



CIEL LIGHT CO.,LTD

PRODUCT SPECIFICATION

Model No. CLSS-56A1AUW-21

Drawing No. _____

Customer _____

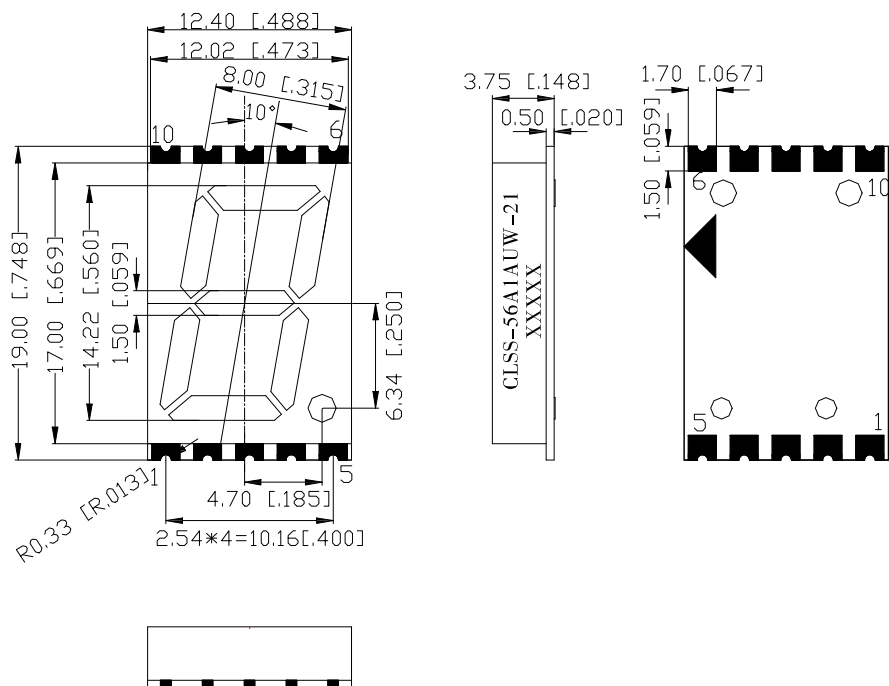
Customer's Model No.: _____

Customer's Drawing No. _____

Descriptions

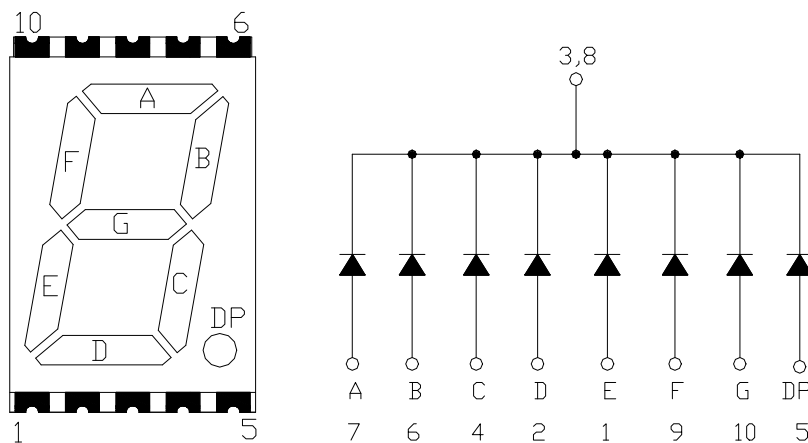
1. Emitting Color: White
2. Lens Color: White Diffused
3. Surface Black Color : Gray
4. Dice Material: InGaN/GaN

Outline Drawing



Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted Unit=mm

Internal Circuit Diagram(C.C.)



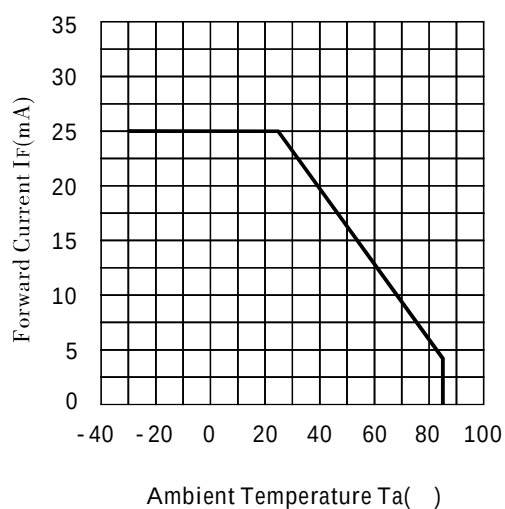
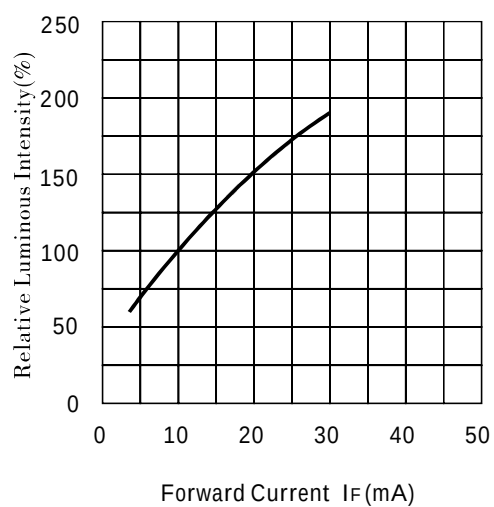
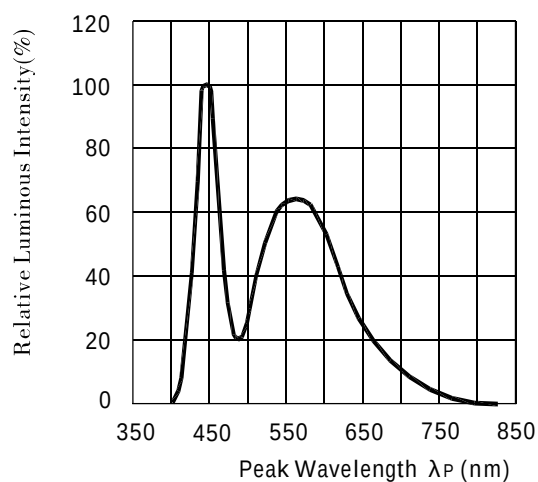
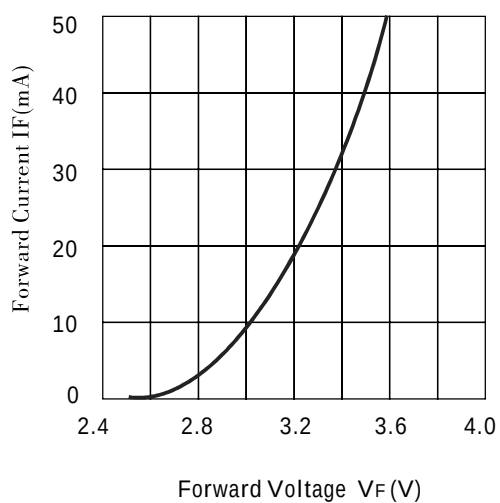
Electrical Optical Characteristics(Ta=25)

Parameter	Symbol	White			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V _F	---	3.20	3.60	V	IF=20mA
Luminous Intensity	I _v	---	60	---	mcd	IF=10mA
Chromaticity Coordinates (Tolerance: ± 0.01)	X	---	0.27	---	nm	IF=20mA
	Y	---	0.25	---	nm	IF=20mA
Reverse Leakage Current	I _R	---	---	50	μA	VR=5V

Absolute Maximum Parameters(Ta=25)

Parameter	Symbol	Condition	Rating	Unit
Power Dissipation	P _D	---	90	mW
Reverse Voltage	V _R	---	5	V
Forward Average Current	I _F	---	25	mA
Temperature Coefficient	I/C	---	0.33	mA/ °C
Pulse Current	IFP	Duty=1/10,1kHz	100	mA
Operating Temperature Range	Topr	---	-25 ~ +85	
Storage Temperature Range	Tstg	---	-30 ~ +100	
Soldering Condition	Tsd	---	260 /5sec	

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



Reliability Test Conditions

Test Item	Test Condition	Result	Judgment Criteria
Consecutive operating life test	IF=20mA, T=25 , t=168h	0/10	Forward Voltage $VF(V) = \text{Upper Limit} \times 1.2$ Reverse Leakage Current $IR(\mu A) = \text{Upper Limit} \times 2.0$ Luminous Intensity IV $(mcd) = \text{Lower Limit} \times 0.7$
High temperature storage life test	T=100 , t=168h	0/10	
Low temperature storage life test	T= - 25 , t=168h	0/10	
High temperature humidity storage life test	T=85 ± 2 , RH=85% ± 3, t=168h	0/10	
Temperature cycle test	- 25 ~25 ~100 30min 5min 30min 10cycles	0/10	
Thermal shock test	100 0 5min 5min 20cycles	0/10	
Soldering heat test	T=260 ± 5 , t=10s ± 1s	0/10	
Solderability test	T=235 ± 5 , t=5s ± 0.5s	0/10	Steeped Part ≥ 95%
Fall test	h=100cm, 50times	0/10	Surface Appearance Photoelectric Properties Intact