

Oval Type High Efficiency LED Lamp

unit: mm

Features

- Green colored diffusion lens type
- Ellipse type(X=4.6mm, Y=5.8mm)
- Super luminosity
- Flangeless package
- High power LEDs
- Oval shape
- Lens color : Green
- View angle: 70° / 34°
- E; ESD Protected (±2.0KV, 3 times @100pF, 1.5KΩ)

Application

Full color displays

Outline Dimensions

- Message boards
- Variable message signs(VMS)

7.50~7.90 1.20 Min. 1.20 Min. 2.54 Typ. Anode Cathode

KSD-O3D009-000

PIN Connections

Anode
 Cathode

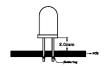
Absolute Maximum Ratings

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

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



* 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 _F = 20mA	-	3.2	3.8	V
* ⁴ Luminous intensity	I_{V}	I _F = 20mA	1760	-	3960	mcd
Dominant wavelength	λ_{D}	I _F = 20mA	516	523	530	nm
Spectrum bandwidth	Δ_{λ}	I _F = 20mA	-	17	-	nm
* ³ Half angle	θ1/2 X	I _F = 20mA	-	±17	-	deg
	Y		-	±35	-	

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

^{*4.} Luminous Intensity Classification

S	T ₁	T ₂		
1760~2640	2640~3300	3300~3960		

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

KSD-O3D009-000 2

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

Characteristic Diagrams

Fig. 1 I_F - V_F

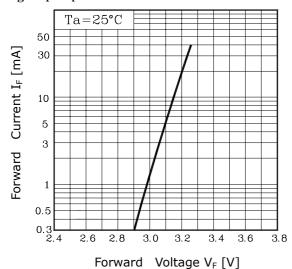
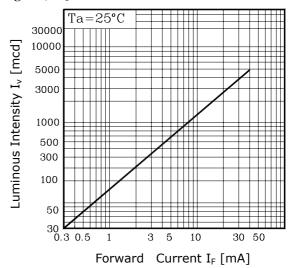


Fig. 2 I_V - I_F



 $Fig. \ 3\ I_F-Ta$

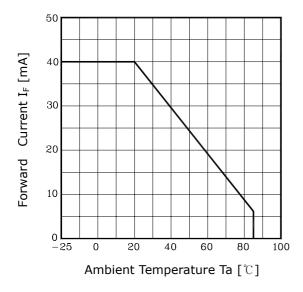


Fig.4 Spectrum Distribution

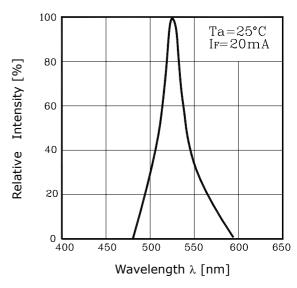


Fig. 5-1 Radiation Diagram(X)

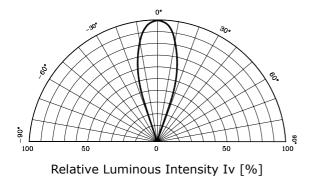
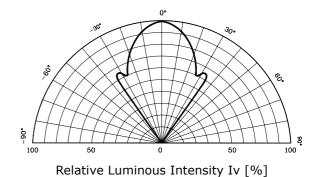


Fig. 5-2 Radiation Diagram(Y)



KSD-O3D009-000 3

The AUK Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Corp. cannot accept liability to any damage which may occur in case these AUK Corp. products were used in the mentioned equipments without prior consultation with AUK Corp..

Specifications mentioned in this publication are subject to change without notice.

KSD-O3D009-000