

**High Brightness LED Lamp** 

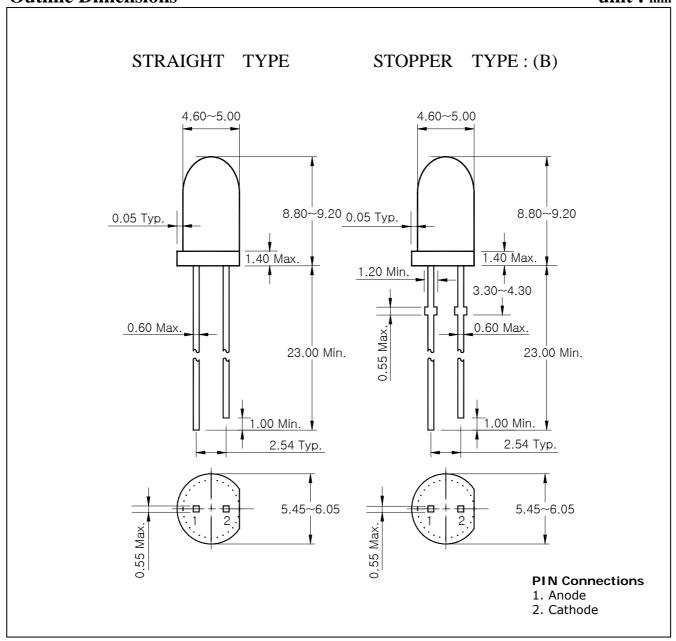
#### **Features**

- Colorless transparency lens type
- Ultra luminosity

#### **Application**

- Message panels
- Backlighting
- Indicator lamp

#### Outline Dimensions unit: mm



KSD-O2P002-000

**Absolute Maximum Ratings** 

(Ta=25℃)

Characteristic	Symbol	Rating	Unit
Power dissipation	$P_{D}$	75	mW
Forward current	$I_{F}$	30	mA
*¹Peak 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** 

 $(Ta=25^{\circ}C)$ 

Characteristic	Symbol	<b>Test Condition</b>	Min.	Typ.	Max.	Unit
Forward voltage	$V_{F}$	I <sub>F</sub> = 20mA	-	1.8	2.5	V
Luminous intensity	I <sub>V</sub>	$I_F = 20 \text{mA}$	1170	-	3960	mcd
Peak wavelength	$\lambda_{P}$	I <sub>F</sub> = 20mA	-	660	1	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	-	±8	1	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

R	S	Т
1170~1760	1760~2640	2640~3960

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

### **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

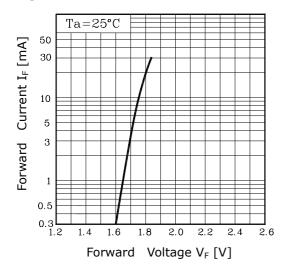


Fig. 2  $I_V$  -  $I_F$ 

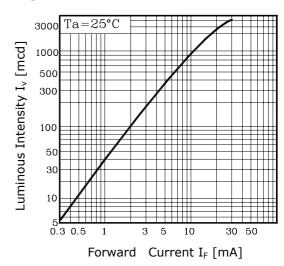
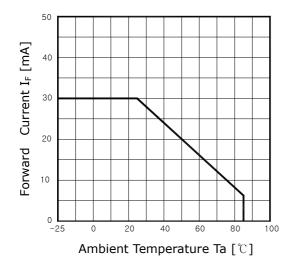


Fig.  $3 I_F - Ta$ 



**Fig.4 Spectrum Distribution** 

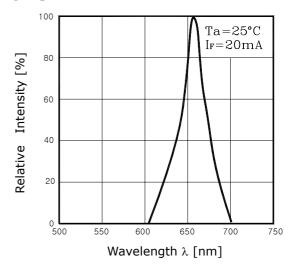
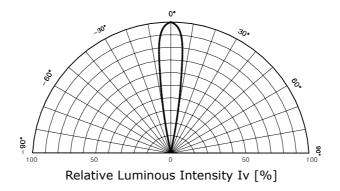


Fig. 5 Radiation Diagram



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