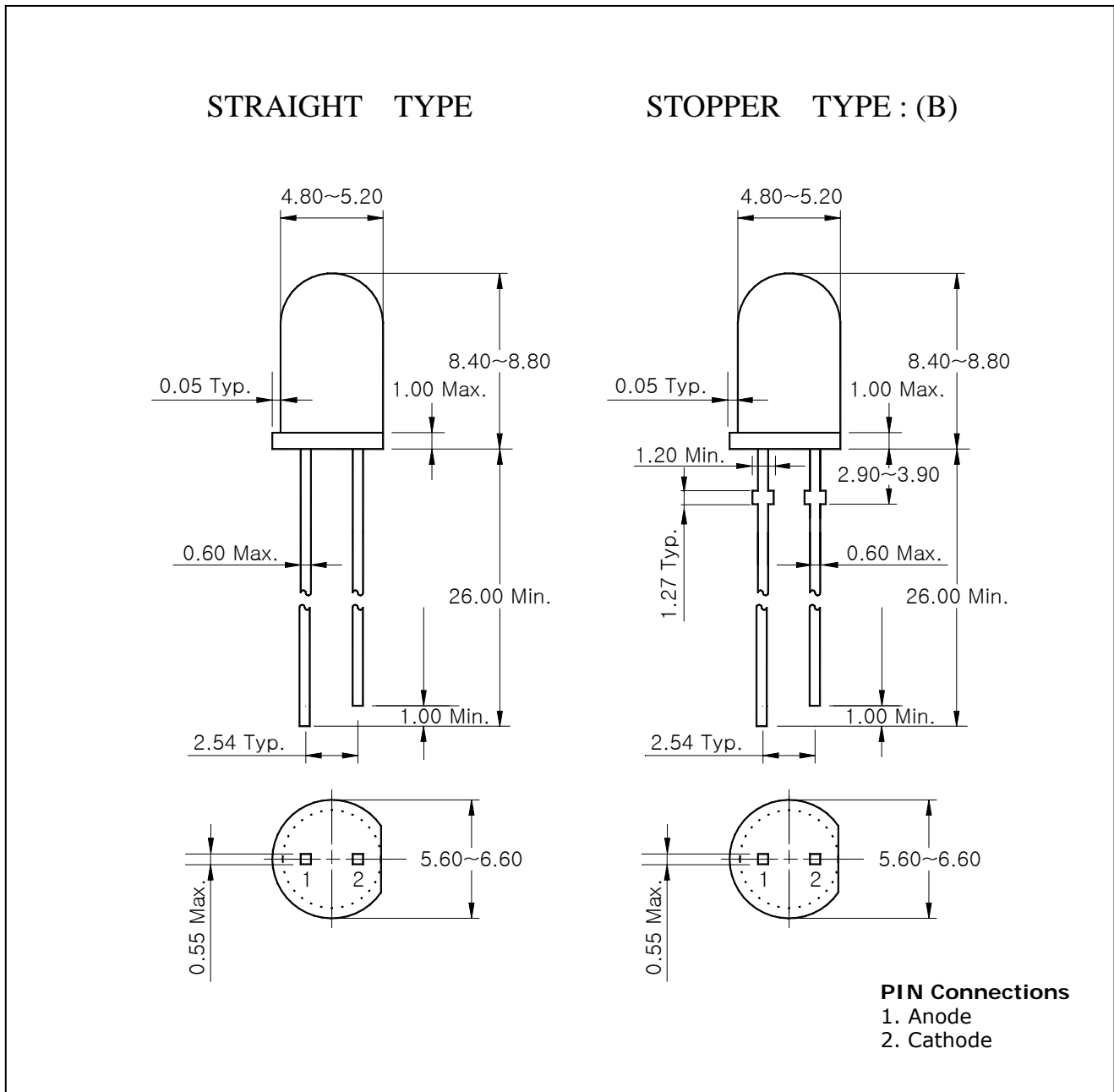


**Features**

- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Low power consumption
- High radiant intensity

**Applications**

- Light source for remote control devices  
(This device should be only used at non- repetitive pulse mode)

**Outline Dimensions**
**unit : mm**


# SI5315-H / SI5315-H(B)

## Absolute Maximum Ratings

(Ta=25°C)

| Characteristic              | Symbol    | Rating               | Unit |
|-----------------------------|-----------|----------------------|------|
| Power dissipation           | $P_D$     | 145                  | mW   |
| *1 Forward current          | $I_F$     | 100                  | mA   |
| *2 Peak forward current     | $I_{FP}$  | 1                    | A    |
| Reverse voltage             | $V_R$     | 4                    | V    |
| Operating temperature range | $T_{opr}$ | -25~85               | °C   |
| Storage temperature range   | $T_{stg}$ | -30~100              | °C   |
| *3 Soldering temperature    | $T_{sol}$ | 260°C for 10 seconds |      |

\*1. Avoid operating under continuous bias

\*2. Duty ratio = 1/100, Pulse width = 0.1ms

\*3. Keep the distance more than 2.0mm from PCB to the bottom of IRED package

## Electrical / Optical Characteristics

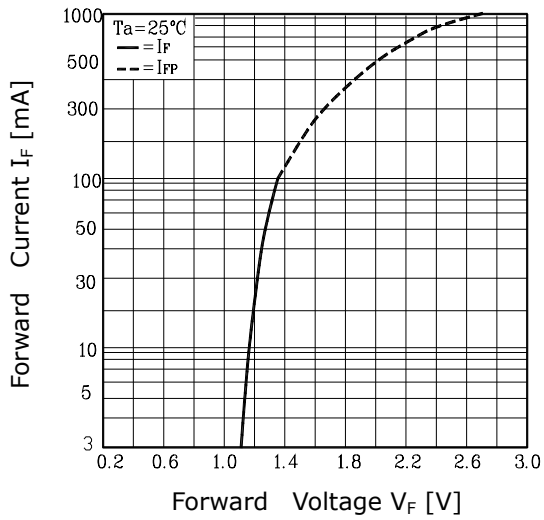
(Ta=25°C)

| Characteristic     | Symbol           | Test Condition      | Min. | Typ. | Max. | Unit  |
|--------------------|------------------|---------------------|------|------|------|-------|
| Forward voltage    | $V_F$            | $I_F = 50\text{mA}$ | -    | 1.3  | 1.45 | V     |
| Radiant intensity  | $I_E$            | $I_F = 50\text{mA}$ | 20   | 40   | -    | mW/Sr |
| Peak wavelength    | $\lambda_p$      | $I_F = 50\text{mA}$ | -    | 950  | -    | nm    |
| Spectrum bandwidth | $\Delta_\lambda$ | $I_F = 50\text{mA}$ | -    | 50   | -    | nm    |
| Reverse current    | $I_R$            | $V_R = 4\text{V}$   | -    | -    | 10   | uA    |
| *4 Half angle      | $\theta^{1/2}$   | $I_F = 50\text{mA}$ | -    | ±20  | -    | deg   |

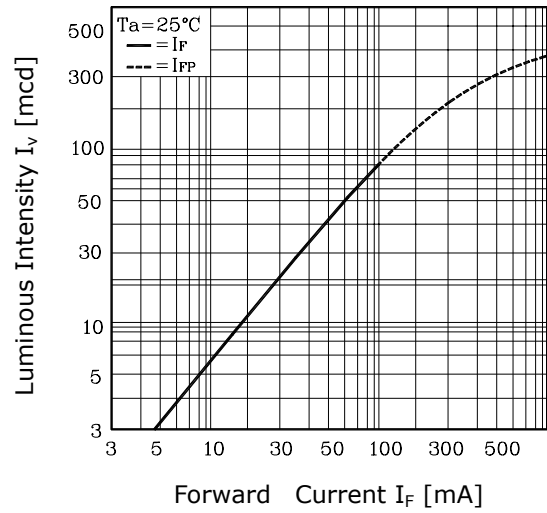
\*4.  $\theta^{1/2}$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity

## Characteristic Diagrams

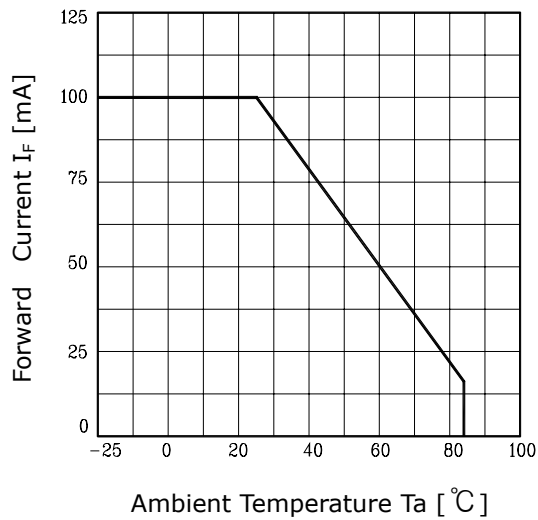
**Fig. 1  $I_F$ - $V_F$**



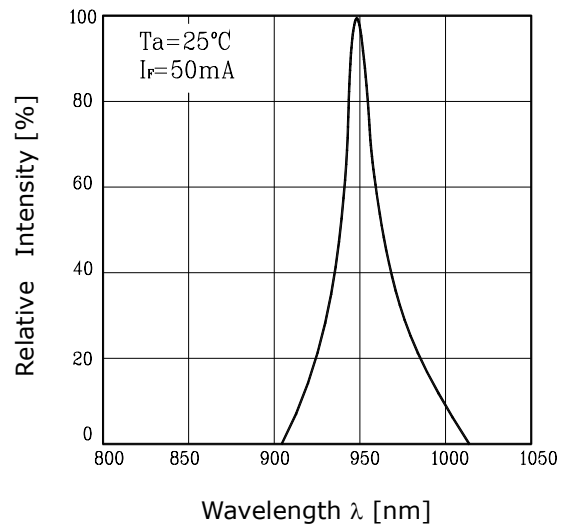
**Fig. 2  $I_E$  -  $I_F$**



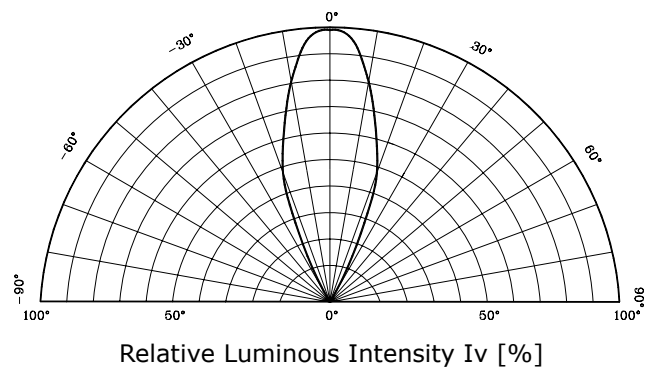
**Fig. 3  $I_F$  -  $T_a$**



**Fig.4 Spectrum Distribution**



**Fig. 5 Radiation Diagram**



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