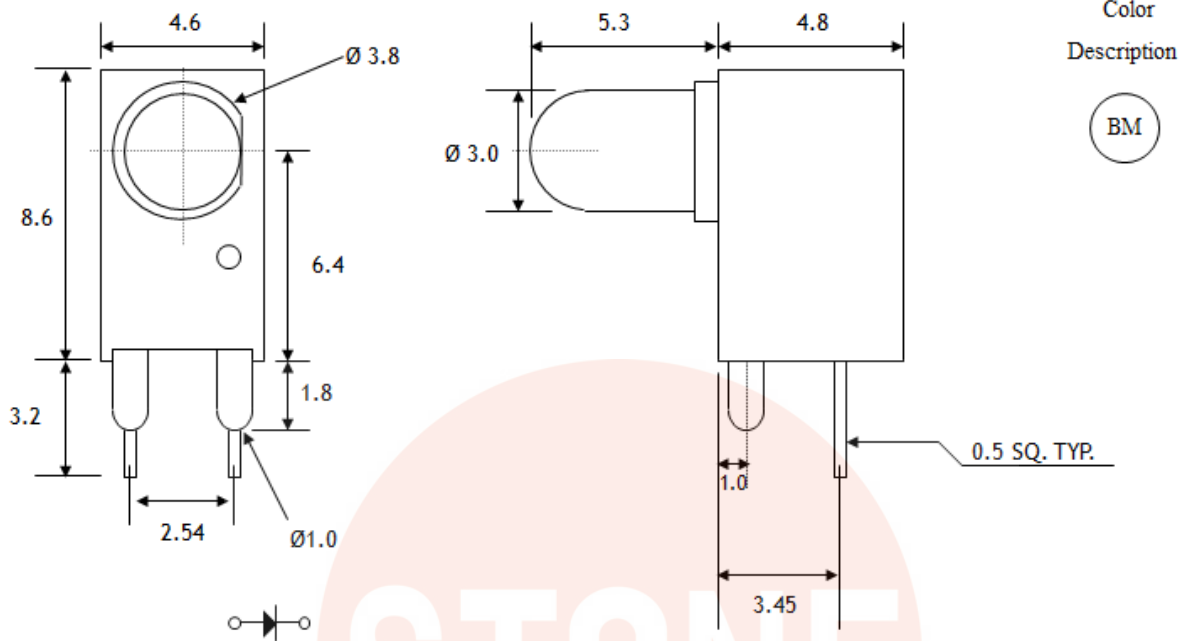


■ **Dimensions**

BL-3I(BM)-1LL



- Notes: 1. All measurements are  $\pm 0.3$  mm unless otherwise indicated.  
 2. The appearance of encapsulation tolerance is  $\pm 0.25$  mm  
 3. The maximum dimensions of protruded resin flange (NOTE) is 1.0mm

■ **Maximum Rating( $T_a=25^\circ\text{C}$ )**

Characteristics	Symbol	Rating	Unit
DC Forward Current	$I_F$	30	mA
Pulse Forward Current <sup>*3</sup>	$I_{PF}$	100	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	100	mW
Junction Temperature	$T_J$	110	$^\circ\text{C}$
Operating Temperature Range	$T_{OP}$	-40~85	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-40~100	$^\circ\text{C}$
Soldering Temperature <sup>*4</sup>	$T_{SD}$	260	$^\circ\text{C}$

Notes 1: There is no maximum or typical voltage parameter

2: For other ambient, limited setting of current will be depended on de-rating curves.

3: Duty 1/10, pulse width 0.1ms

4: The maximum of soldering time is 5 seconds in  $T_{SD}$

**Typical Product Characteristics(Ta=25°C)**
**BL-3I(BM)-1LL**

Characteristics	Symbol	Min.	Typ.	Max.	Unit	Test condition
Forward Voltage	$V_F$	2.8	3.2	3.6	V	$I_F=20mA$
Reverse Current	$I_R$	-	-	10	$\mu A$	$V_R= 5V$
Luminous Intensity	$I_v$	600	1000	-	mcd	$I_F=20mA$
Dominant Wavelength	$\lambda_d$	462.5	-	472.5	nm	$I_F=20mA$
View Angle	$2\theta_{1/2}$	-	45	-	deg	$I_F=20mA$

Notes: 1. Measurement Errors:

 Forward Voltage:  $\pm 0.1V$ , Luminous Intensity:  $\pm 10\%I_v$ , Dominant Wavelength:  $\pm 1.0nm$ 

2. Electrical-Optical Characteristics (Ta=25°C)

**Range of Bins**
**1). Forward Voltage Bins ( $I_F=20mA$ )**

Bin code	Min. $V_F$ (V)	Max. $V_F$ (V)
B	2.8	3.0
C	3.0	3.2
D	3.2	3.4
E	3.4	3.6

**2). Luminous Lumen Bins ( $I_F=20mA$ )**

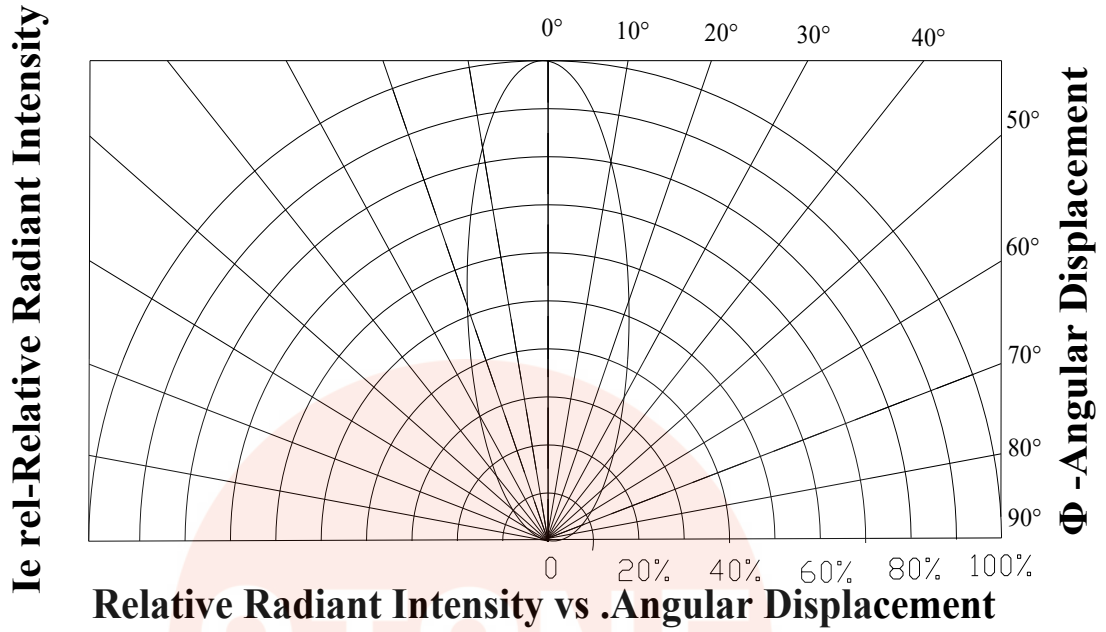
Bin code	Min. $I_v$ ( mcd)	Max. $I_v$ ( mcd )
16	600	780
17	780	1000
18	1000	1300
19	1300	1700
20	1700	2200

**3).Dominant Wavelength Bins ( $I_F=20mA$ )**

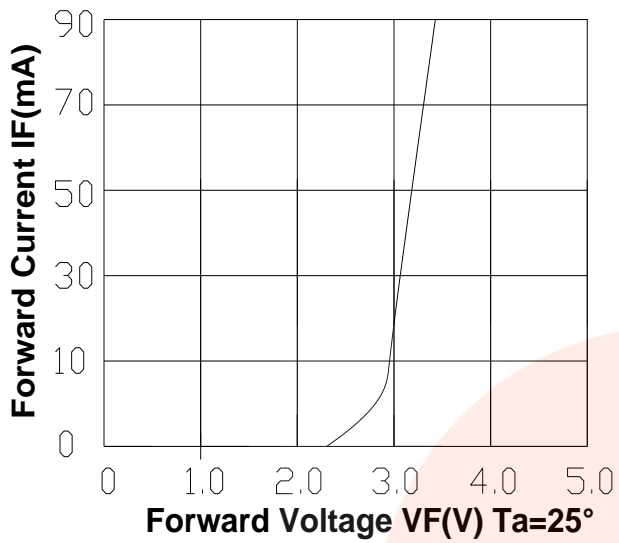
Bin Code	Min. $\lambda_d$ (nm)	Max. $\lambda_d$ (nm)
D	462.5	467.5
E	467.5	472.5

■ Directive Characteristics(Ta=25°C)

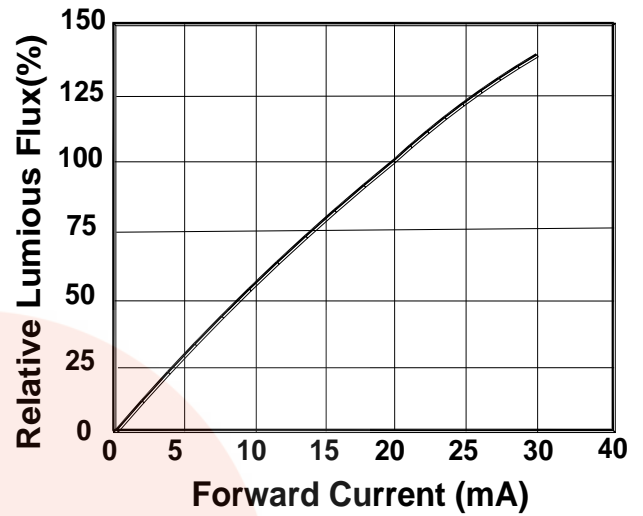
BL-3I(BM)-1LL



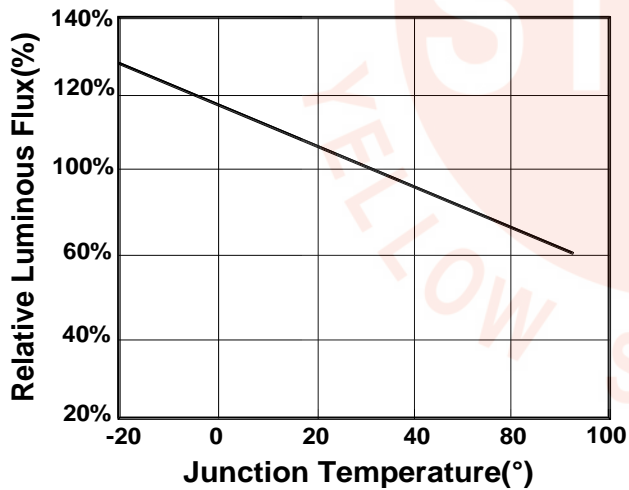
1). Forward Current  $I_F$ - $V_F$



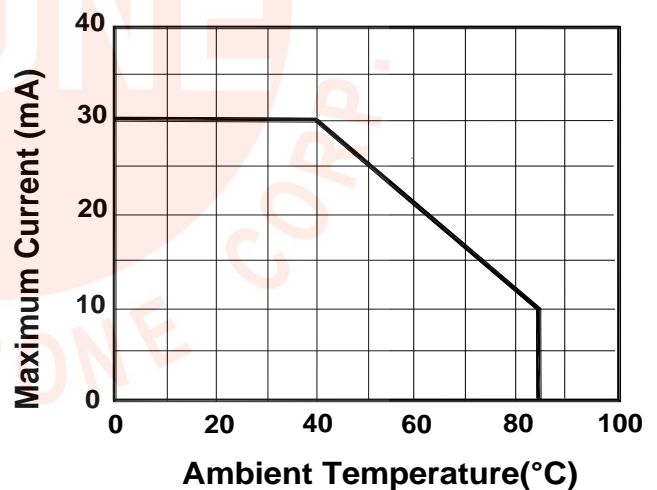
2). Relative Luminous Intensity- $I_F$



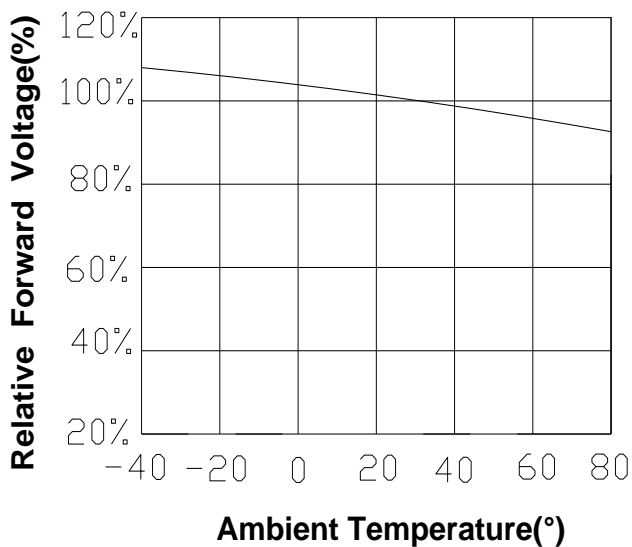
3). Relative Luminous Intensity- $T_a$



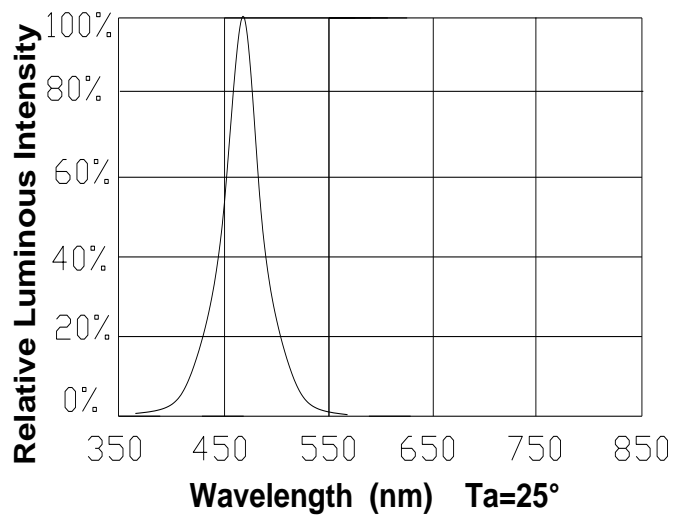
4). Forward Current  $I_F$ - $T_a$

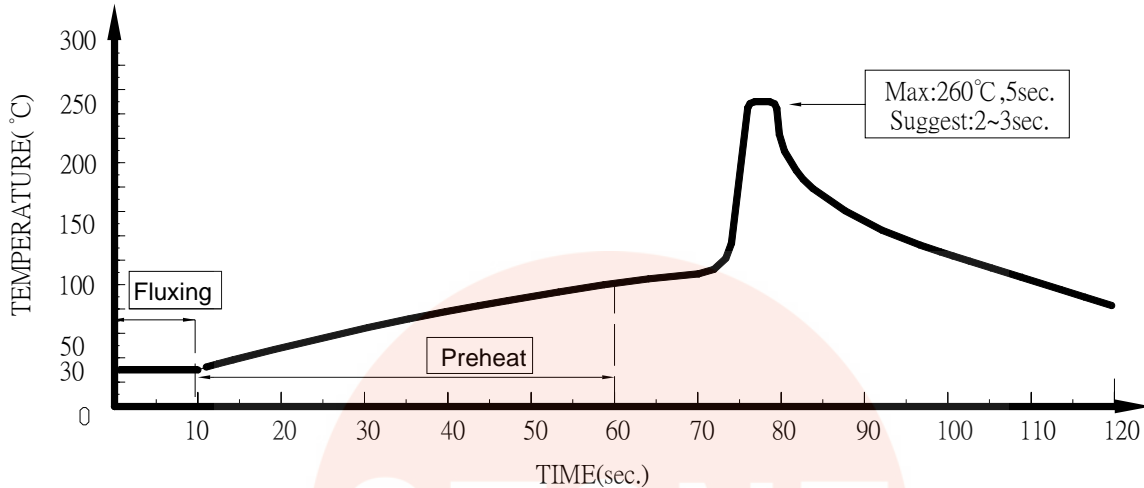


5). Forward Voltage- $T_a$



6). Wavelength Characteristics ( $T_a=25^\circ\text{C}$ )





1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

● IRON Soldering

A : Max : 350°C Within 3 sec. One time only.

B : For 3mm LED without flange, if the LED epoxy lays flat on the PCB, the welding condition is 350°C within 2 seconds, one time only.

