

**High Brightness LED Lamp** 

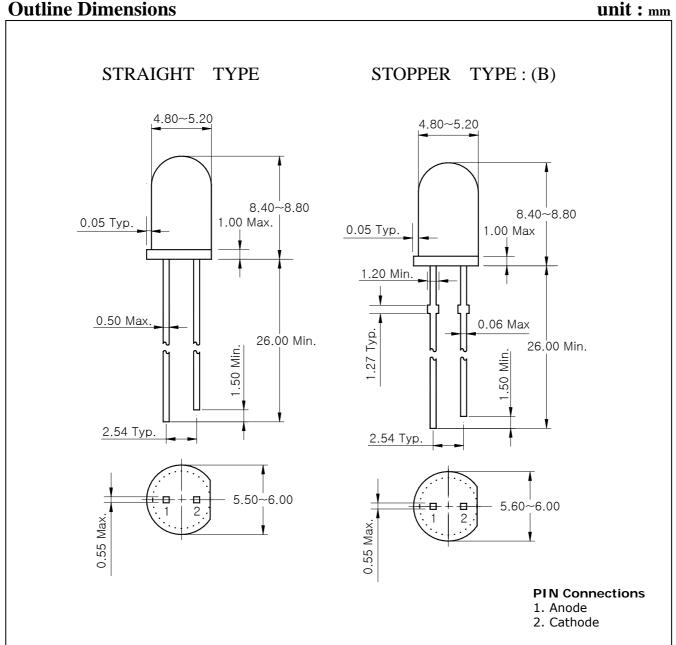
#### **Features**

- Colorless transparency lens type
- φ5mm(T-1¾) all plastic mold type
- Ultra luminosity

#### **Application**

- Message panels
- Backlighting
- Indicator lamp

#### **Outline Dimensions**



KSD-O2O009-000

**Absolute Maximum Ratings** 

(Ta=25℃)

Characteristic	Symbol	Rating	Unit	
Power dissipation	$P_{D}$	75	mW	
Forward current	$\mathbf{I}_{F}$	30	mA	
* <sup>1</sup> Peak forward current	${ m I}_{\sf FP}$	50	mA	
Reverse voltage	$V_R$	4	V	
Operating temperature range	$T_{opr}$	-20~85	$^{\circ}$	
Storage temperature range	$T_{stg}$	-30~100	$^{\circ}$	
*2Soldering temperature	T <sub>sol</sub>	260℃ for 10 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 / Optical Characteristics** 

(Ta=25℃)

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Characteristic	Symbol	<b>Test Condition</b>	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	-	1.85	2.5	V
Luminous Intensity	I <sub>V</sub>	$I_F = 20 \text{mA}$	1000	-	-	mcd
Peak Wavelength	$\lambda_{P}$	I <sub>F</sub> = 20mA	-	660	-	nm
Spectrum Bandwidth	$\Delta_{\lambda}$	I <sub>F</sub> = 20mA	-	20	-	nm
Reverse Current	$I_{R}$	V <sub>R</sub> =4V	-	-	10	uA
* <sup>3</sup> Half Angle	θ1/2	I <sub>F</sub> = 20mA	-	±11	-	deg

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

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### **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

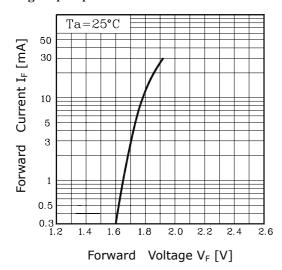
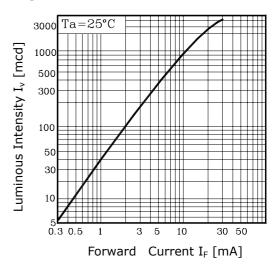
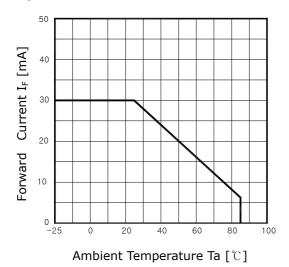


Fig. 2  $I_V$  -  $I_F$ 



 $Fig. \ 3\ I_F-Ta$ 



**Fig.4 Spectrum Distribution** 

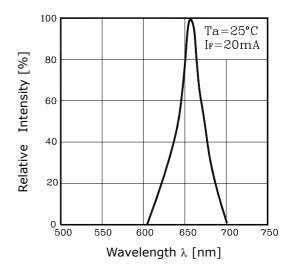
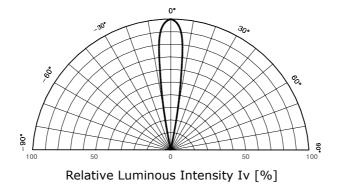


Fig. 5 Radiation Diagram



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