

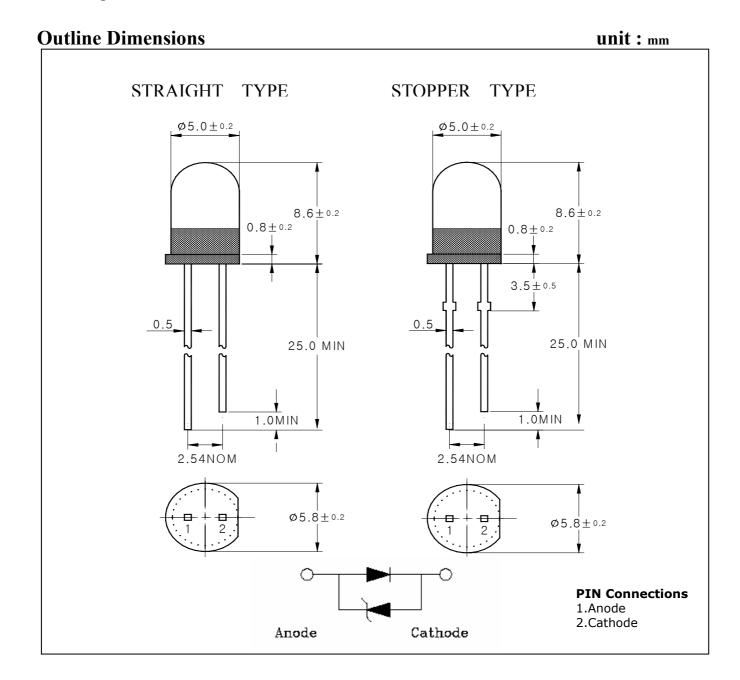
**High Brightness LED Lamp** 

#### **Features**

- Colorless transparency lens type
- φ5mm(T-13/4) all plastic mold type
- Super luminosity
- E; ESD Protected ( $\pm 2.0$ KV, 3 Times @100pF, 1.5K $\Omega$ )

#### **Application**

- Traffic Signal
- Massage Board



KLE-4006-001

### Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	$P_D$	120	mW
Forward Current	$I_{F}$	40	mA
*1Peak Forward Current	${ m I}_{\sf FP}$	65	mA
Reverse Voltage	$V_R$	4	V
Operating Temperature	T <sub>opr</sub>	-25~85	°C
Storage Temperature	T <sub>stg</sub>	-30~100	C
*2Soldering Temperature	T <sub>sol</sub>	260°C for 5 seconds	

<sup>\*1.</sup>Duty ratio = 1/16, Pulse width = 0.1ms

<sup>\*2.</sup>Keep the distance more than 2.0mm from PCB to the bottom of LED package



#### **Electrical Characteristics**

Ta=25°C

Characteristic	Symbol	<b>Test Condition</b>	Min.	Тур.	Max.	Unit
Forward Voltage	$V_{F}$	$I_F = 20mA$	2.9	1	3.6	V
* <sup>4</sup> Luminors Intensity	$I_{V}$	$I_F = 20 \text{mA}$	3400	ı	8910	mcd
Dominant Wavelength	$\lambda_{\mathrm{D}}$	$I_F = 20mA$	-	502	-	nm
Spectrum Bandwidth	Δλ	$I_F = 20 \text{mA}$	-	30	-	nm
* <sup>3</sup> Half angle	$\theta^1/_2$	$I_F = 20mA$	-	±20	-	deg

<sup>\*3.</sup>  $\theta$ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

<sup>\*4.</sup> Luminous Intensity classification

T2	U1	U2	V1	V2
3400~3960	3960~4900	4900~5940	5940~7400	7400~8910

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<sup>\*4.</sup> Luminous intensity maximum tolerance for each Grade Classification limit is  $\pm 18\%$ 

### **Characteristic Diagrams**

Fig. 1  $I_{\text{F}}$  -  $V_{\text{F}}$ 

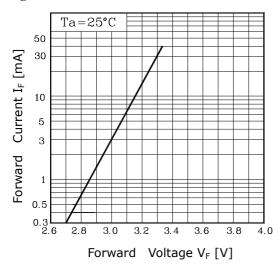


Fig. 2  $I_V$  -  $I_F$ 

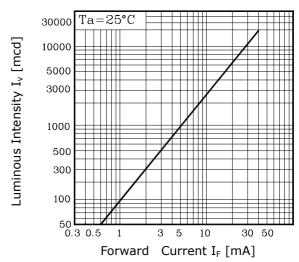


Fig.  $3 I_F - Ta$ 

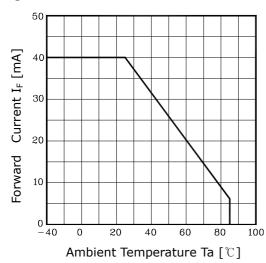


Fig.4 Spectrum Distribution

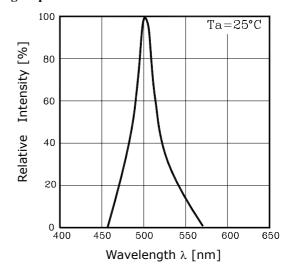
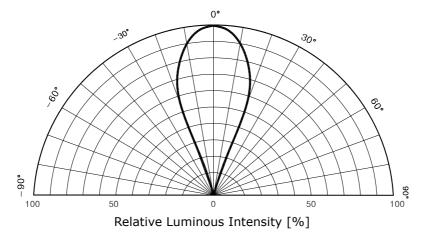


Fig. 5 Radiation Diagram



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