



Data Sheet

Customer:

Part No:

CLS-3013BUW-11T

Sample No:

Description:

0.3 inch 1 Digit White Color

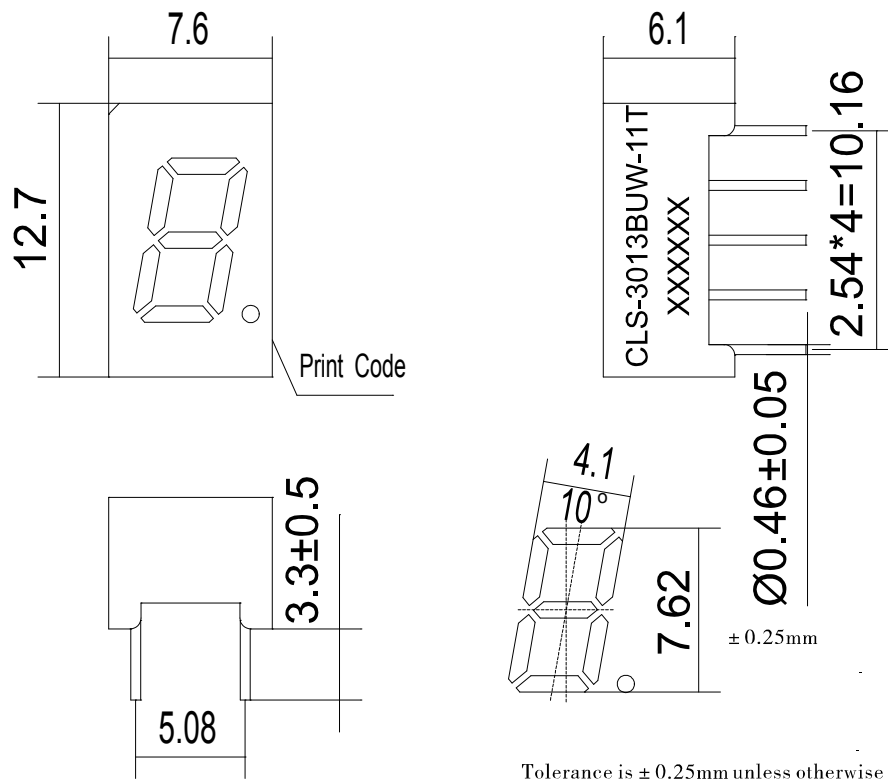
Item No:

Customer			
Check	Inspection	Approval	Date

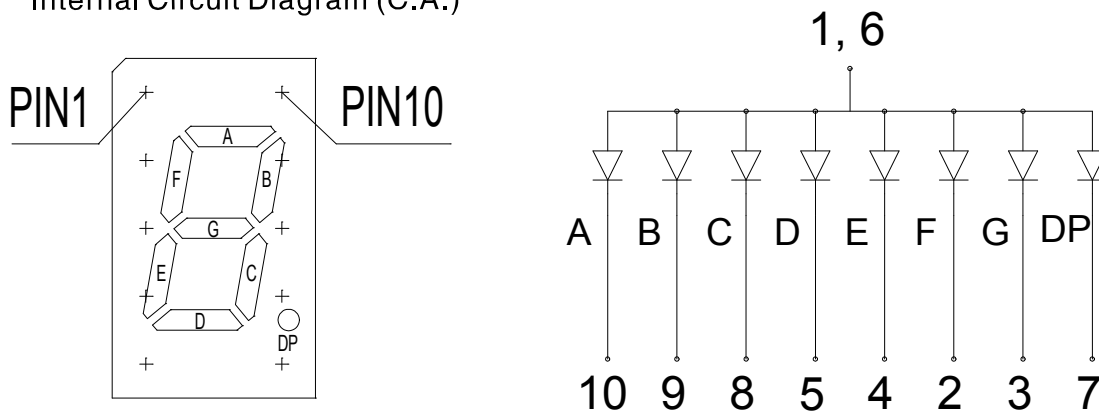
Descriptions

1. Emitting Color: White
2. Lens Color: White Diffused
3. Surface Black Color : Black
4. Dice Material: InGaN/GaN
5. Mask Material: Black fluorescein 0.125PET

Outline drawing



Internal Circuit Diagram (C.A.)



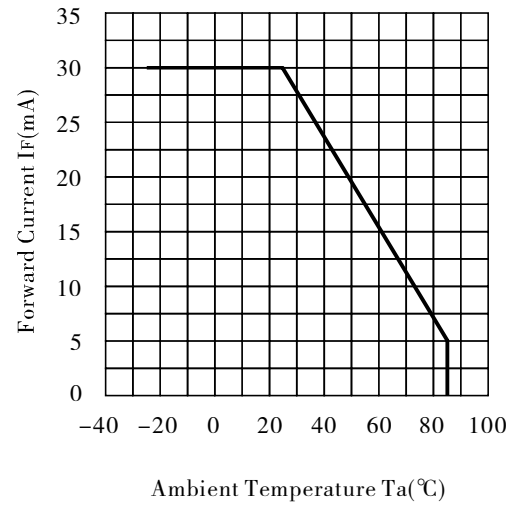
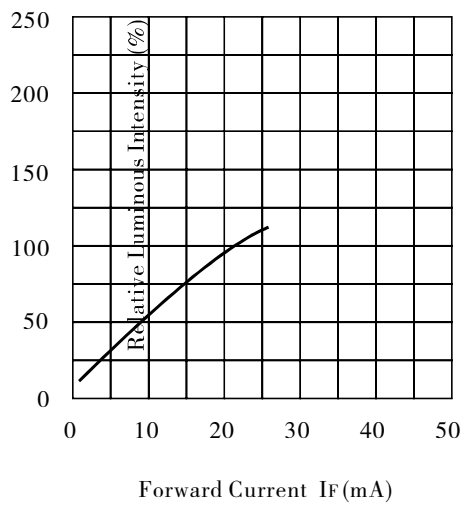
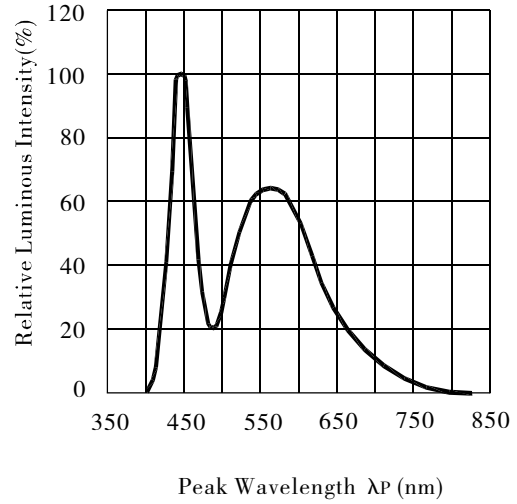
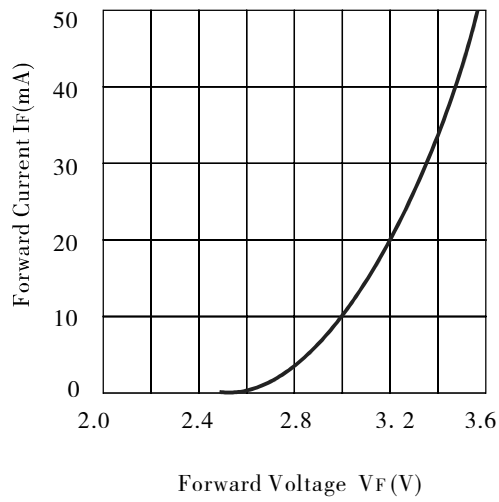
Electrical optical characteristics (Ta=25℃)

Parameter	Symbol	White			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V _F	---	3.2	3.6	V	IF=20mA
Luminous Intensity	I _V	19.0	37.2	---	mcd	IF=10mA
Chromaticity Coordinates	X	---	0.28	---	nm	IF=20mA
	Y	---	0.27	---	nm	IF=20mA
Spectral Line half-width	Δλ	---	30	---	nm	IF=20mA
Reverse Leakage Current	I _R	---	---	50	μA	VR=5V

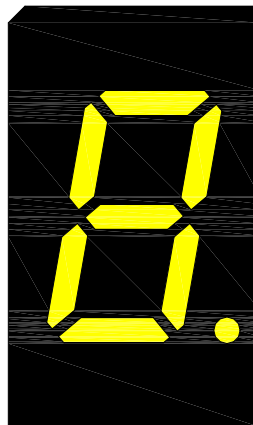
Absolute Maximum Parameters(Ta=25℃)

Parameter	Symbol	Condition	Rating	Unit
Power Dissipation	P _D	---	120	mW
Reverse Voltage	V _R	---	5	V
Forward Average Current	I _F	---	30	mA
Temperature Coefficient	I/C	---	0.4	mA/℃
Pulse Current	IFP	Duty=1/10,1kHz	100	mA
Operating Temperature Range	T _{opr}	---	-25 ~ +85	℃
Storage Temperature Range	T _{stg}	---	-30 ~ +100	℃
Soldering Condition	T _{sd}	---	260℃/5sec	℃

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



Film



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
Terminal strength test	W=9.8N, t=30 ± 5s	0/10	
Lead bending test	W=4.9N, 2times	0/10	