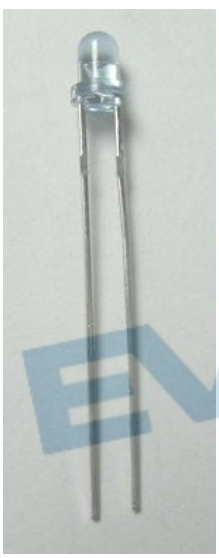
DATASHEET

Technical Data Sheet

3mm Infrared LED, T-1

IR204/H16/L10



Features

- High reliability
- 2.54mm lead spacing
- Low forward voltage
- Good spectral matching to Si photodetector
- High radiant intensity
- Pb free
- The product itself will remain within RoHS compliant version.
- Compliance with EU REACH
- Compliance Halogen Free(Br < 900ppm, Cl < 900ppm, Br+Cl < 1500ppm)

Description

EVERLIGHT's infrared emitting (IR204/H16/L10)
is a high intensity diode, molded in a blue transparent plastic package.
The device is spectrally matched with phototransistor, photodiode and infrared receive module.

Applications

•Infrared applied system

Device Selection Guide

LED Part No.	Chip Material	Lens Color
IR204/H16/L10	GaAlAs	Blue

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I_F	100	mA
Peak Forward Current *1	I_{FP}	1.0	A
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-40~ +85	℃
Storage Temperature	T_{stg}	-40 ~ +100	℃
Soldering Temperature *2	T_{sol}	260	℃
Power Dissipation at(or below) 25℃ Free Air Temperature	P_d	150	mW

Notes: *1:I_{FP} Conditions--Pulse Width≦100μs and Duty≦1%.

*2:Soldering time≦5 seconds.

Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Radiant Intensity	IE	4.0	-	17.6	mW/sr	I_F=20mA
Peak Wavelength	λp	-	940	-	nm	I_F=20mA
Spectral Bandwidth	Δλ	-	45	-	nm	I_F=20mA
Forward Voltage	V_F	-	1.2	1.5	V	I_F=20mA
Reverse Current	I_R	-	-	10	μA	V_R=5V
View angle	2θ1/2	-	50	-	degree	I_F=20mA

Rank

Condition：I_F=20mA

Unit：mW/sr

Bin Number	K	L	M	N
Min	4.0	5.6	7.8	11.0
Max	6.4	8.9	12.5	17.6

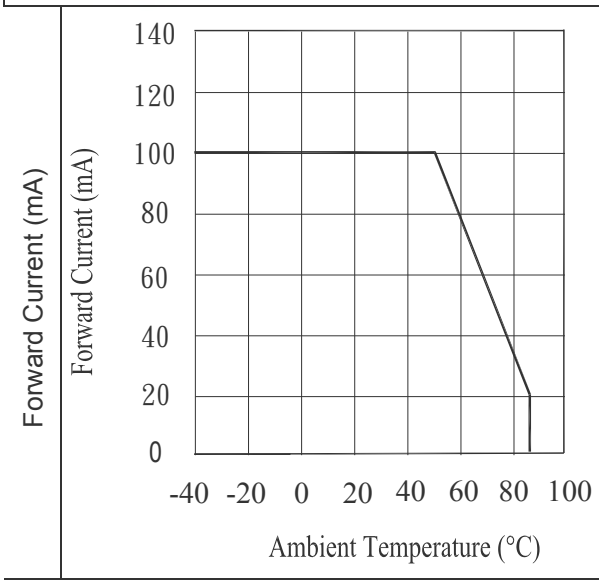
Note:

*Measurement Uncertainty of Forward Voltage: ±0.1V

*Measurement Uncertainty of Luminous Intensity: ±10%

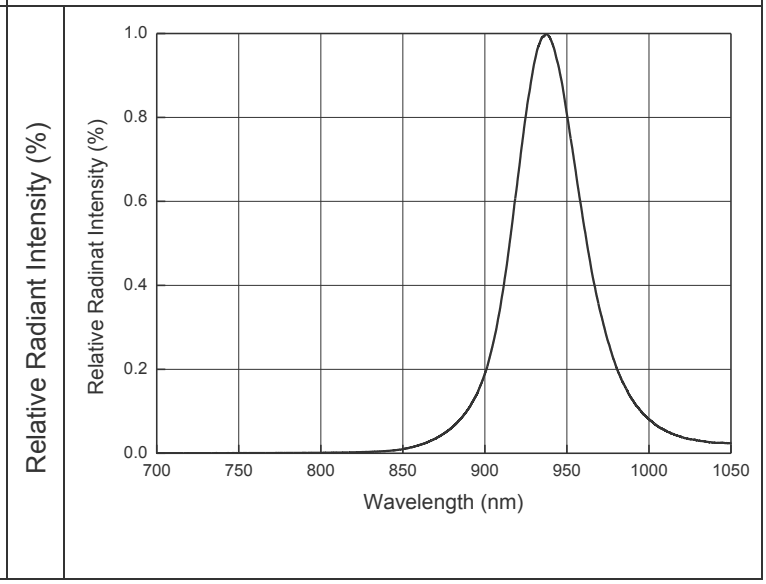
*Measurement Uncertainty of Dominant Wavelength ±1.0nm

Fig.1 Forward Current vs. Ambient Temperature



Ambient Temperature(℃)

Fig.2 Spectral Distribution



Wavelength λ (nm)

Fig.3 Radiant Intensity vs. Forward Current

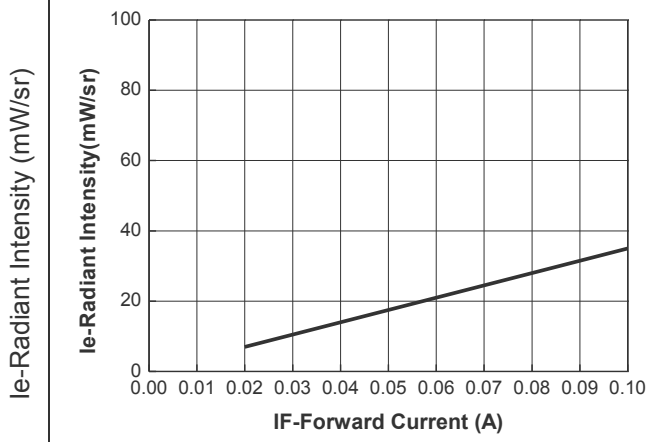
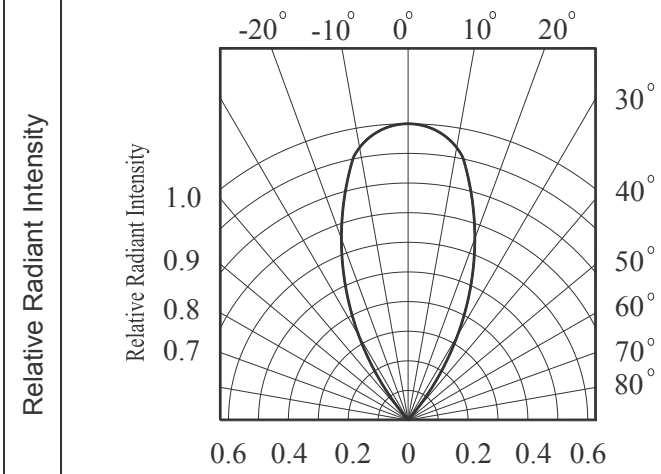
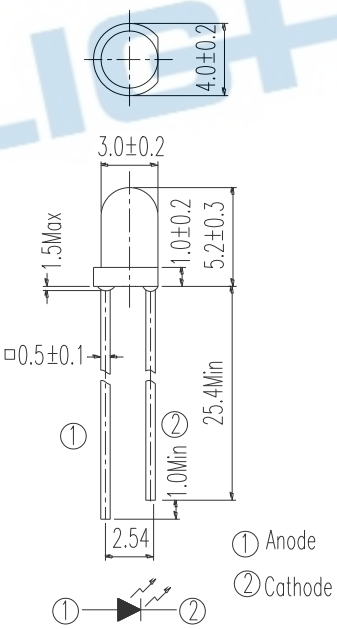


Fig.4 Relative Radiant Intensity vs. Angular Displacement



Packing Quantity Specification

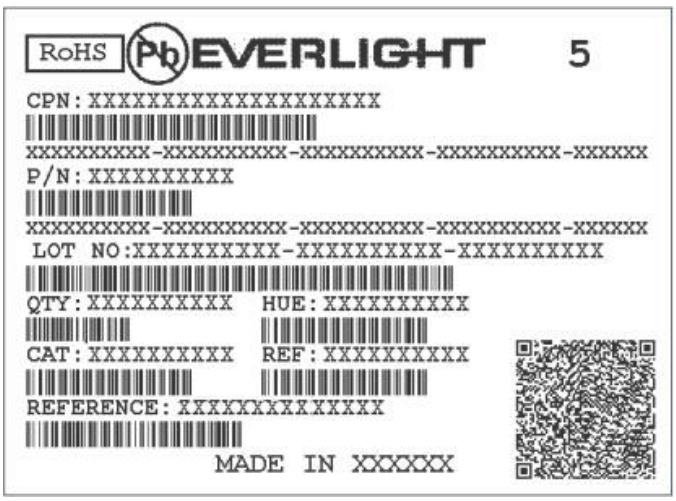
1. 200~1000PCS/1Bag,4Bags/1Box
2. 10Boxes/1Carton



Notes: 1. All dimensions are in millimeters
2. Tolerances unless dimensions ±0.25mm

Moisture Resistant Packing Materials

Label Form Specification



CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot Number

MADE IN TAIWAN: Production Place

DISCLAIMER

1. EVERLIGHT reserves the right(s) on the adjustment of product material mix for the specification.
2. The product meets EVERLIGHT published specification for a period of twelve (12) months from da of shipment.
3. The graphs shown in this datasheet are representing typical data only and do not show guarantee values.
4. When using this product, please observe the absolute maximum ratings and the instructions for usir outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damag resulting from the use of the product which does not comply with the absolute maximum ratings ar the instructions included in these specification sheets.
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6. This product is not intended to be used for military, aircraft, automotive, medical, life sustaining life saving applications or any other application which can result in human injury or death. Pleas

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