

**Oval Type High Efficiency LED Lamp** 

#### Features

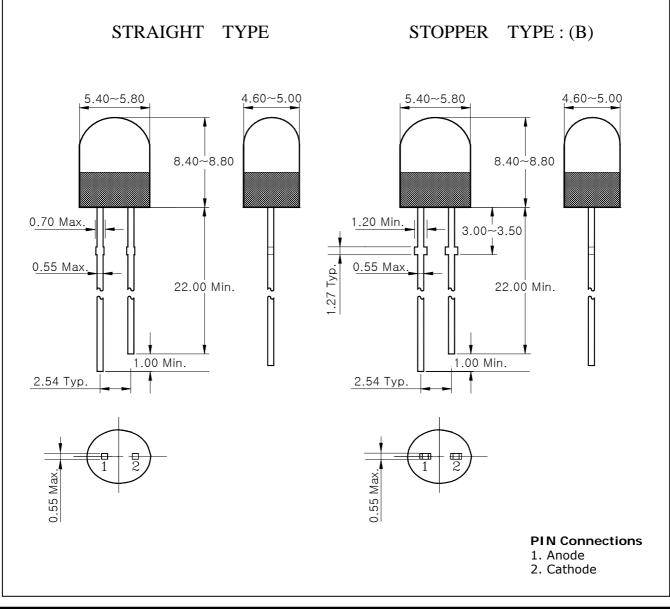
- Green colored transparency lens type
- $\phi$ 5mm(T-13/4) all plastic mold type
- Super luminosity

#### Application

- Traffic Signal
- Message Board

#### **Outline Dimensions**

unit : mm



#### Absolute Maximum Ratings

<b>Absolute Maximum Ratings</b>			(Ta=25°C)
Characteristic	Symbol	Ratings	Unit
Power dissipation	P <sub>D</sub>	110	mW
Forward current	I <sub>F</sub>	40	mA
* <sup>1</sup> Peak forward current	$\mathrm{I}_{FP}$	50	mA
Reverse voltage	V <sub>R</sub>	4	V
Operating temperature range	T <sub>opr</sub>	-25~85	C
Storage temperature range	T <sub>stg</sub>	-30~100	C
* <sup>2</sup> Soldering temperature	T <sub>sol</sub>	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  $V_{\mathsf{F}}$ \_ V \_ 350 \*<sup>4</sup>Luminous intensity  $I_V$  $I_F = 20 \text{mA}$ 68 mcd Dominant wavelength  $I_F = 20 mA$ 575  $\lambda_D$ \_ nm Spectrum bandwidth  $I_F = 20 \text{mA}$ 30  $\Delta_{\lambda}$ \_ nm Reverse current  $V_R = 4V$ 10 uA  $\mathbf{I}_{\mathsf{R}}$ \_ \_ ±30 Х --\*<sup>3</sup>Half angle  $\theta 1/2$  $I_F = 20 \text{mA}$ deg Y \_  $\pm 15$ -

\*3.  $\theta$ 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**

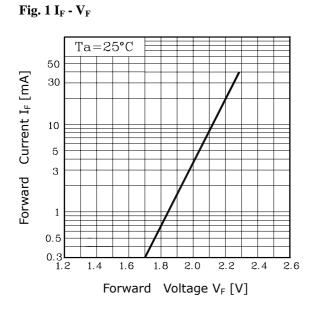


Fig. 3 I<sub>F</sub> – Ta

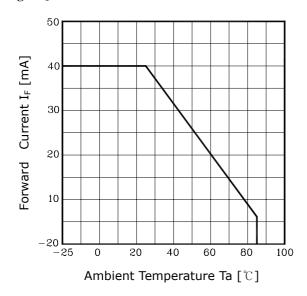
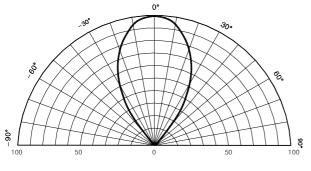
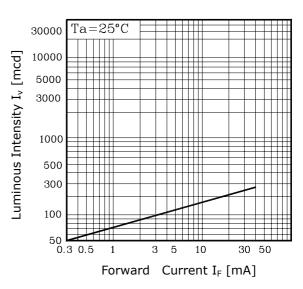


Fig. 5-1 Radiation Diagram(X)



Relative Luminous Intensity Iv [%]

Fig. 2  $I_V$  -  $I_F$ 



**Fig.4 Spectrum Distribution** 

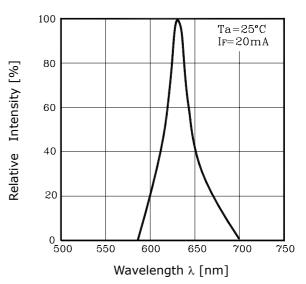
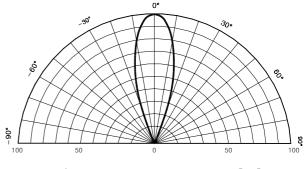


Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv [%]

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