

Oval Type High Efficiency LED Lamp

Features

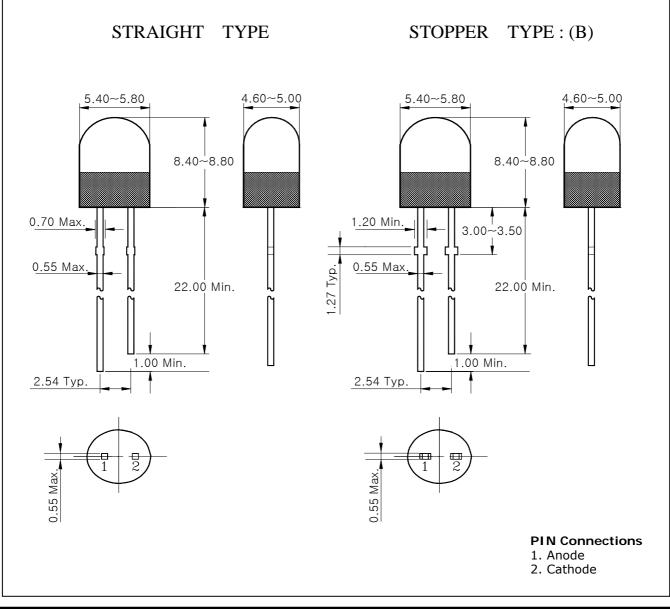
- Green colored transparency lens type
- ϕ 5mm(T-13/4) all plastic mold type
- Super luminosity

Application

- Traffic Signal
- Message Board

Outline Dimensions

unit : mm



Absolute Maximum Ratings

Absolute Maximum Ratings			(Ta=25°C)
Characteristic	Symbol	Ratings	Unit
Power dissipation	P _D	110	mW
Forward current	I _F	40	mA
* ¹ Peak forward current	I_{FP}	50	mA
Reverse voltage	V _R	4	V
Operating temperature range	T _{opr}	-25~85	C
Storage temperature range	T _{stg}	-30~100	C
* ² Soldering temperature	T _{sol}	260 °C for 10 seconds	

*1.Duty ratio = 1/16, Pulse width = 0.1ms

*2.Keep the distance more than 2.0mm from PCB to the bottom of LED package



Electrical / Optical Characteristics

 $(Ta=25^{\circ}C)$ Characteristic **Symbol Test Condition** Min Max Unit Тур Forward voltage $I_F = 20 \text{mA}$ 2.2 2.5 V_{F} _ V _ 350 *⁴Luminous intensity I_V $I_F = 20 \text{mA}$ 68 mcd Dominant wavelength $I_F = 20 mA$ 575 λ_D _ nm Spectrum bandwidth $I_F = 20 \text{mA}$ 30 Δ_{λ} _ nm Reverse current $V_R = 4V$ 10 uA \mathbf{I}_{R} _ _ ±30 Х --*³Half angle $\theta 1/2$ $I_F = 20 \text{mA}$ deg Y _ ± 15 -

*3. θ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

*4. Luminous intensity maximum tolerance for each grade classification limit is ±18%

*4. Luminous Intensity Classification

К	L	М	Ν
68~100	100~155	155~230	230~350

Characteristic Diagrams

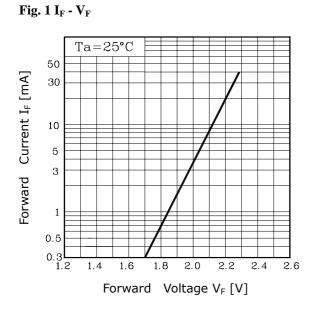


Fig. 3 I_F – Ta

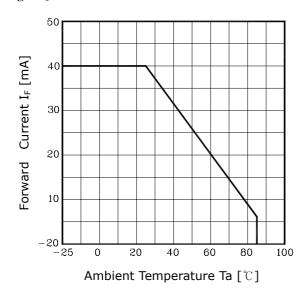
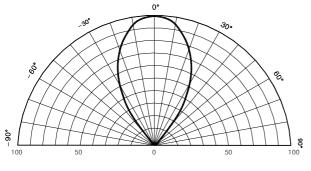


Fig. 5-1 Radiation Diagram(X)



Relative Luminous Intensity Iv [%]

Fig. 2 I_V - I_F

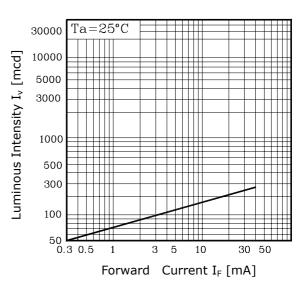


Fig.4 Spectrum Distribution

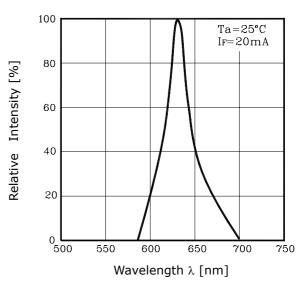
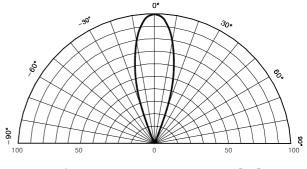


Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv [%]

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