

SHE144AE-(B)

High Efficiency LED Lamp

Features

• Red Colored lens type

• Ellipse type(X=4.6mm, Y=5.8mm)

Super luminosity

• Flangeless package

• High power LEDs

• Oval shape

• Lens Color: Red

• View Angle: 70° / 34°

Application

• Full color displays

Message boards

• Variable message signs(VMS)

Outline Dimensions unit: mm Ø5.8±0.2 $\phi 4.6 \pm 0.2$ 7.7 ± 0.2 3.6±0.5 0.5 22.0 MIN 1.0 MIN 2.54 NOM **PIN Connections** 1.Anode 2.Cathode

KLE-3014-000

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit	
Power Dissipation	P_D	110	mW	
Forward Current	${ m I}_{\sf F}$	40	mA	
*1Peak Forward Current	${ m I}_{\sf FP}$	65	mA	
Reverse Voltage	V_R	4	V	
Operating Temperature	T_{opr}	-25~85	°C	
Storage Temperature	T _{stg}	-30~100	°C	
*2Soldering Temperature	T_{sol}	260℃ for 5 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 Characteristics

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Forward Voltage	V _F	I _F = 20mA	1.8	2.0	2.5	V
* ⁴ Luminous Intensity	I _V	I _F = 20mA	350	650	1170	mcd
Peak Wavelength	$\lambda_{ m P}$	I _F = 20mA	-	630	-	nm
Spectrum Bandwidth	Δλ	I _F = 20mA	-	17	-	nm
Reverse Current	I_{R}	V _R =4V	-	-	10	uA
* 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

0	Р	Q		
350~520	520~780	780~1170		

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^{*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

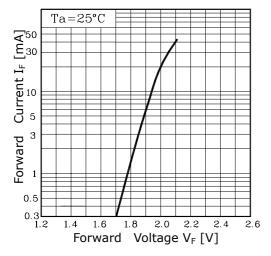


Fig. $3 I_F - Ta$

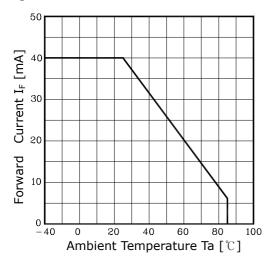
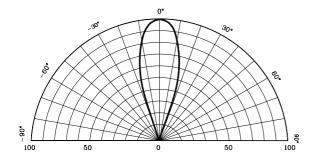


Fig. 5-1 Radiation Diagram(X)



Relative Luminous Intensity Iv [%]

Fig. 2 I_V - I_F

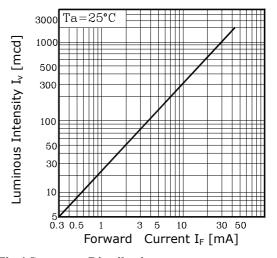


Fig.4 Spectrum Distribution

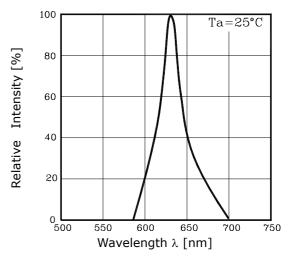
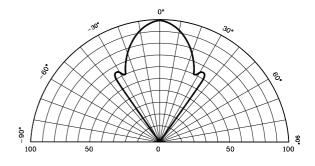


Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv [%]

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