



Technical Data Sheet

3mm Infrared LED, T-1

IR204/H60

Features

- High reliability
- 2.54mm lead spacing
- Low forward voltage
- Good spectral matching to Si photodetector
- Pb free
- The product itself will remain within RoHS compliant version.

Descriptions

EVERLIGHT's infrared emitting diode (IR204/H60) 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	Lens Color
	Material	
IR204/H60	GaAlAs	Blue

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Radiant Intensity	I_E	$I_F=20\text{mA}$	4.0	7.0	--	mW/sr
		$I_F=80\text{mA}$	16	22	--	
		$I_F=100\text{mA}$	20	30	--	
		$I_F=1\text{A}$ Pulse Width $\leq 100 \mu\text{s}$ and Duty $\leq 1\%$	--	300	--	
Peak Wavelength	λ_p	$I_F=20\text{mA}$	--	940	--	nm
Spectral Bandwidth	$\Delta \lambda$	$I_F=20\text{mA}$	--	45	--	nm
Forward Voltage	V_F	$I_F=20\text{mA}$	--	1.2	1.5	V
		$I_F=100\text{mA}$	--	1.4	1.8	
		$I_F=1\text{A}$ Pulse Width $\leq 100 \mu\text{s}$ and Duty $\leq 1\%$	--	2.6	4.0	
Reverse Current	I_R	$V_R=5\text{V}$	--	--	10	μA
View Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	40	50	60	deg

Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs.
Ambient Temperature

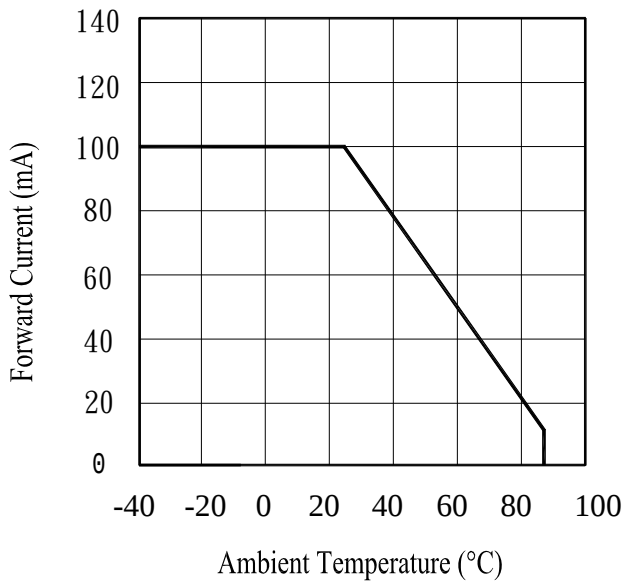


Fig.2 Spectral Distribution

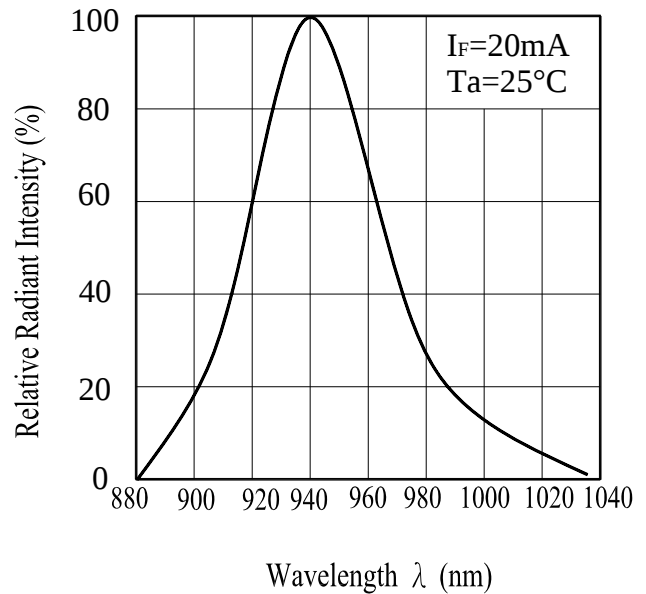


Fig.3 Peak Emission Wavelength
Ambient Temperature

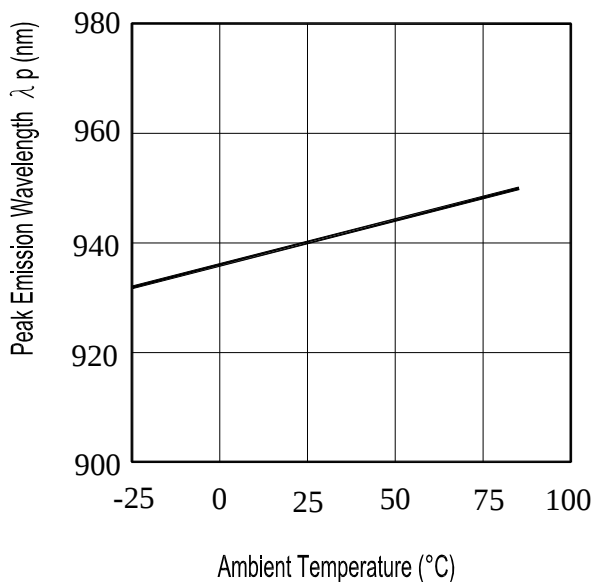
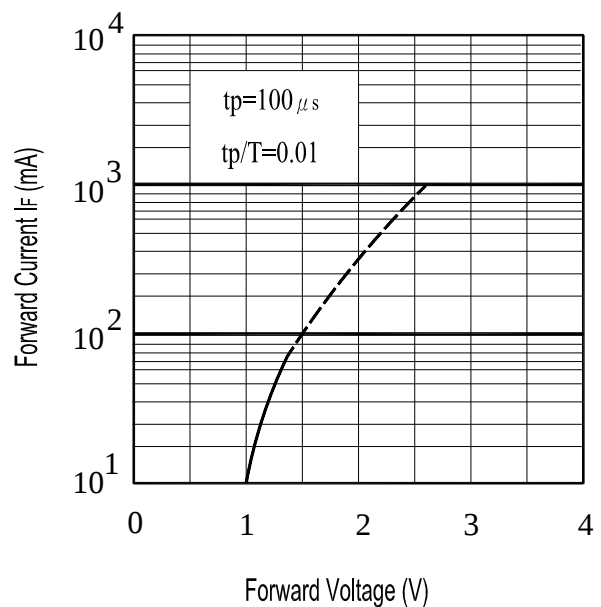


Fig.4 Forward Current
vs. Forward Voltage



Typical Electro-Optical Characteristics Curves

Fig.5 Relative Intensity vs.

Forward Current

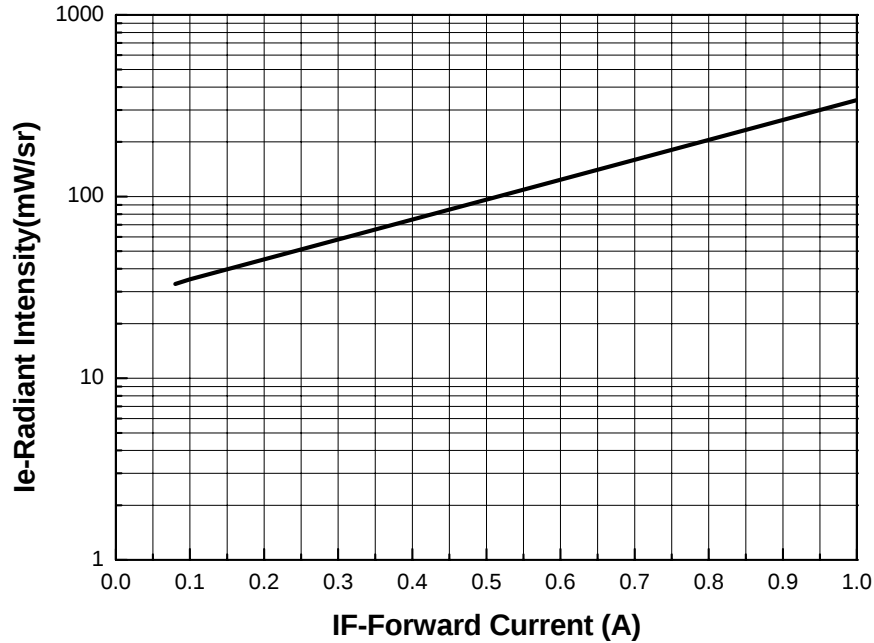
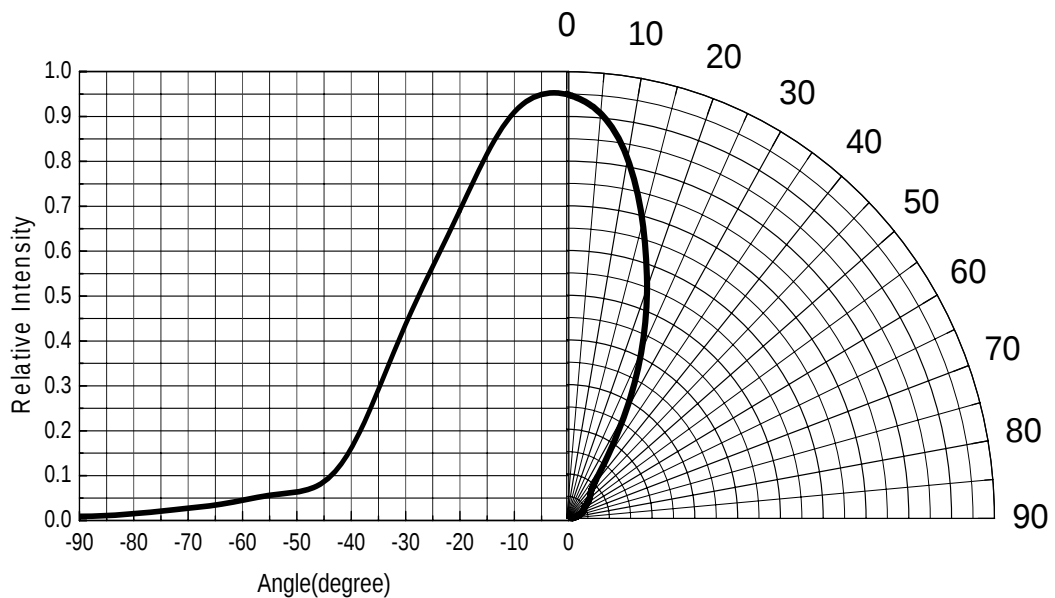


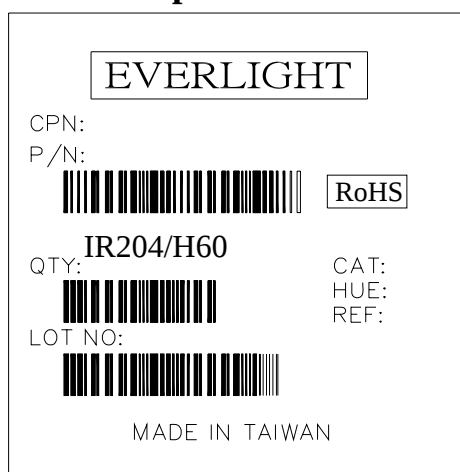
Fig.6 Relative Radiant Intensity vs.

Angular Displacement



Packing Quantity Specification

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

Label Form Specification

The diagram shows a rectangular label with the following layout:

- Top center: **EVERLIGHT** in a box.
- Left side, top: CPN: and P/N: (with a barcode).
- Left side, middle: QTY: (with a barcode).
- Left side, bottom: LOT NO: (with a barcode).
- Center: **IR204/H60**.
- Right side, top: **RoHS** in a box.
- Right side, middle: CAT: HUE: REF: (with a barcode).
- Bottom center: **MADE IN TAIWAN**.

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

Notes

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

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