

# 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	$\theta_{1/2}$	---	85	---	deg	(Note 2)
Peak Wavelength	$\lambda_s$	---	940	---	nm	I <sub>F</sub> =20mA
Spectral Line Half- Width	$\Delta\lambda$	---	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.
- LVWKRIL -axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
- The I<sub>e</sub> guarantee should be added ±15% tolerance.

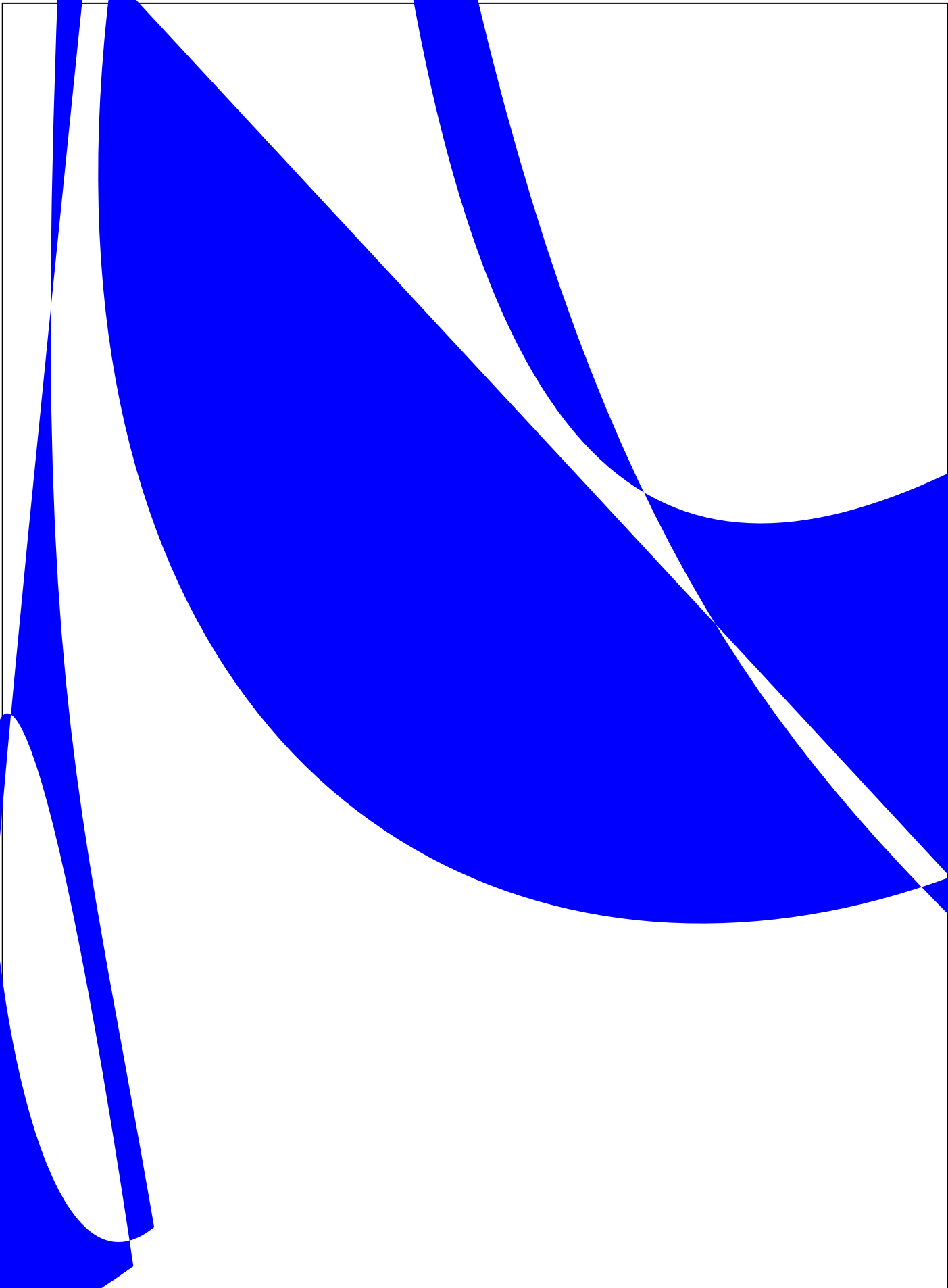
## Infrared Emitting Diode Specification

### ●Commodity: Infrared emitting diode

#### ●Intensity Bin Limits (At 20mA)

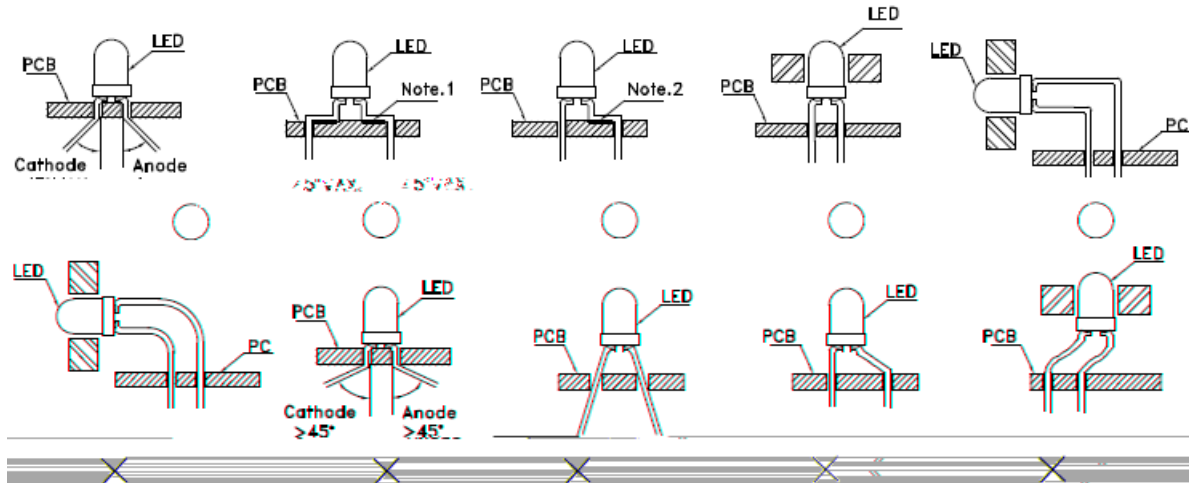
BIN CODE	Min. (mW/sr)	Max. (mW/sr)
1	2.2	2.6
2	2.6	3.1
3	3.1	3.7
4	3.7	4.5

**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)



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.

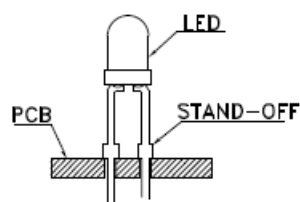


Fig. 3

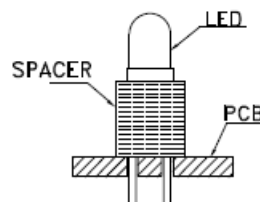


Fig. 4

## LEAD FORMING PROCEDURES

