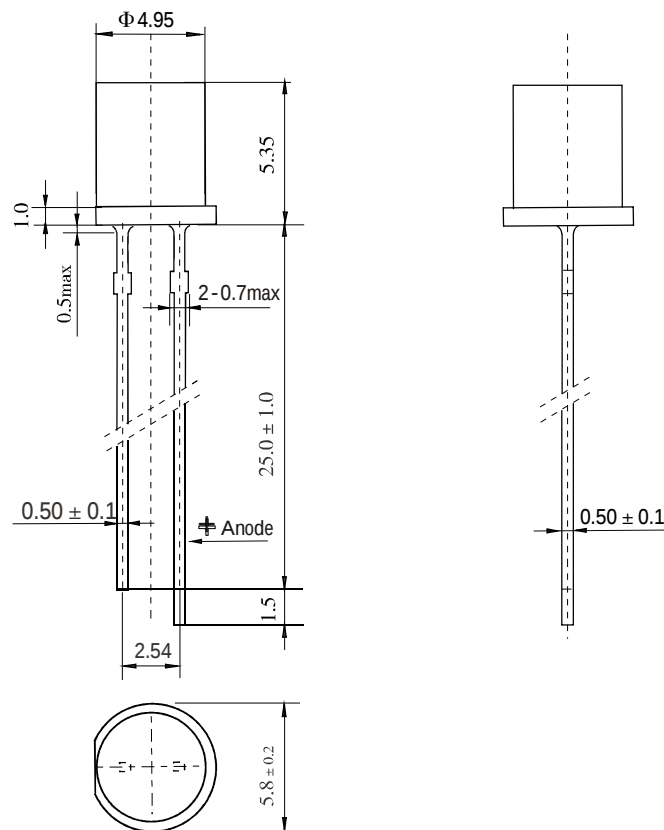
规格说明 Descriptions

发光颜色：高亮琥珀色 Emitting Color: Ultra Amber

封装颜色：无色透明 Lens Color: Water Clear

芯片材料：AlGaInP/GaAs Dice Material: AlGaInP/GaAs

外型图 Outline Drawing



未注公差：±0.25mm，单位：mm

Tolerance is ±0.25mm unless otherwise noted, Unit=mm

Pin弯曲 ≤ 长度*1%

Pin bending ≤ length*1%

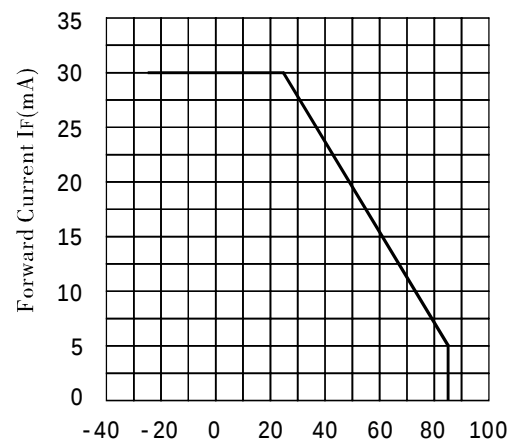
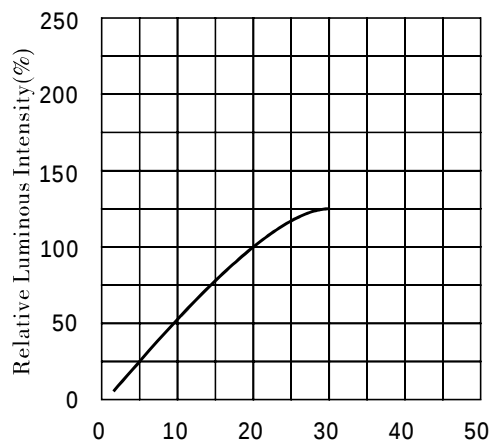
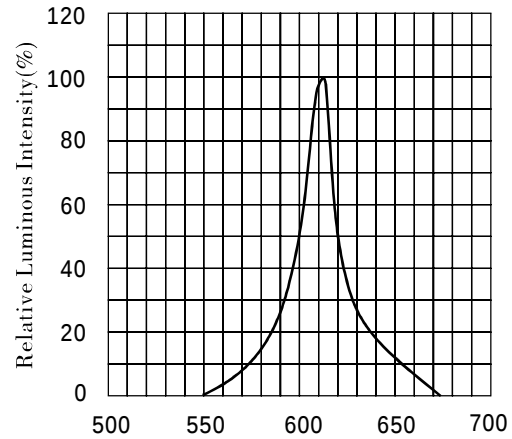
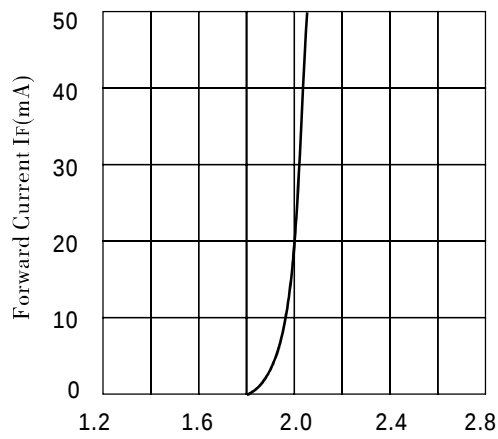
Electrical Optical Characteristics (Ta=25°C)

Parameter	Symbol	Ultra Amber			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V_F	---	2.0	2.4	V	IF=20mA
Luminous Intensity	I_v	100	280	---	mcd	IF=20mA
Peak Wavelength	λ_P	---	612	---	nm	IF=20mA
Dominant Wavelength	λ_d	---	606	---	nm	IF=20mA
Spectral Line half-width	$\Delta \lambda$	---	20	---	nm	IF=20mA
Reverse Leakage Current	I_R	---	---	50	μA	VR=5V
Viewing Angle	$2\theta_{1/2}$	---	80	---	Deg	IF=20mA

Absolute Maximum Parameters (Ta=25°C)

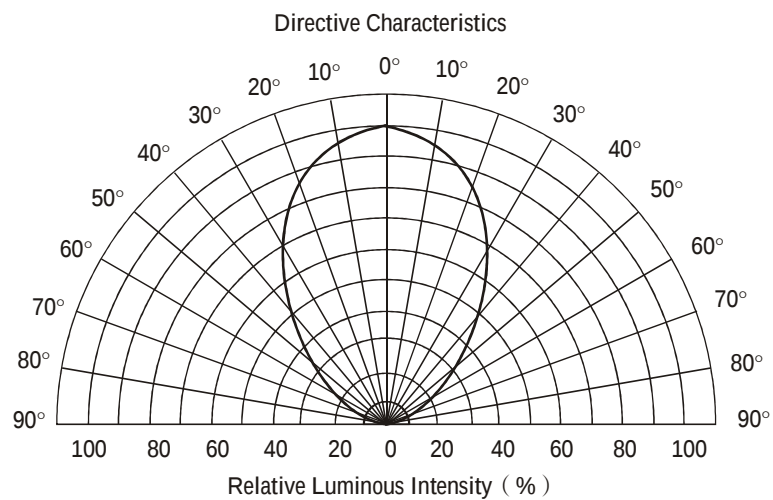
Parameter	Symbol	Condition	Rating	Unit
Power Dissipation	P_D	---	80	mW
Reverse Voltage	V_R	---	5	V
Forward Average Current	I_F	---	30	mA
Temperature Coefficient	I/C	---	0.33	mA/ °C
Pulse Current	IFP	Duty=1/10,1kHz	100	mA
Operating Temperature Range	Topr	---	-25 ~ +85	°C
Storage Temperature Range	Tstg	---	-30 ~ +100	°C
Soldering Condition	Tsd	---	260°C/5sec	°C

Typical Electro/Optical Characteristic Curves ($T_a=25^{\circ}\text{C}$)



Forward Current I_F (mA)

Ambient Temperature T_a ($^{\circ}\text{C}$)



可靠性试验条件 Reliability Test Conditions

试 验 项 目 Test Item	试 验 条 件 Test Condition	结 果 Result	判 断 基 准 Judgment criteria
连续动作寿命 Consecutive operating life test	IF=20mA, T=25℃, t=168h	0/100	正向电压 VF(V)= 容许上限规格 × 1.2 反向漏电 IR(μA)= 容许上限规格 × 2.0 轴向亮度 IV(mcd)= 容许下限规格 × 0.7 Forward Voltage VF(V)= Upper Limit × 1.2 Reverse Leakage Current IR(μA)=Upper Limit × 2.0 Luminous Intensity IV (mcd)=Lower Limit × 0.7
高温放置寿命 High temperature storage life test	T=100℃, t=168h	0/100	
低温放置寿命 Low temperature storage life test	T=-25℃, t=168h	0/100	
高温高湿储存 high temperature high humidity storage life test	T=85 ± 5℃, RH=85% ± 5, t=168h	0/100	
高低温循环 Temperature cycle test	-25℃~25℃~100℃, 30min 5min 30min 10cycles	0/100	
耐热冲击 Thermal shock test	100℃ 0℃ 5min 5min 20 cycles	0/100	
焊接耐热 Soldering heat test	T=260 ± 5℃, t=10s ± 1s	0/100	
锡可焊性 Solderability test	T=235 ± 5℃, t=5s ± 1s	0/100	锡附着面积 ≥95% Steeped Part ≥95%
耐跌落性能 Fall test	h=100cm, 50times	0/100	外观无损伤 性能无变化 Surface Appearance Photoelectric Properties Intact
引脚抗拉强度 Terminal strength test	W=9.8N, t=30s	0/100	
引脚抗弯曲性 Lead Bending test	W=4.9N, 2times	0/100	