

IRED

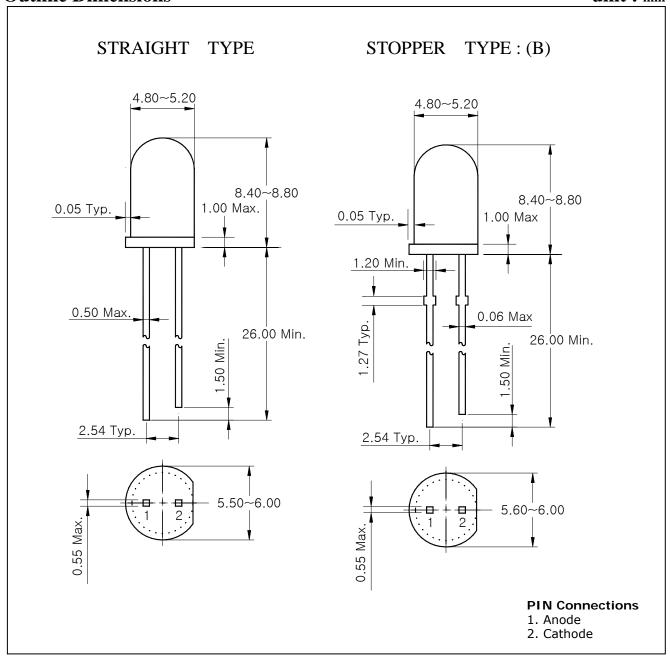
Features

- Blue Colored transparency lens type
- ϕ 5mm(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



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Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit	
Power dissipation	P _D	145	mW	
*1Forward current	I_{F}	100	mA	
* ² Peak forward current	${ m I}_{\sf FP}$	1	А	
Reverse voltage	V_R	4	V	
Operating temperature range	T _{opr}	-25~85	$^{\circ}$	
Storage temperature range	T _{stg}	-30~100	$^{\circ}$	
* ³ Soldering temperature	T _{sol}	260℃ for 10 seconds		

^{*1.}Avoid operating under continuous bias

Electrical / Optical Characteristics

(Ta=25℃)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_{F}	I _F = 50mA	-	1.3	1.45	V
Radiant intensity	I _E	I _F = 50mA	25	45	-	mW/Sr
Peak wavelength	λ_{P}	I _F = 50mA	-	950	-	nm
Spectrum bandwidth	Δ_{λ}	I _F = 50mA	-	50	-	nm
Reverse current	I_{R}	V _R =4V	-	ı	10	uA
* ⁴ Half angle	$\theta^1/_2$	I _F = 50mA	-	±11	-	deg

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

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^{*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

Characteristic Diagrams

Fig. 1 I_F - V_F

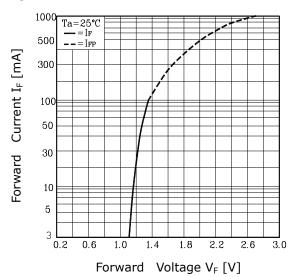


Fig. 2 I_E - I_F

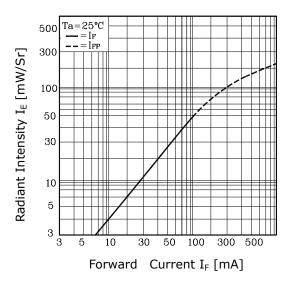


Fig. $3 I_F - Ta$

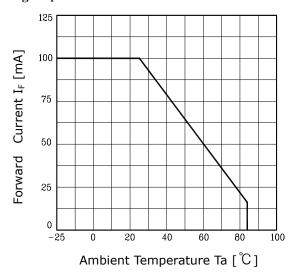


Fig.4 Spectrum Distribution

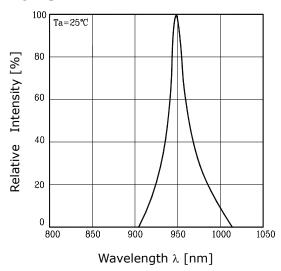
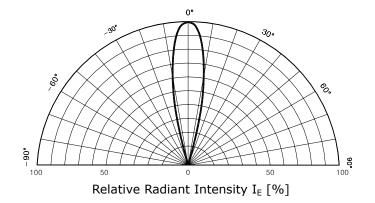


Fig. 5 Radiation Diagram



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