

Descriptions

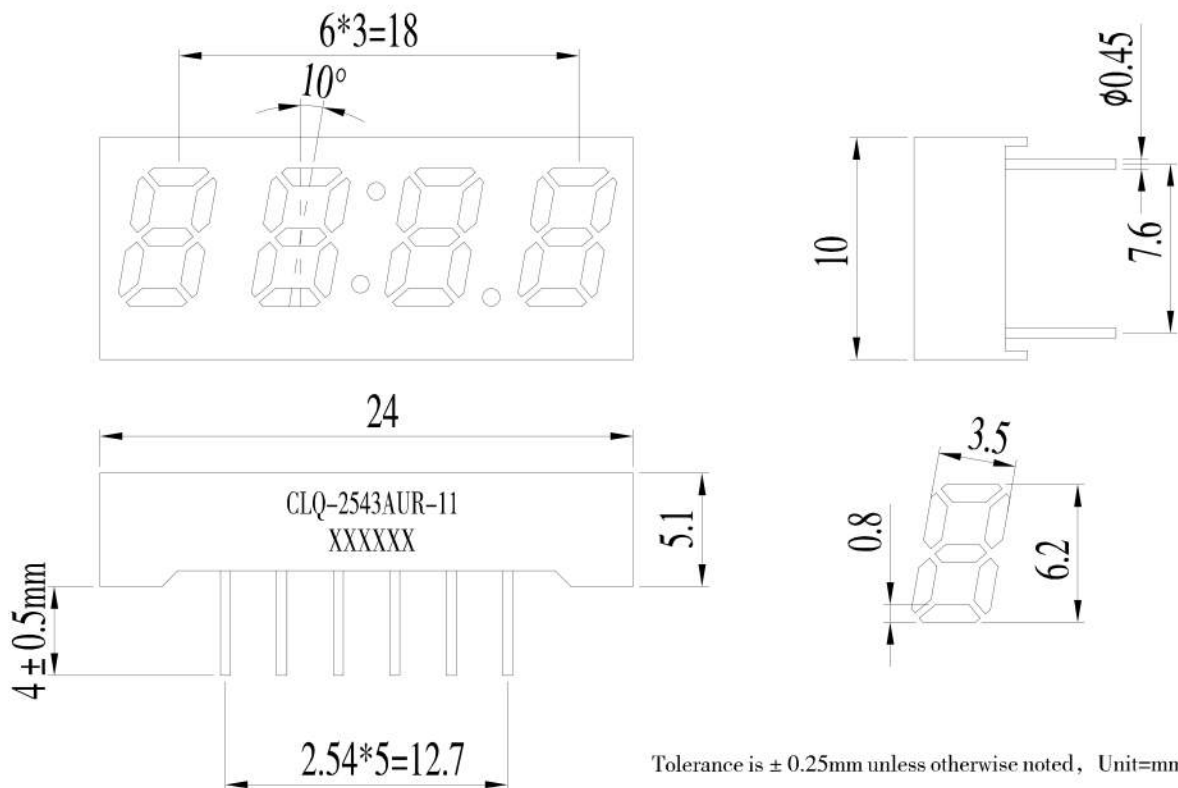
Emitting Color: Red

Lens Color: White Diffused

Surface Ink Color: Black

AlGaInP/GaAs Dice Material: AlGaInP/GaAs

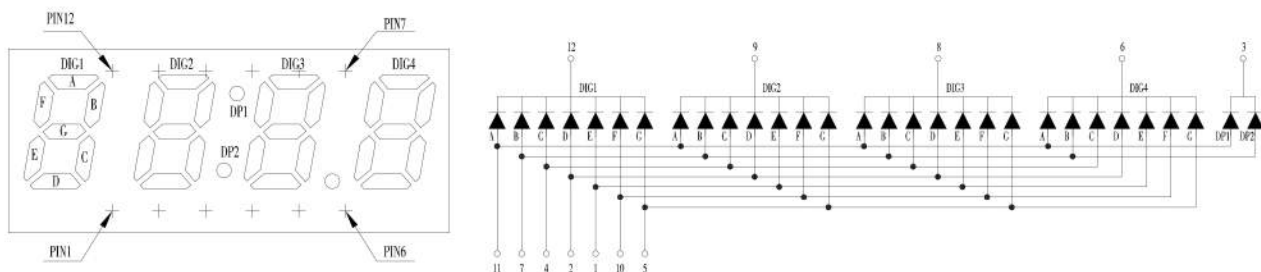
Outline Drawing



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

Pin bending $\leq$ length*1%

Circuit Diagram (C.C.)



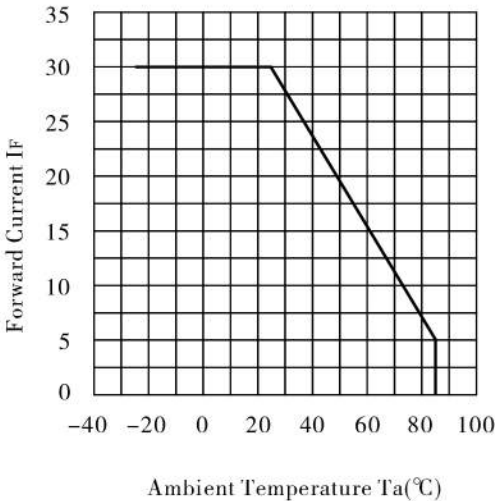
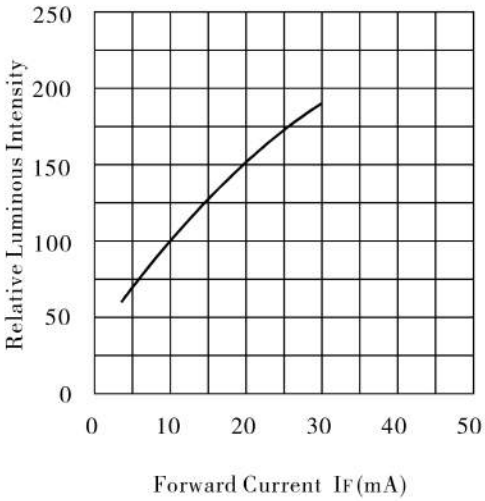
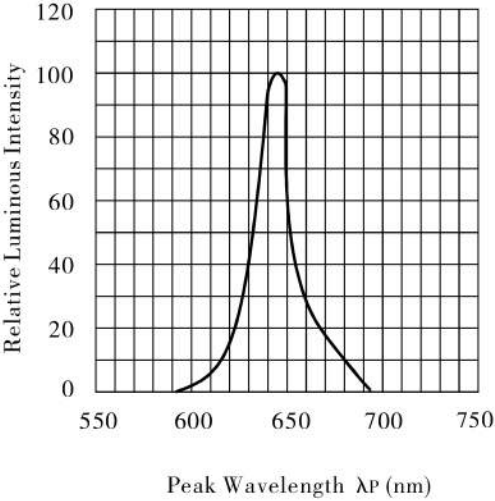
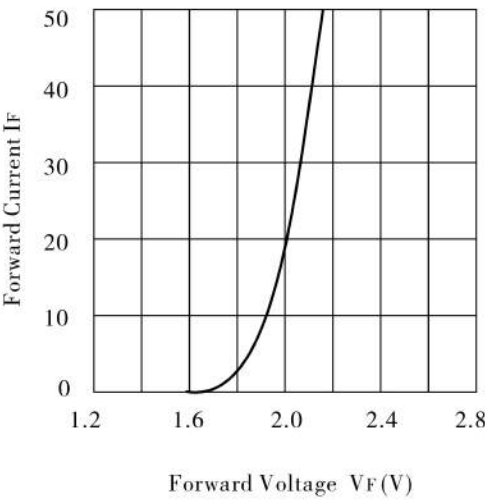
Electrical And Optical Characteristics (Ta=25℃)

Parameter	Symbol	Red			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V_F	---	2.0	2.4	V	IF=20mA
Luminous Intensity	I_V	3.4	5.2	---	med	IF=10mA
Peak Wavelength	λ_P	---	640	---	nm	IF=20mA
Dominant Wavelength	λ_d	---	635	---	nm	IF=20mA
Spectral Line half-width	$\Delta\lambda$	---	30	---	nm	IF=20mA
Reverse Leakage Current	I_R	---	---	50	μA	$V_R=5V$

Absolute Maximum Parameters (Ta=25℃)

Parameter	Symbol	Test 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/℃
Pulse Current	I_{FP}	Duty=1/10,1kHz	100	mA
Operating Temperature Range	T_{opr}	---	-25 ~ +85	℃
Storage Temperature Range	T_{stg}	---	-30 ~ +100	℃
Soldering Temperature	T_{sd}	---	260℃/5sec	℃

Typical Electrical/Optical Characteristic Curves (Ta=25℃)



Reliability Test Conditions

Test Item	Test Condition	Result	Judgment criteria
Consecutive perating life test	IF=10mA, 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 ± 5℃, RH=85% ± 5, t=168h	0/10	
Temperature cycle test	-25℃~25℃~100℃, 30min 5min 30min 10cycles	0/10	
Thermal shock test	100℃ ~ 0℃ 5min 5min 20 cycles	0/10	
Soldering heat test	T=260 ± 5℃, t=10s ± 1s	0/10	Steeped Part ≥ 95%
Solderability test	T=235 ± 5℃, t=5s ± 0.5s	0/10	
Fall test	h=100cm, 50 times	0/10	Surface Appearance Photoelectric Properties Intact
Terminal strength test	W=9.8N, t=30 ± 5s	0/10	
Lead Bending test	W=4.9N, 2 times	0/10	