

High Brightness LED Lamp

unit: mm

Features

- Colorless transparency lens type
- \$\phi 3mm(T-1) all plastic mold type
- Super luminosity

Outline Dimensions

STRAIGHT TYPE STOPPER TYPE 0.0 ± 0.2 0.0 ± 0.2 5.3 ± 0.2 5.3 ± 0.2 2.9±0.2 2.9±0.2 5.2 ± 0.5 □0.4 □0.4 23.0MIN 23.0MIN 1.0MIN 1.0MIN 2.54 NOM 2.54 NOM 3.6 ± 0.2 3.6 ± 0.2 3.8±0.2 3.8±0.2 **PIN Connections** 1.Anode 2.Cathode

KLB-3001-001

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Power Dissipation	P_D	85	mW
Forward Current	I_{F}	20	mA
*1Peak Forward Current	${ m I}_{\sf FP}$	50	mA
Reverse Voltage	V_R	4	V
Operating Temperature	T _{opr}	-25~85	°C
Storage Temperature	T _{stg}	-30~100	°C
Soldering Temperature	T _{sol}	250℃ for 3 seconds	

^{*1.}Duty ratio = 1/16, Pulse width = 0.1ms

Electrical Characteristics

Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Forward Voltage	V_{F}	I _F = 20mA	-	3.4	3.8	V
* ² Luminous Intensity	I_{V}	I _F = 20mA	155	230	520	mcd
*3Dominant Wavelength	$\lambda_{ m D}$	I _F = 20mA	-	465	-	nm
Spectrum Bandwidth	Δλ	I _F = 20mA	-	26	-	nm
Reverse Current	_R	V _R =4V	-	-	10	uA
* ⁴ Half angle	θ1/2	I _F = 20mA	-	±45	-	deg

^{*2.} Luminous Intensity Maximum tolerance for each Grade Classification limit is $\pm 18\%$

$\bullet~\text{VF} \slash \text{IV} \slash \slash \lambda_P \text{Grade Classification}$

Test Condition @IF = 20mA				
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant eavelength [nm]		
1 = 2.9 ~ 3.2	M = 155 ~ 230	a = 460 ~ 465		
2 = 3.2 ~ 3.5	N = 230 ~ 350			
3 = 3.5 ~ 3.8	O = 350 ~ 520	b = 466 ~ 470		

KLB-3001-001 2

^{*3.} Dominant Wavelength Maximum tolerance for each Grade Classification limit is ± 1 nm

^{*4.} θ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

Characteristic Diagrams

Fig. 1 I_F - V_F

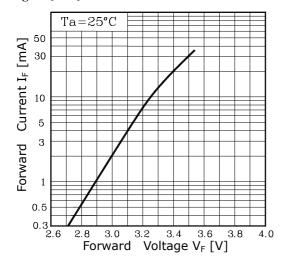


Fig. $3 I_F - Ta$

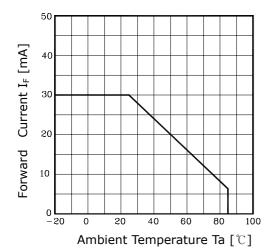


Fig. 2 I_V - I_F

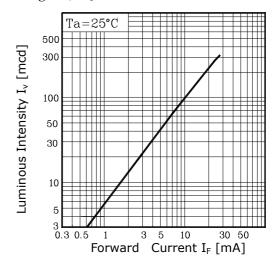


Fig.4 Spectrum Distribution

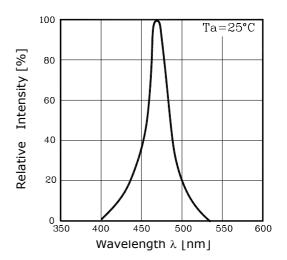
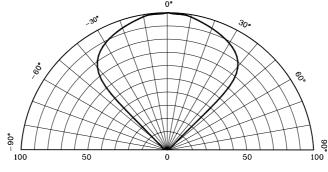


Fig. 5 Radiation Diagram



Relative Luminous Intensity Iv [%]

KLB-3001-001 3

These AUK products are intended for usage in general electronic equipments (Office and communication equipment, measuring equipment, domestic electrification, etc.).

Please make sure that you consult with us before you use these AUK 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, traffic signal, combustion central, all types of safety device, etc.).

AUK cannot accept liability to any damage which may occur in case these AUK products were used in the mentioned equipments without prior consultation with AUK.

KLB-3001-001 4