

SHE144MC(B)

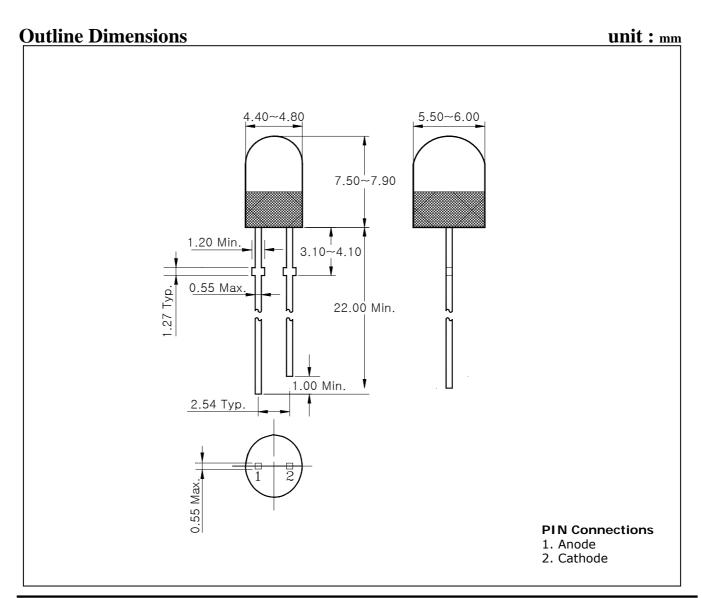
Oval Type High Efficiency LED Lamp

Features

- Green colored transparency lens type
- Ellipse type(X=4.6mm, Y=5.8mm)
- Super luminosity
- Flangeless package
- High power LEDs
- Oval shape
- Lens Color : Yellow-green
 View Angle : 70° / 34°

Application

- Full color displays
- Message boards
- Variable message signs(VMS)



KSD-O3D018-000

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_{D}	100	mW
Forward current	I_{F}	40	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

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

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Characteristic	Sym	bol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V	F	I _F = 20mA	-	2.1	2.5	V
* ⁴ Luminous intensity	I	/	I _F = 20mA	68	-	350	mcd
Peak wavelength	λ	P	I _F = 20mA	-	570	-	nm
Spectrum bandwidth	Δ	λ	I _F = 20mA	-	30	-	nm
Reverse current	I	R	V _R =4V	-	-	10	uA
* ³ Half angle	01/2	Х	I _F = 20mA	-	±17	-	dog
	θ1/2	Υ			±35		deg

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

^{*4.} Luminous Intensity Classification

K	L	М	N	
68~100	100~155	155~230	230~350	

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

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

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Characteristic Diagrams

Fig. 1 I_F - V_F

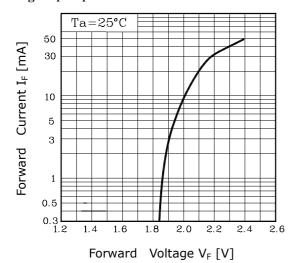


Fig. 2 I_V - I_F

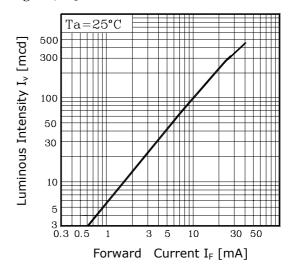


Fig. $3 I_F - Ta$

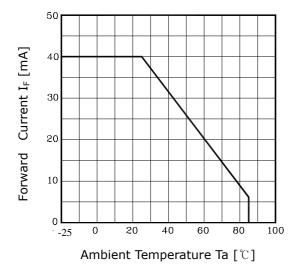


Fig.4 Spectrum Distribution

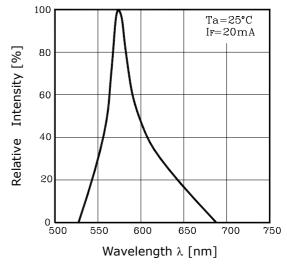


Fig. 5-1 Radiation Diagram(X)

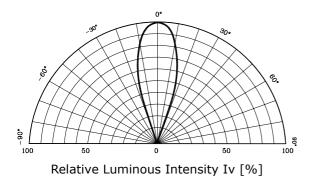
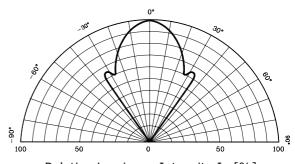


Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv [%]

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