

### ●Applications

- Light source for sensors  
(proximity sensors, signal transmission applications)

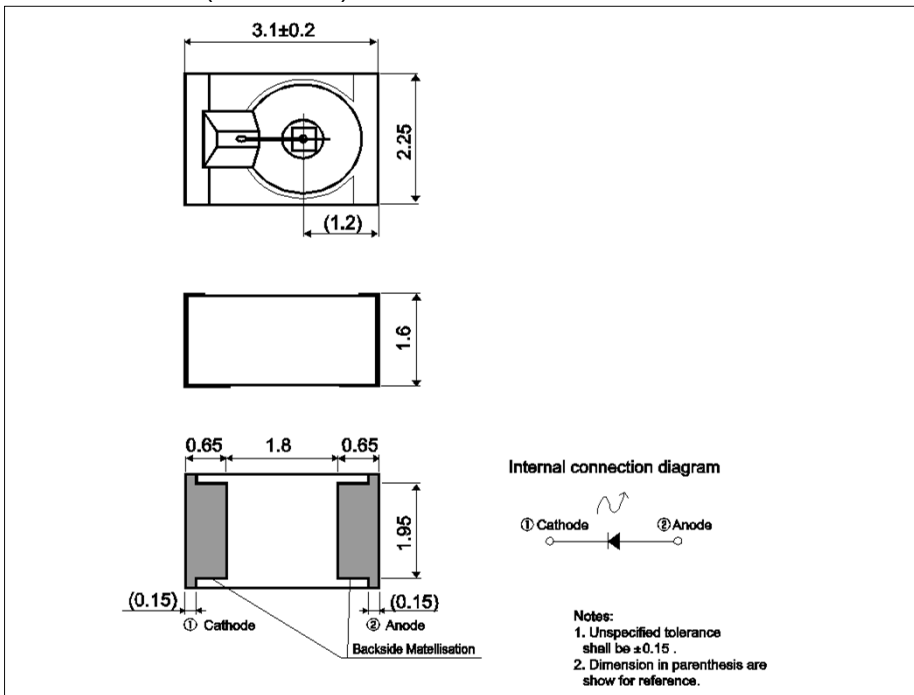
### ●Features

- 1) High compact, low-profile
- 2) High output, over a narrow angle
- 3) Excellent temperature property
- 4) Long life, high reliability
- 5) Original optical technology is ultra-high-output surface mount infrared LEDs.

### ●Outline



### ●Dimensions (Unit : mm)



### ●Absolute maximum ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Forward current	$I_F$	100	mA
Pulse forward current*1	$I_{FP}$	1	A
Reverse voltage	$V_R$	5	V
Power dissipation	$P_D$	180	mW
Operating temperature	$T_{opr}$	-25 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +85	$^\circ\text{C}$

\*1 Pulse width 0.1msec, duty ratio 1%

●Electrical and optical characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	$V_F$	$I_F = 100\text{mA}$	-	1.7	2.5	V
Reverse current	$I_R$	$V_R = 5\text{V}$	-	-	15	$\mu\text{A}$
Peak light emitting wavelength	$\lambda_p$	$I_F = 100\text{mA}$	-	870	-	nm
Spectral line half width	$\Delta\lambda$	$I_F = 100\text{mA}$	-	35	-	nm
View angle	$\theta_{1/2}$	-	-	$\pm 20$	-	deg.
Radiant intensity	$I_E$	$I_F = 100\text{mA}$	20	-	100	mW/sr

\* This product is not designed to be protected against electromagnetic wave.

\* Non-coherent infrared light emitting diode used.

●Electrical and optical characteristics curves

Fig.1 Forward Current Falloff

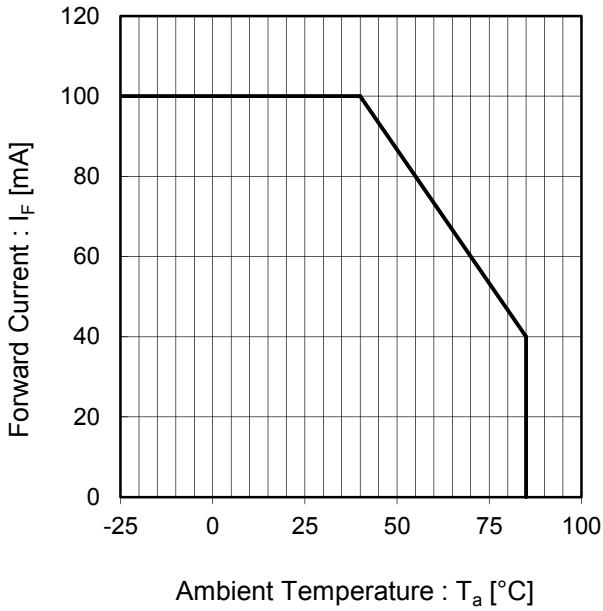


Fig.2 Forward Current vs. Forward Voltage

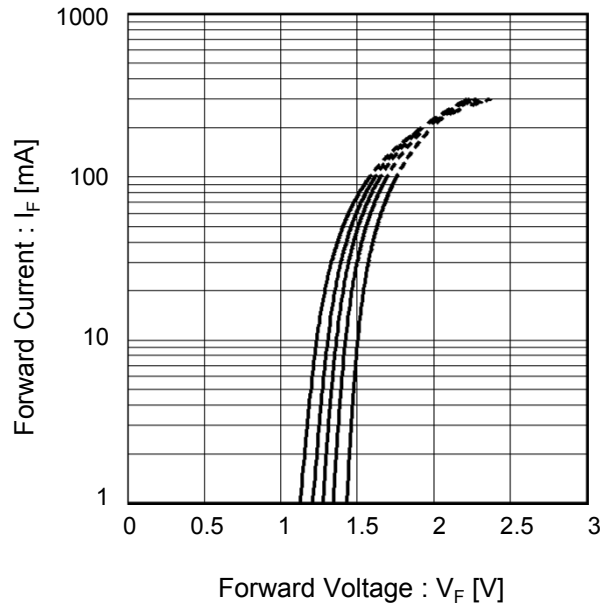


Fig.3 Radiant intensity vs. Forward current

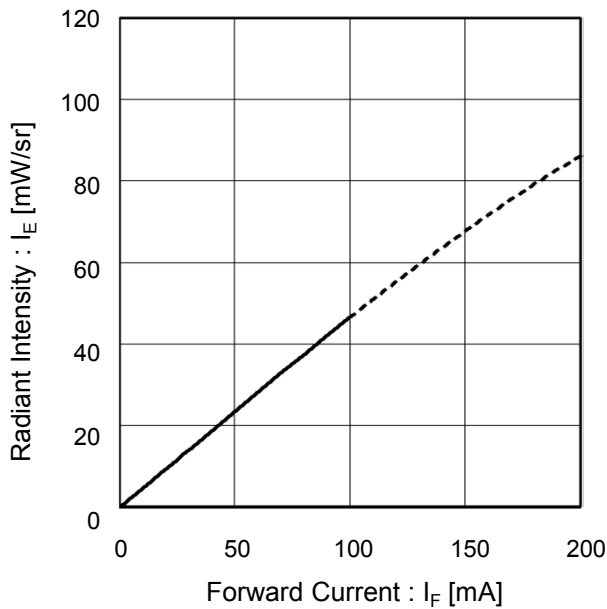
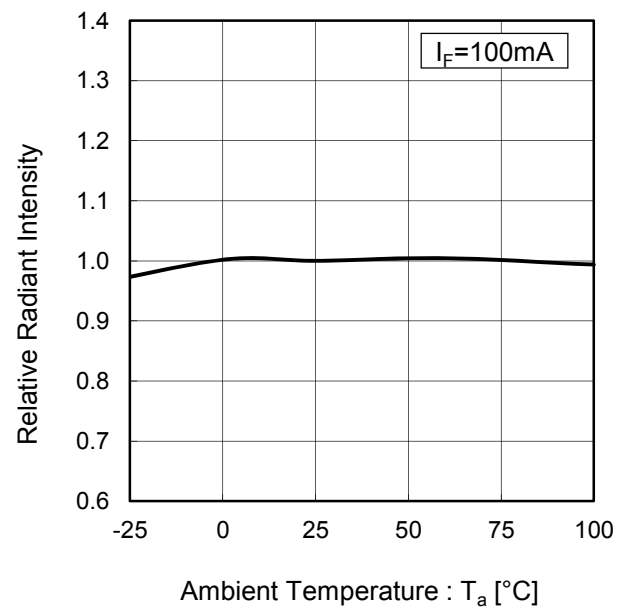


Fig.4 Relative Radiant vs. Ambient Temperature



●Electrical and optical characteristics curves

Fig.5 Spectral data

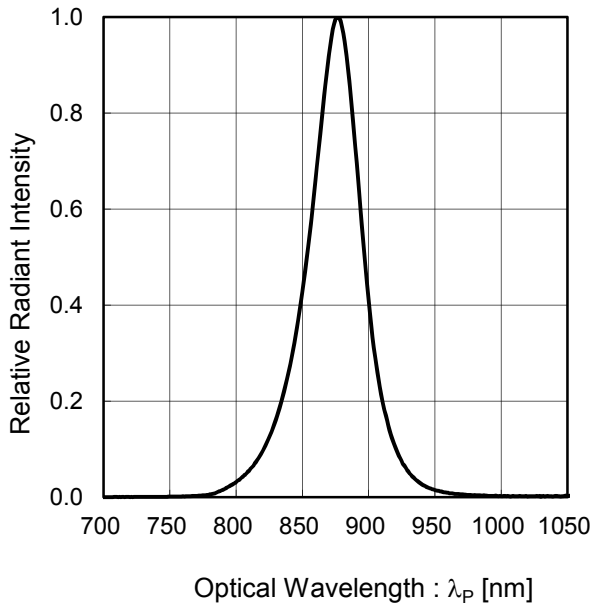


Fig.6 Radiant intensity

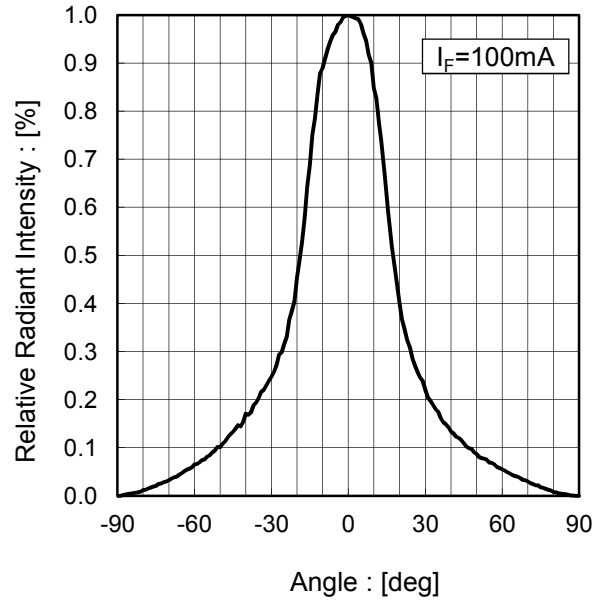
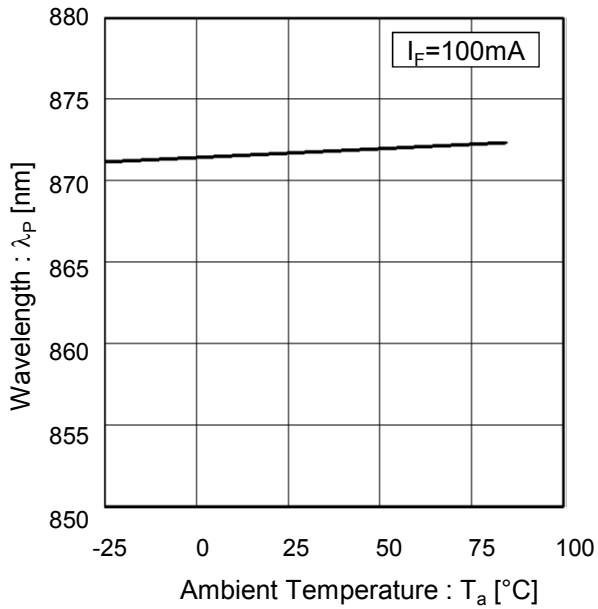


Fig.7 Wavelength vs. Ambient temperature



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