Data Sheet

Customer:

Part No: CLQ-5643AUW-11T

Sample No:

Description: 0.56 inch 4 Digit White Color

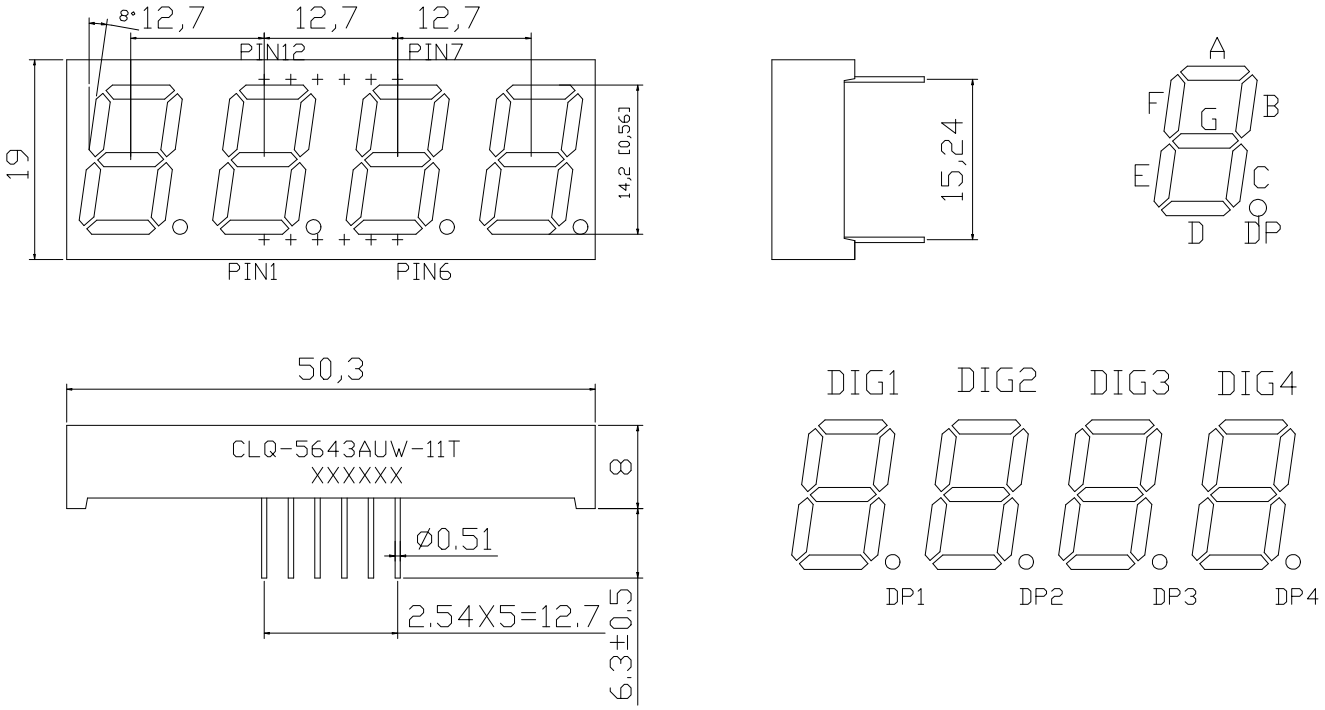
Item No:

Customer			
Check	Inspection	Approval	Date

Descriptions

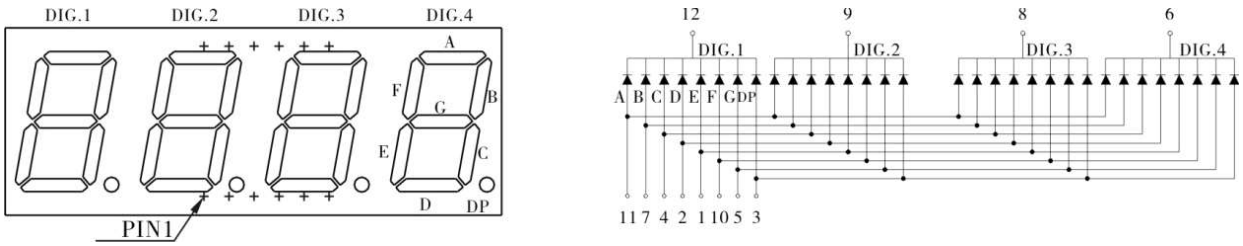
1. Emitting color: White
2. Lens color:White Diffused
3. Surface ink color : Black
4. Dice material: InGaN/GaN
5. Mask Material: Black fluorescein 0.125PET

Outline drawing



Tolerance is ± 0.25mm unless otherwise noted, Unit=mm
Pin bending≦length*1%

Internal Circuit Diagram (C.C)



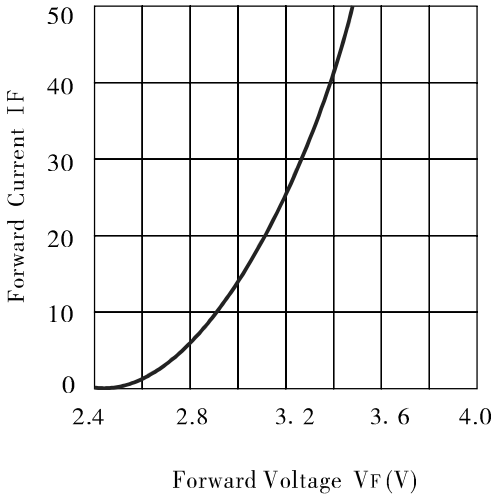
Electrical optical characteristics (Ta=25℃)

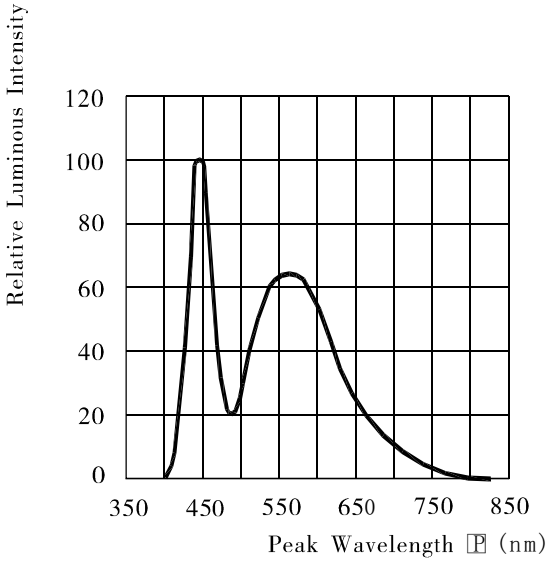
Parameter	Symbol	White			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V_F	2.8	3.0	3.4	V	IF=20mA
Luminous Intensity	I_V	37.2	72.8	---	mcd	IF=10mA
Chromaticity Coordinates	X	---	0.28	---	---	IF=20mA
	Y	---	0.29	---		
Reverse Leakage Current	I_R	---	---	50	μA	V_R=5V

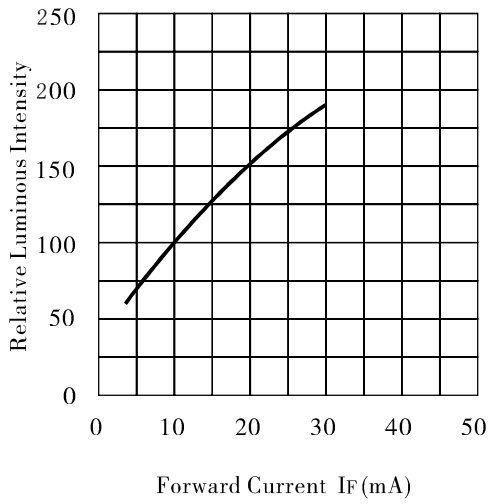
Absolute maximum parameters （Ta=25℃ ）

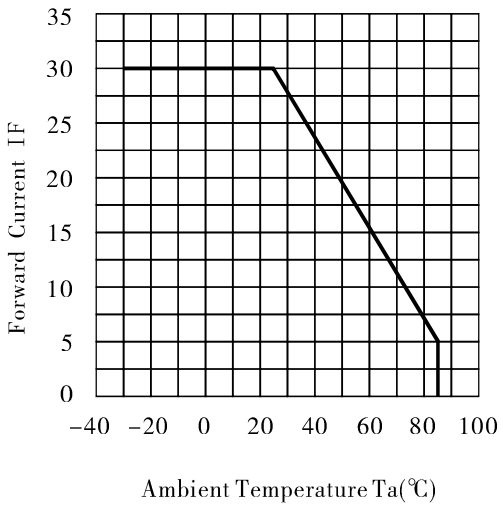
Parameter	Symbol	Condition	Rating	Unit
Power Dissipation	PD	---	90	mW
Reverse Voltage	VR	---	5	V
Forward Average Current	IF	---	25	mA
Temperature cofficient	I/C	---	0.33	mA/°C
Pulse Current	IFP	Duty=1/10,1kHz	100	mA
Operating Temperature Range	Topr	---	-25 ~ +85	℃
Storage Temperature Range	Tstg	---	-30 ~ +100	℃
Soldering Condition	Tsd	---	265℃/5sec	℃

Typical Electro-Optical characteristic curves （Ta=25℃）









Film

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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)= Upper Limit × 1.2 Reverse Leakage Current I_R(μA)=Upper Limit × 2.0 Luminous Intensity Iv (mcd)=Lower Limit × 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	