

# KLB-11B-X-X

KLB-11B-x-x is a high bright InGaN blue LED, and has the optimized optical characteristics.

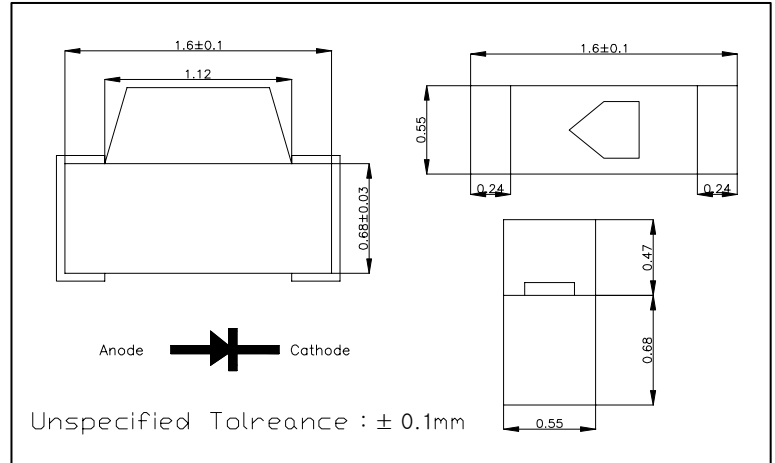
**Features**

- Ultra Wide Viewing Angle
- Very Thin Small SMD Package

**Applications**

- Display
- Indicator
- Key Pad Back Light

**[DIMENSIONS]**



**Maximum Ratings**

[ Ta=25°C ]

Parameter	Symbol	Ratings	Unit
Reverse Voltage	$V_R$	5	V
Forward current	$I_F$	20	mA
Pulse forward current <sup>*1</sup>	$I_{FP}$	70	mA
Power dissipation	$P_D$	70	mW
Operating temperature	$T_{opr.}$	-20 ~ +85	°C
Storage temperature	$T_{stg.}$	-30 ~ +100	°C
Soldering Temperature <sup>*2</sup>	$T_{sol.}$	260	°C

\*1.  $I_{FP}$  Measured under duty  $\leq 1/10$  @ 1KHz

\*2. Soldering time  $\leq 5$  Sec

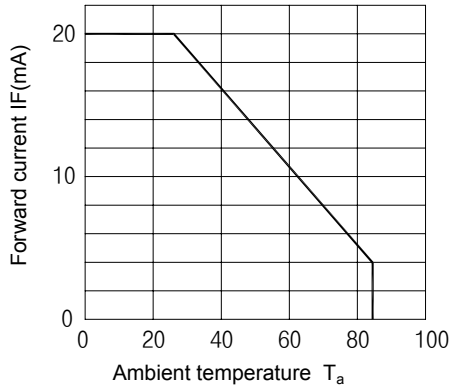
**Electro-Optical Characteristics**

[ Ta=25°C ]

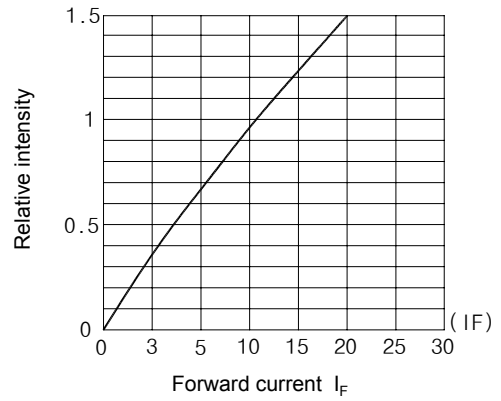
Parameter	Symbol	Conditions	Min	Typ	Max	Unit	
Forward voltage	$V_F$	$I_F = 5$ mA	2.75	3.0	3.25	V	
Luminous Intensity	$I_v$	$I_F = 5$ mA	10	20	-	mcd	
Doninant Wave Length	$\lambda_d$	$I_F = 5$ mA	465	470	475	nm	
Spectral half bandwidth	$\Delta\lambda$	$I_F = 5$ mA	-	25	-	nm	
Half angle	$\Delta\theta$	$I_F = 5$ mA	X	-	140	-	deg.
			Y	-	150	-	

**KLB-11B-X-X**

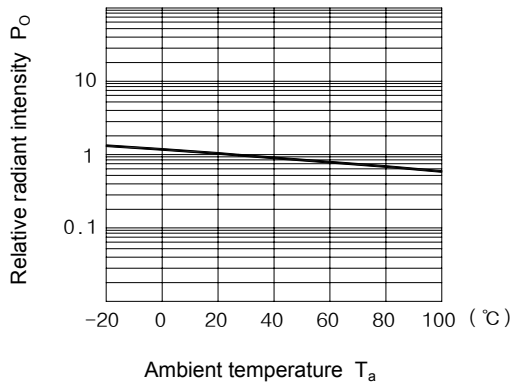
**Forward current vs. Ambient temperature**



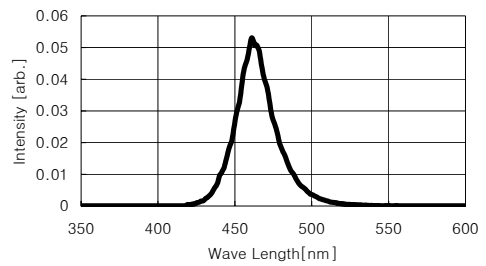
**Radiant Intensity vs. Forward current**



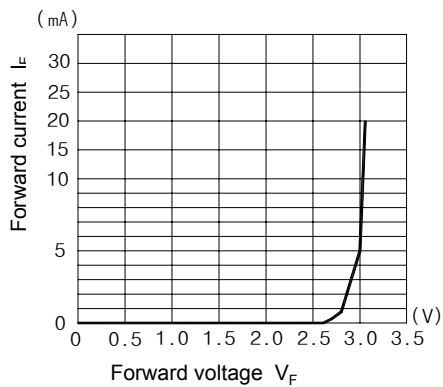
**Relative radiant intensity vs. Ambient temperature**



**Relative intensity vs. Wavelength**



**Forward current vs. Forward voltage**



**Radiant Pattern**

