





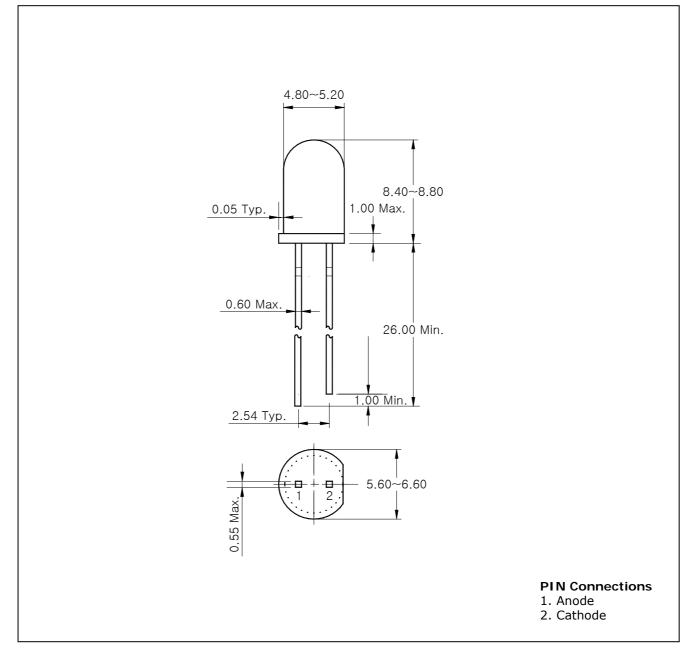
Features

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

Application

- Traffic Signal
- Massage Board

Outline Dimensions unit: mm



KSD-O2S007-000

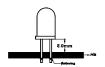
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P _D	70	mW
Forward current	I_{F}	30	mA
*1Peak forward current	${ m I}_{\sf FP}$	65	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25~85	$^{\circ}$
Storage temperature range	T_{stg}	-30~100	$^{\circ}$
*2Soldering temperature	T _{sol}	260 $^{\circ}$ 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.	Typ.	Max.	Unit
Forward voltage	V_{F}	$I_F = 20 \text{mA}$	1.9	-	2.4	V
*4Luminous intensity	I_{V}	$I_F = 20 \text{mA}$	3400	-	8910	mcd
Peak wavelength	λ_{D}	$I_F = 20 \text{mA}$	615	620	625	nm
Spectrum bandwidth	Δ_{λ}	$I_F = 20 \text{mA}$	-	30	-	nm
Reverse current	I_{R}	$V_R=4V$	-	-	10	uA
* ³ Half angle	θ1/2	$I_F = 20mA$	-	±15	-	deg

^{*3.} θ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

• V_F / I_V / λ_D Grade Classification (Ta=25 $^{\circ}{\circ}$)

Test Condition @I _F = 20mA					
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]			
1:1.9~2.0	T ₂ : 3400~3960				
2:2.0~2.1	U ₁ : 3960~4900	a: 615~620			
3:2.1~2.2	U ₂ : 4900~5940				
4:2.2~2.3	V ₁ : 5940~7400	b : 620~625			
5: 2.3~2.4	V ₂ : 7400~8910				

(Do not use to combine grade classification. It must be used separately grade classification)

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^{*4.} Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$

Characteristic Diagrams

Fig. 1 I_F - V_F

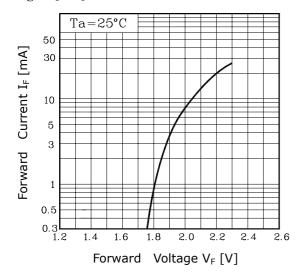


Fig. 2 I_{V} - I_{F}

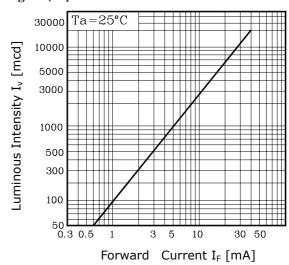


Fig. $3 I_F - Ta$

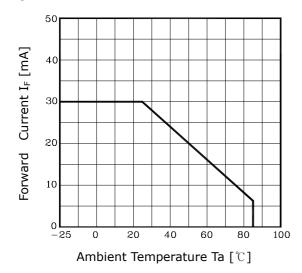


Fig.4 Spectrum Distribution

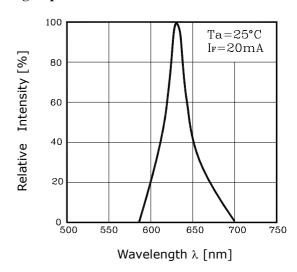
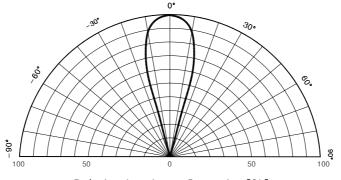


Fig. 5 Radiation Diagram



Relative Luminous Intensity [%]

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