

# LIGHT







## Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	I <sub>e</sub>	2.2	3.1	4.5	mW/sr	I <sub>F</sub> =20mA (Note 1,3)
Viewing Angle	1/2	---	85	---	deg	(Note 2)
Peak Wavelength		---	940	---	nm	I <sub>F</sub> =20mA
Spectral Line Half- Width	Δ	---	50	---	nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	---	1.22	1.5	V	I <sub>F</sub> =50mA
Reverse Current	I <sub>R</sub>	---	---	100	μA	V <sub>R</sub> =8V

### Note:

- Point sources of the amount of radiation per unit time in a given direction within the unit solid Angle radiated energy.
- axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
- The I<sub>e</sub> guarantee should be added ±15% tolerance.

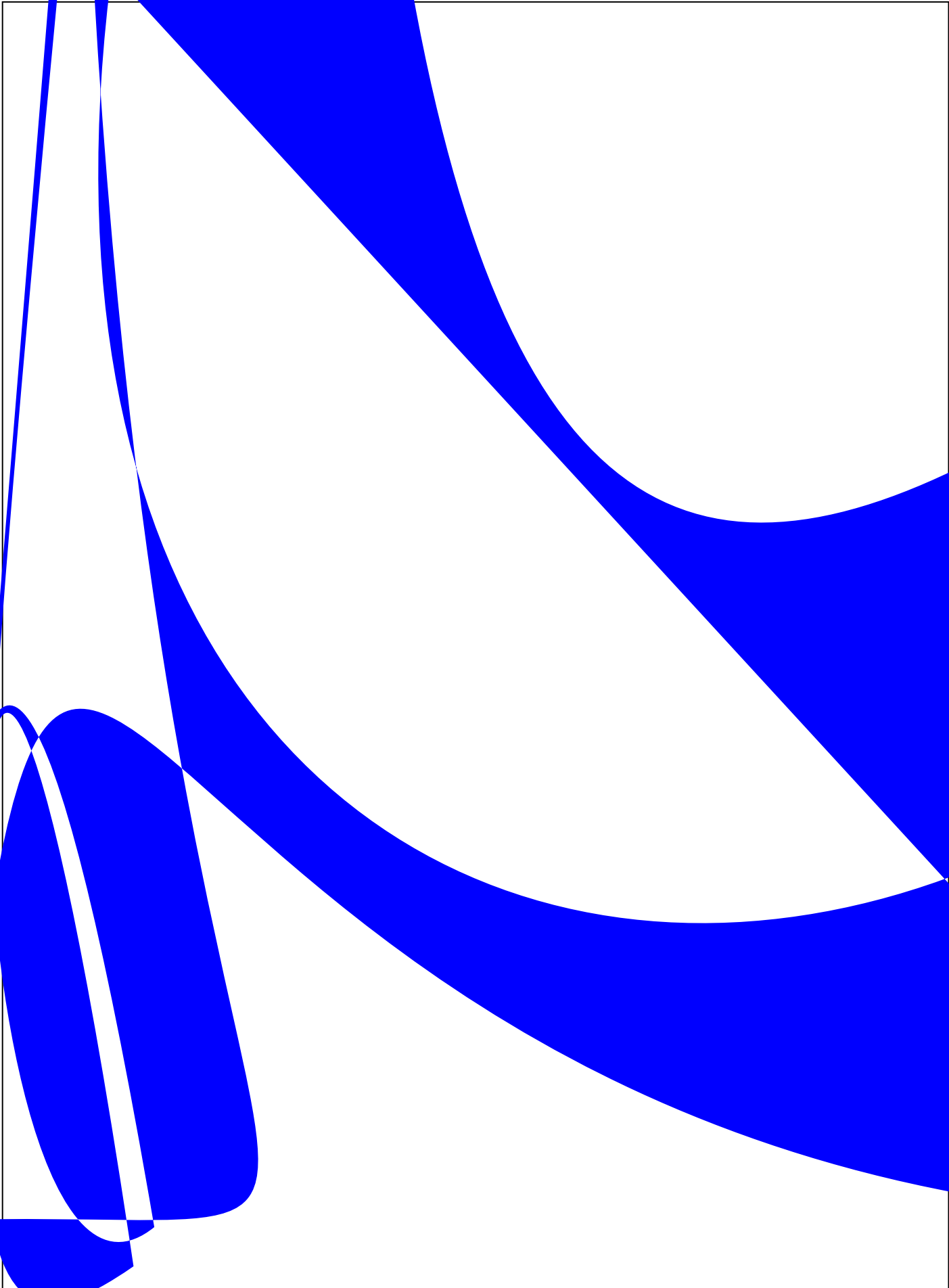
## Infrared Emitting Diode Specification

### ●Commodity: Infrared emitting diode

#### ●Intensity Bin Limits (At 20mA)

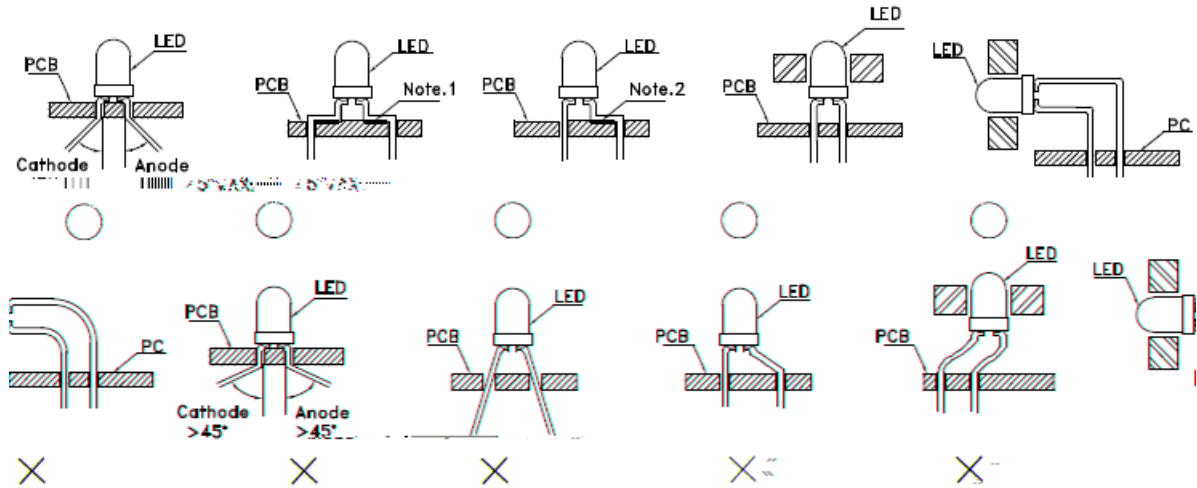
BIN CODE	Min. (mW/sr)	Max. (mW/sr)
1	2.2	2.6
2	2.6	3.1
3	3.1	3.7
4	3.7	4.5

**NOTE:** The I<sub>e</sub> guarantee should be added ±15% tolerance.



## LED MOUNTING METHOD

1. The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead-forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.(Fig.1)



-2: Do not route PCB

Trace in the contact area between the leadframe and the PCB to prevent short-circuit.

2. When soldering wire to the LED, use individual heat-shrink tubing to insulate the exposed leads to prevent accidental contact short-circuit (Fig.2)



3. Use stand-offs (Fig.3) or spacers (Fig.4) to securely position the LED above the PCB.

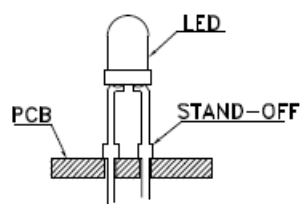


Fig. 3

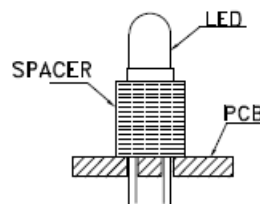


Fig. 4

## LEAD FORMING PROCEDURES

