



CIEL LIGHT CO.,LTD.

PRODUCT SPECIFICATION

Model No.: CLD-8021DUR-11

Drawing No.: _____

Customer: _____

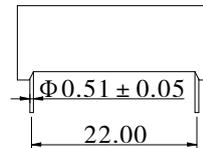
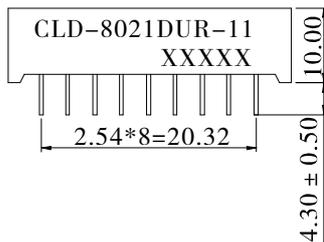
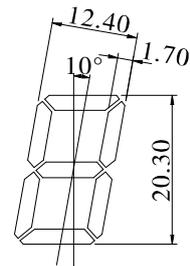
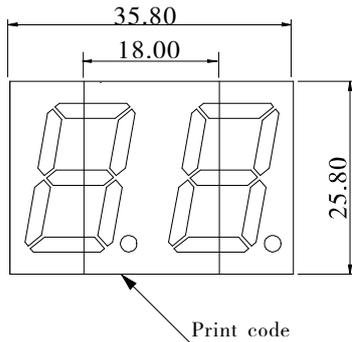
Customer's Model No.: _____

Customer's Drawing No.: _____

Descriptions

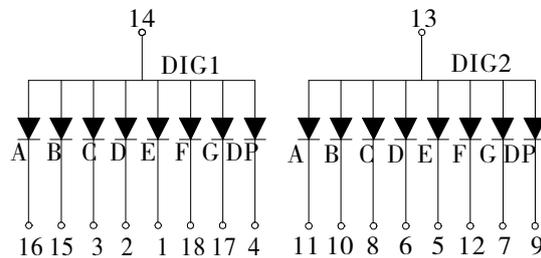
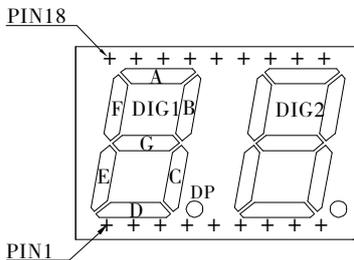
1. Emitting color:Red
2. Lens Color:White Diffused
- 3.Surface black color :Black
- 4.Dice material:AlGaInP/GaAs

Outline drawing



未注公差: $\pm 0.25\text{mm}$
Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted
PIN弯曲 \leq 长度*1%
PIN Bending \leq Length*1%

Internal Circuit Diagram (C.A.)



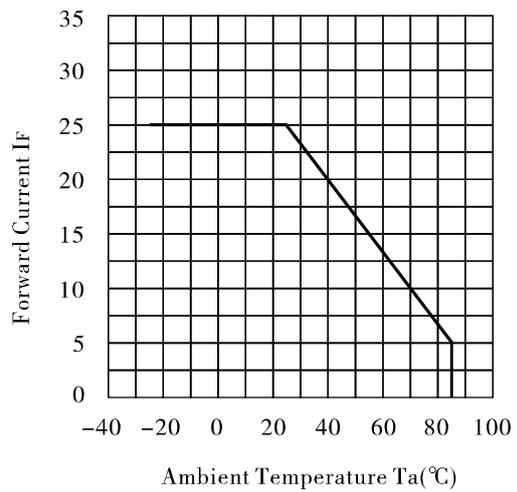
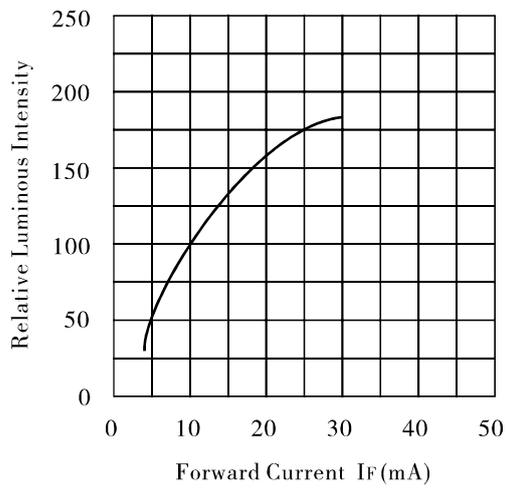
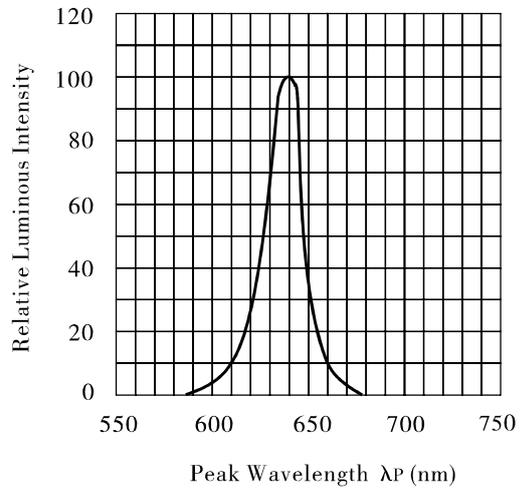
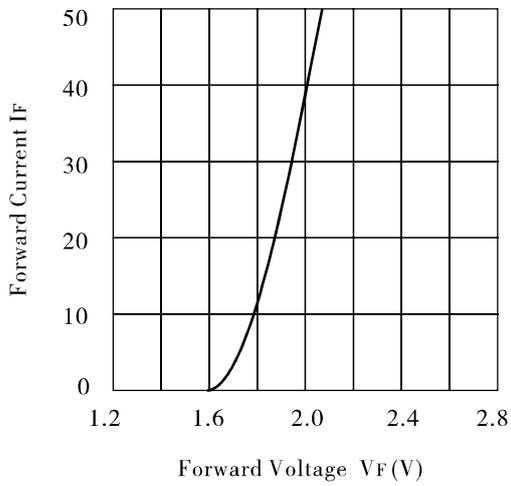
Electrical optical characteristics (Ta=25°C)

Parameter	Symbol	Ultra Red			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V _F	---	2.0	2.4	V	IF=20mA
Luminous Intensity	I _V	13.7	37.2	---	mcad	IF=20mA
Peak Wavelength	λ _P	---	645	---	nm	IF=20mA
Dominant Wavelength	λ _d	---	635	---	nm	IF=20mA
Spectral Line half-width	Δλ	---	20	---	nm	IF=20mA
Reverse Leakage Current	I _R	---	---	50	μA	V _R =5V

Absolute maximum parameters (Ta=25°C)

Parameter	Symbol	Condition	Rating	Unit
Power Dissipation	PD	---	80	mW
Reverse Voltage	VR	---	5	V
Forward Average Current	IF	---	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	---	260/5sec	°C

Typical Electro-Optical characteristic curves (Ta=25°C)



Reliability test conditions

Test Item	Test Condition	Result	Judgment criteria
Consecutive operating life test	IF=20mA, T=25℃, t=168h	0/12	Forward Voltage $V_F(V) = \text{Upper Limit} \times 1.2$ Reverse Leakage Current $I_R(\mu A) = \text{Upper Limit} \times 2.0$ Luminous Intensity Iv (mcd)=Lower Limit $\times 0.7$
High temperature storage life test	T=100℃, t=168h	0/12	
Low temperature storage life test	T=-25℃, t=168h	0/12	
high Temperature humidity storage life test	T=85 ± 2℃, RH=85% ± 3, t=168h	0/12	
Temperature cycle test	-25℃~25℃~100℃, 30min 5min 30min 10cycles	0/12	
Thermal shock test	100℃ 0℃ 5min 5min 20 cycles	0/12	
Soldering heat test	T=260 ± 5℃, t=10s ± 1s	0/12	
Solderability test	T=230 ± 5℃, t=5s ± 0.5s	0/12	Steeped Part ≥95%
Fall test	h=100cm, Free fall, 3times	0/12	Intact
Terminal strength test	W=9.8N, t=30 ± 5s	0/12	
Lead Bending test	W=4.9N, 2times	0/12	