

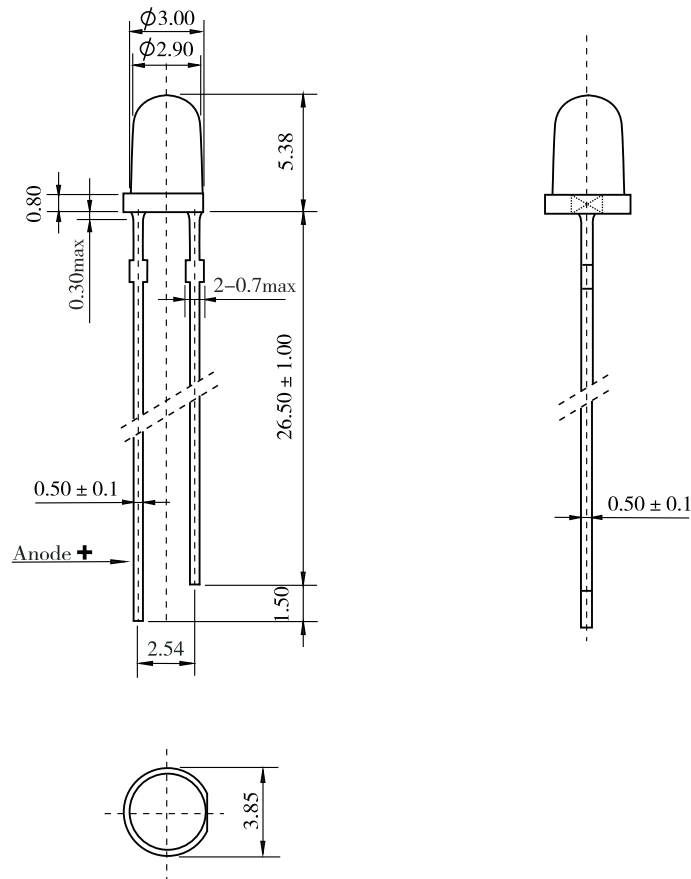
Features

Low Power Consumption
High Efficiency
Round Type
T1 (3mm) Diameter
With Flange
Solder Leads Without Stand-off
Compliant With RoHS

Descriptions

Chip Material: AlGaInP/GaAs
Emitting Color: Ultra Red
Lens Color: Water Clear

Outline Drawing



ATTENTION



OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES

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

Electrical Optical Characteristics (Ta=25°C)

Parameter	Symbol	Ultra Orange			Unit	Test Condition
		Min	Typ	Max		
Forward Voltage	V _F	---	2.0	2.4	V	IF=20mA
Luminous Intensity	I _V	3130	5400	---	mcd	IF=20mA
Peak Wavelength	λ _P	---	632	---	nm	IF=20mA
Dominant Wavelength	λ _d	---	624	---	nm	IF=20mA
Spectral Line half-width	Δλ	---	20	---	nm	IF=20mA
Reverse Leakage Current	I _R	---	---	50	μA	VR=5V
Viewing Angle	2θ _{1/2}	---	15	---	Deg	IF=20mA

Absolute Maximum Parameters (Ta=25°C)

Parameter	Symbol	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/ °C
Pulse Current	IFP	Duty=1/10,1kHz	100	mA
Operating Temperature Range	T _{opr}	---	-25 ~ +85	°C
Storage Temperature Range	T _{stg}	---	-30 ~ +100	°C
Soldering Condition	T _{sd}	---	260°C/5sec	°C

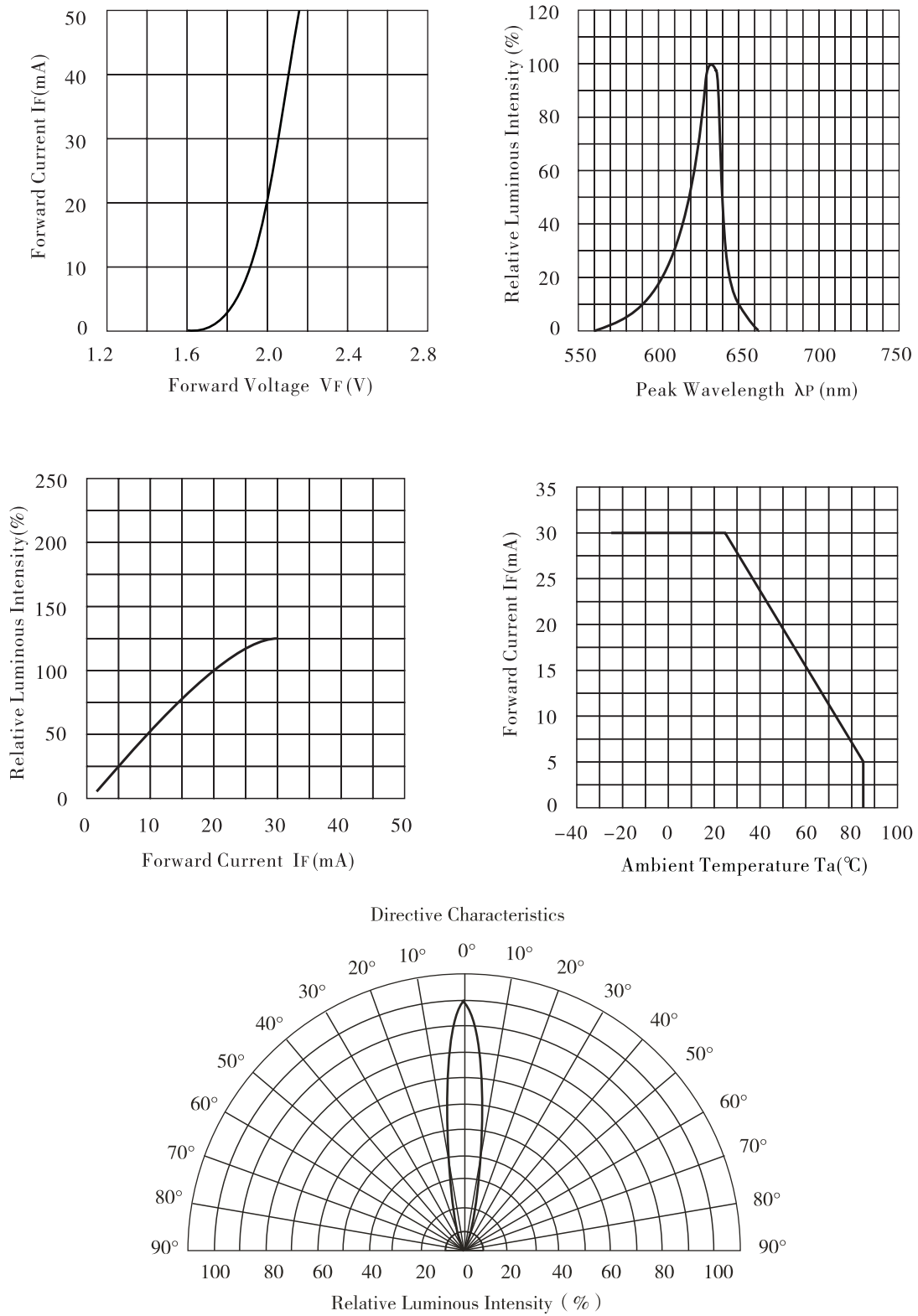
NOTE:

Luminous Intensity Measurement allowance is ± 10%.

2θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

The dominant wavelength is derivd from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

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	0/100	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) = Lower Limit $\times 0.7$
High temperature storage life test	T=100℃, t=168h	0/100	
Low temperature storage life test	T=25℃, t=168h	0/100	
High temperature humidity storage life test	T=85 ± 2℃, RH=85% ± 3, t=168h	0/100	
Temperature cycle test	-25℃~25℃~100℃ 30min 5min 30min 10cycles	0/100	
Thermal shock test	100℃ 0℃ 5min 5min 20cycles	0/100	
Soldering heat test	T=260 ± 5℃, t=10s ± 1s	0/100	
Solderability test	T=235 ± 5℃, t=5s ± 0.5s	0/100	Steeped Part ≥ 95%
Fall test	h=100cm, 50times	0/100	Surface Appearance Photoelectric Properties Intact
Terminal strength test	W=9.8N, t=30 ± 5s	0/100	
Lead bending test	W=4.9N, 2times	0/100	

Package

Item	Inner packaging bag	Inner packaging box
Material	Antistatic bag	Single corrugated box
Quantity	1000PCS	Single corrugated box × 10 =10000PCS
Marking	Label Marking: Type、Quantity	Certificate of conformity Marking: Product name 、 Type、Quantitye、 Date of manufacture
Size	16×16(cm)	30×19×11.5(cm)