

**Oval Type High Efficiency LED Lamp** 

#### **Features**

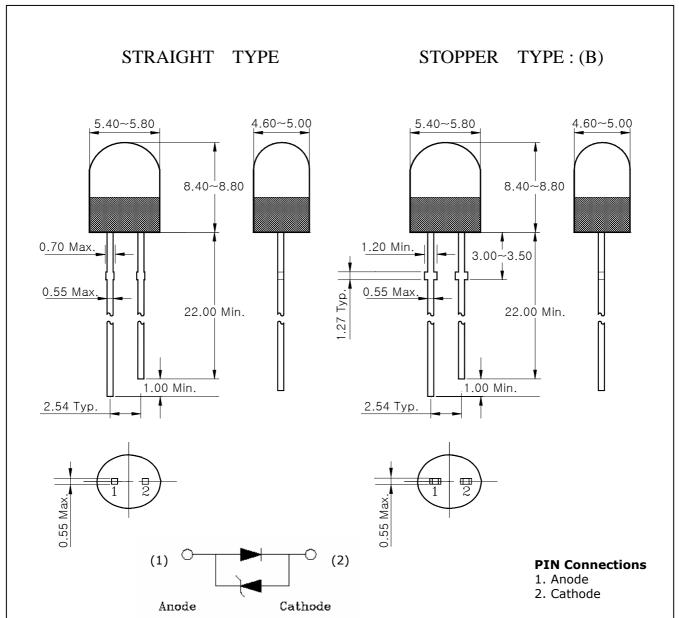
- Blue colored transparency lens type
- \$5mm(T-13/4) all plastic mold type
- Super luminosity
- E; ESD Protected (±2.0KV, 3 Times @100pF, 1.5KΩ)

### **Application**

- Traffic Signal
- Message Board

### **Outline Dimensions**

unit: mm



KSD-O3C006-000

**Absolute Maximum Ratings** 

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

Characteristic	Symbol	Ratings	Unit	
Power dissipation	$P_{D}$	150	mW	
Forward current	${ m I}_{\sf F}$	40	mA	
*1Peak forward current	${ m I}_{\sf FP}$	50	mA	
Operating temperature range	$T_{opr}$	<b>-</b> 25∼85	$^{\circ}$ C	
Storage temperature range	$T_{stg}$	-30~100	$^{\circ}$	
*2Soldering temperature	T <sub>sol</sub>	260°C 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



\* Recommend document

-. LED is very sensitive to ESD.

**Electrical / Optical Characteristics** 

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

Characteristic	Symbol	Test Condition	Min	Тур	Max	Unit
Forward voltage	$V_{F}$	I <sub>F</sub> = 20mA	-	3.2	3.8	V
* <sup>4</sup> Luminous intensity	$I_{V}$	I <sub>F</sub> = 20mA	950	-	3400	mcd
Dominant wavelength	$\lambda_{D}$	I <sub>F</sub> = 20mA	460	465	470	nm
Spectrum bandwidth	$\Delta_{\lambda}$	I <sub>F</sub> = 20mA	-	20	-	nm
* <sup>3</sup> Half angle	θ1/2 X	$I_{F}$ = 20mA	-	±30	-	deg
	<sup>01/2</sup>   Y	1F- 2011IA	-	±15	-	

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

#### \*4. Luminous Intensity Classification

	R <sub>1</sub>	$R_2$	S <sub>1</sub>	S <sub>2</sub>	T <sub>1</sub>
9	50~1250	1250~1760	1760~2200	2200~2640	2640~3400

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

### **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

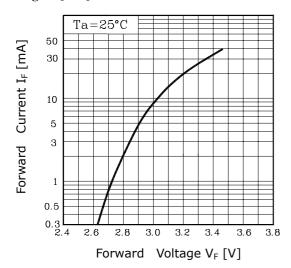
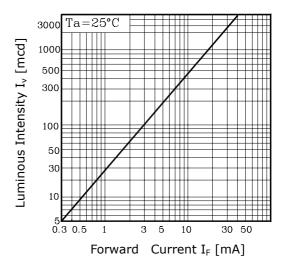
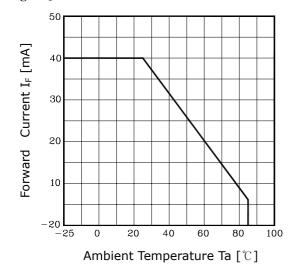


Fig. 2  $I_V$  -  $I_F$ 



 $Fig. \ 3\ I_F-Ta$ 



**Fig.4 Spectrum Distribution** 

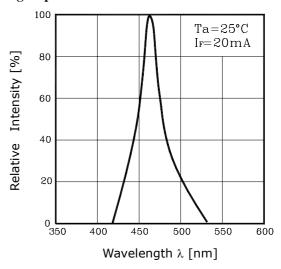
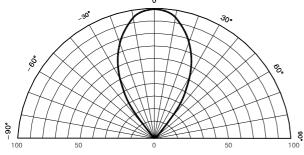
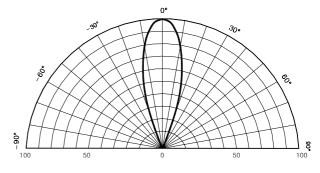


Fig. 5-1 Radiation Diagram(X)



Relative Luminous Intensity Iv [%]

Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv [%]

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