

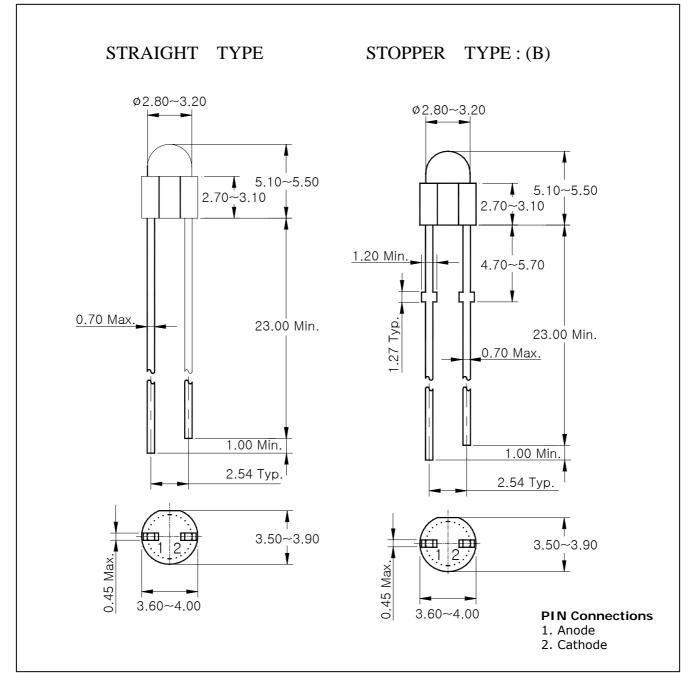
# SPG3317-H / SPG3317-H(B)

**High Brightness LED Lamp** 

#### **Features**

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

### Outline Dimensions unit: mm



KSD-O2B034-000

## **SPG3317-H / SPG3317-H(B)**

**Absolute Maximum Ratings** 

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	$P_D$	70	mW
Forward current	$I_{F}$	20	mA
* <sup>1</sup> Peak forward current	$I_{FP}$	50	mA
Reverse voltage	$V_R$	4	V
Operating temperature range	T <sub>opr</sub>	-25~85	$^{\circ}$
Storage temperature range	T <sub>stg</sub>	-30~100	$^{\circ}$
*2Soldering temperature	T <sub>sol</sub>	260 $^{\circ}$ for $10$ seconds	

<sup>\*1.</sup>Duty ratio = 1/16, Pulse width = 0.1ms

<sup>\*2.</sup>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 <sub>F</sub> = 20mA	2.8	-	3.6	V
* <sup>4</sup> Luminous intensity	$I_{V}$	I <sub>F</sub> = 20mA	1170	-	3960	mcd
Dominant wavelength	$\lambda_{D}$	I <sub>F</sub> = 20mA	519	525	530	nm
Spectrum bandwidth	$\Delta_{\lambda}$	I <sub>F</sub> = 20mA	-	30	-	nm
Reverse current	$I_{R}$	V <sub>R</sub> =4V	-	-	10	μА
* <sup>3</sup> Half angle	θ1/2	I <sub>F</sub> = 20mA	-	±22	-	deg

<sup>\*3.</sup>  $\theta$ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

#### • $V_F / I_V / \lambda_D$ Grade Classification (Ta=25°C)

Test Condition $@I_F = 20mA$				
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]		
1 = 2.8~3.0	R = 1170~1760	a = 519~525		
2 = 3.0~3.2		g = 213~222		
3 = 3.2~3.4	S = 1760~2640			
4 = 3.4~3.6	T = 2640~3960	b = 525~530		

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

<sup>\*4.</sup> Luminous intensity maximum tolerance for each grade classification limit is  $\pm 18\%$ 

## **SPG3317-H / SPG3317-H(B)**

### **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

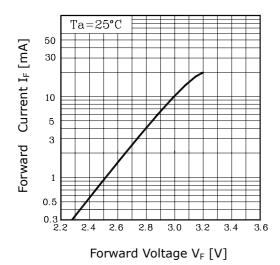
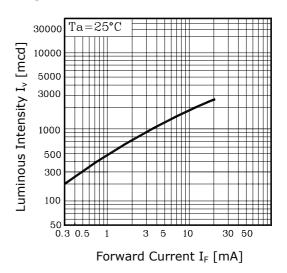
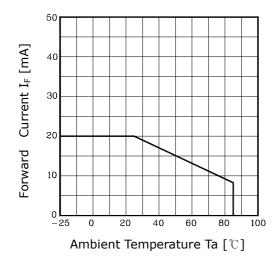


Fig. 2  $I_V$  -  $I_F$ 



 $Fig. \ 3\ I_F-Ta$ 



**Fig.4 Spectrum Distribution** 

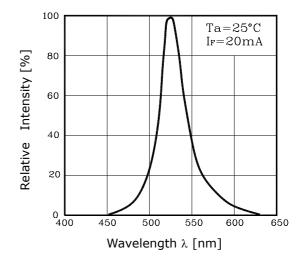
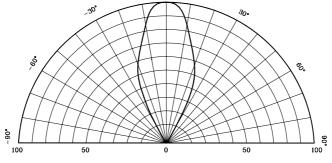


Fig. 5 Radiation Diagram



Relative Luminous Intensity Iv [%]

KSD-O2B034-000 3

### **SPG3317-H/SPG3317-H(B)**

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.