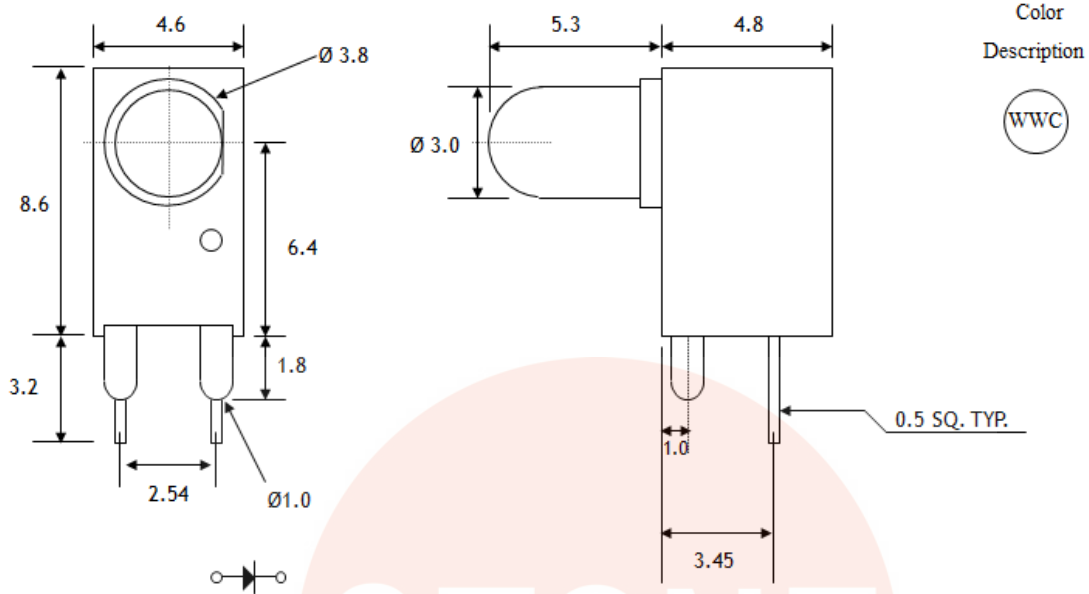


■ **Dimensions**

BL-3I(WWC)-1LL



- Notes: 1. All measurements are ± 0.3 mm unless otherwise indicated.
 2. The appearance of encapsulation tolerance is ± 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	Typical	Unit
DC Forward Current	I_F	30	mA
Pulse Forward Current ^{*3}	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 ^{*4}	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(WWC)-1LL

Characteristics	Symbol	Min	Typical	Max	Unit	Test condition
Forward Voltage	V_F	2.8	3.2	3.6	V	$I_F=20\text{mA}$
Reverse Current	I_R	-	-	10	μA	$V_R=5\text{V}$
Luminous Intensity	I_V	4900	10600	-	mcd	$I_F=20\text{mA}$
Color Coordinate	x		0.285	-	-	$I_F=20\text{mA}$
	y		0.271	-		
Viewing Angle	$2\theta_{1/2}$	-	30	-	Deg	$I_F=20\text{mA}$

Notes: 1. Measurement Errors:

Forward Voltage: $\pm 0.1\text{V}$, Luminous Intensity: $\pm 10\%I_V$, Color Coordinate: ± 0.006

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

■ Range of Bins

1).Forward Voltage Bins($I_F=20\text{mA}$)

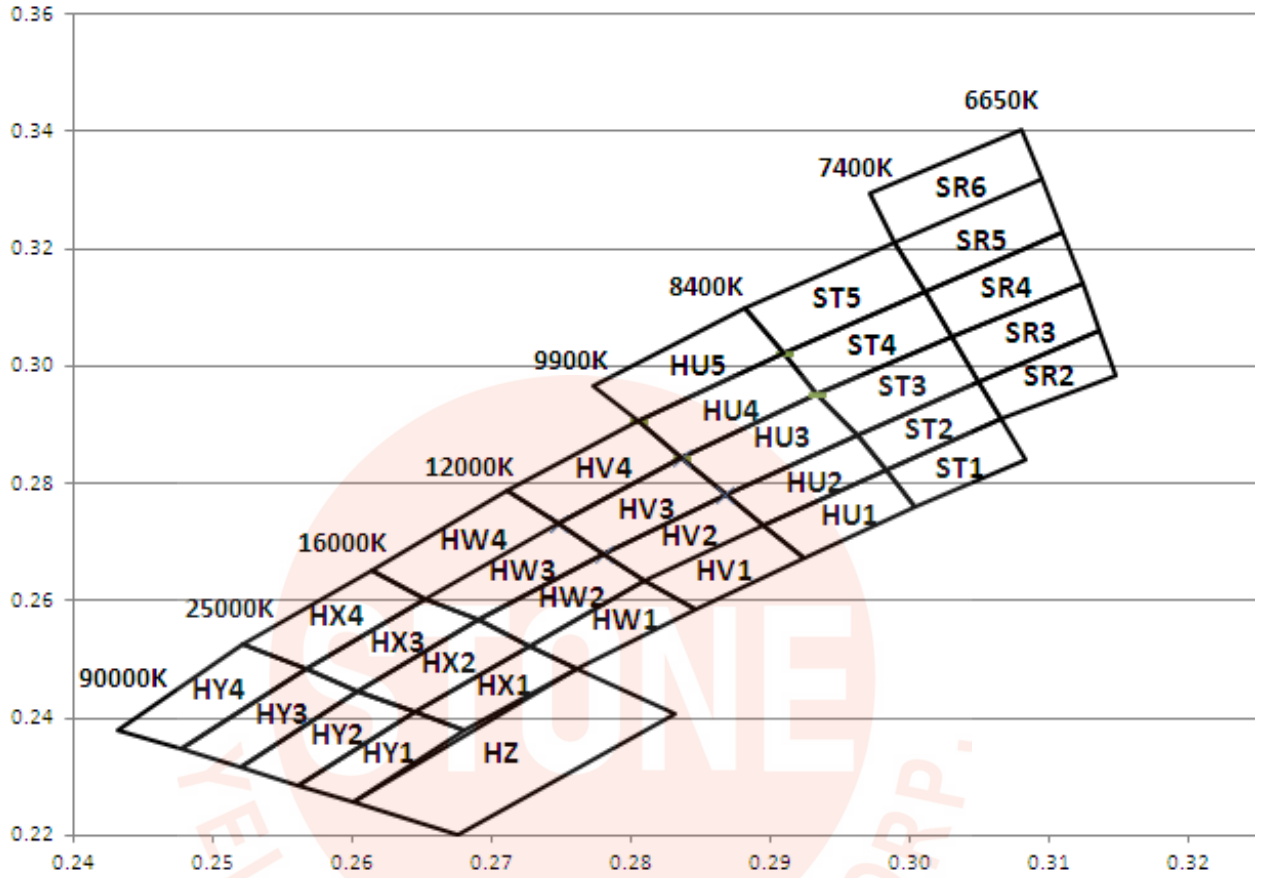
Bin Code	Min. V_F (V)	Max. V_F (V)
B	2.8	2.9
C	2.9	3.0
D	3.0	3.1
E	3.1	3.2
F	3.2	3.3
G	3.3	3.4
H	3.4	3.5
I	3.5	3.6

2).Luminous Intensity Bins($I_F=20\text{mA}$)

Bin code	Min. I_V (mcd)	Max. I_V (mcd)
24	4900	6300
25	6300	8200
26	8200	10600
27	10600	13800
28	13800	18000

■ Color Coordinate Comparison

BL-3I(WWC)-1LL



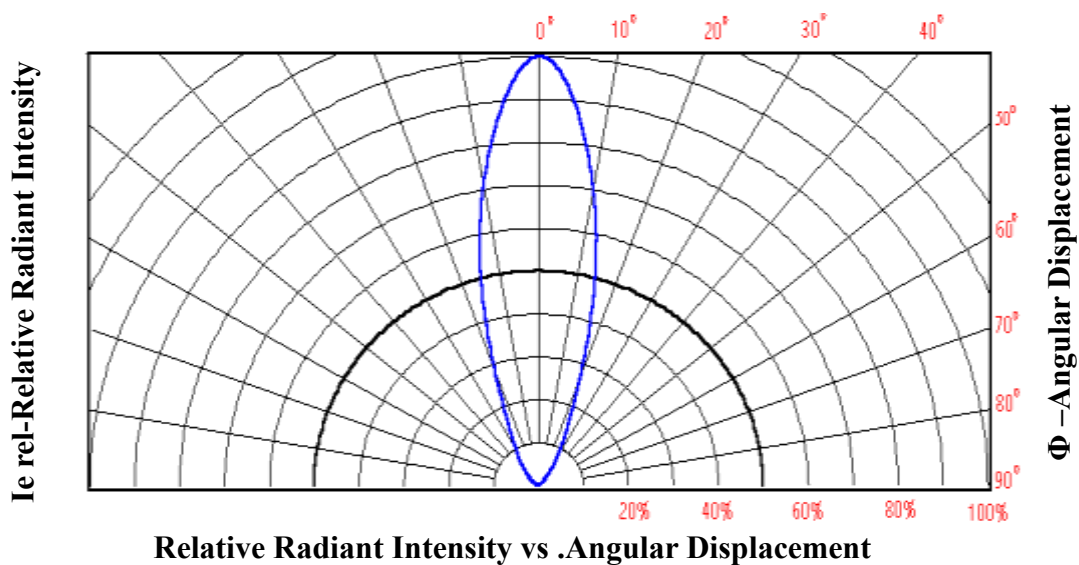
Color Ranks

BIN碼	X	Y	X	Y	X	Y	X	Y
SR2	0.3050	0.2972	0.3066	0.2912	0.3148	0.2983	0.3136	0.3060
SR3	0.3030	0.3050	0.3050	0.2972	0.3136	0.3060	0.3124	0.3142
SR4	0.3011	0.3127	0.3030	0.3050	0.3124	0.3142	0.3110	0.3230
SR5	0.2989	0.3213	0.3011	0.3127	0.3110	0.3230	0.3095	0.3320
SR6	0.2971	0.3295	0.2989	0.3213	0.3095	0.3320	0.3080	0.3405
ST1	0.2983	0.2823	0.3004	0.2762	0.3084	0.2841	0.3066	0.2912
ST2	0.2962	0.2884	0.2983	0.2823	0.3066	0.2912	0.3050	0.2972
ST3	0.2934	0.2954	0.2962	0.2884	0.3050	0.2972	0.3030	0.3050
ST4	0.2910	0.3024	0.2934	0.2954	0.3030	0.3050	0.3011	0.3127
ST5	0.2882	0.3098	0.2910	0.3024	0.3011	0.3127	0.2989	0.3213
HU1	0.2895	0.2730	0.2924	0.2672	0.3004	0.2762	0.2983	0.2823
HU2	0.2868	0.2781	0.2895	0.2730	0.2983	0.2823	0.2962	0.2884
HU3	0.2837	0.2845	0.2868	0.2781	0.2962	0.2884	0.2934	0.2954
HU4	0.2806	0.2908	0.2837	0.2845	0.2934	0.2954	0.2910	0.3024
HU5	0.2773	0.2967	0.2806	0.2908	0.2910	0.3024	0.2882	0.3098

Color Ranks

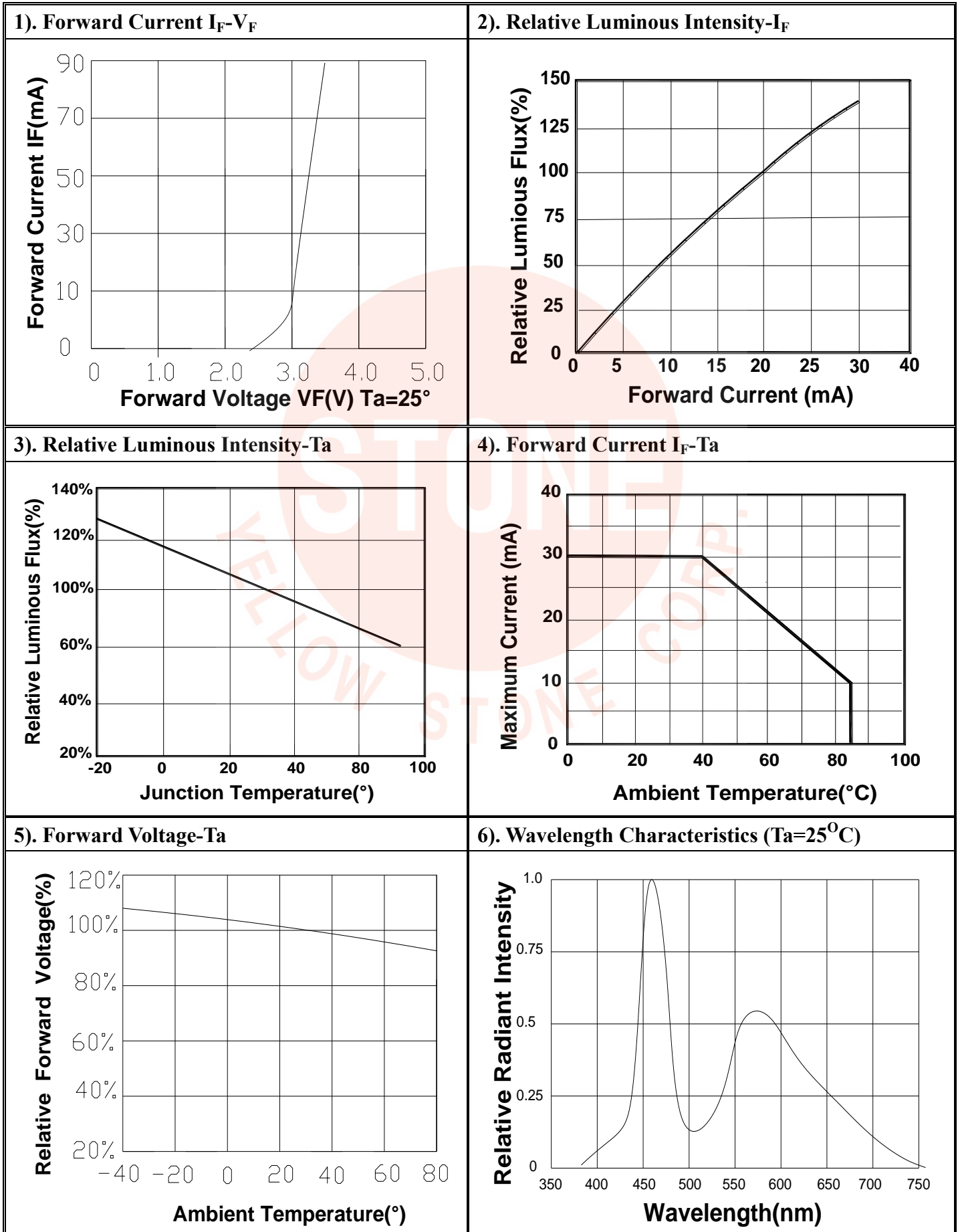
HV1	0.2810	0.2634	0.2846	0.2585	0.2924	0.2672	0.2895	0.2730
HV2	0.2780	0.2680	0.2810	0.2634	0.2895	0.2730	0.2868	0.2781
HV3	0.2748	0.2732	0.2780	0.2680	0.2868	0.2781	0.2837	0.2845
HV4	0.2712	0.2788	0.2748	0.2732	0.2837	0.2845	0.2806	0.2908
HW1	0.2727	0.2523	0.2762	0.2485	0.2846	0.2585	0.2810	0.2634
HW2	0.2691	0.2568	0.2727	0.2523	0.2810	0.2634	0.2780	0.2680
HW3	0.2653	0.2605	0.2691	0.2568	0.2780	0.2680	0.2748	0.2732
HW4	0.2615	0.2653	0.2653	0.2605	0.2748	0.2732	0.2712	0.2788
HX1	0.2645	0.2410	0.2680	0.2380	0.2762	0.2485	0.2727	0.2523
HX2	0.2604	0.2446	0.2645	0.2410	0.2727	0.2523	0.2691	0.2568
HX3	0.2567	0.2485	0.2604	0.2446	0.2691	0.2568	0.2653	0.2605
HX4	0.2522	0.2526	0.2567	0.2485	0.2653	0.2605	0.2615	0.2653
HY1	0.2562	0.2286	0.2601	0.2259	0.2680	0.2380	0.2645	0.2410
HY2	0.2520	0.2318	0.2562	0.2286	0.2645	0.2410	0.2604	0.2446
HY3	0.2478	0.2349	0.2520	0.2318	0.2604	0.2446	0.2567	0.2485
HY4	0.2432	0.2380	0.2478	0.2349	0.2567	0.2485	0.2522	0.2526
HZ	0.2601	0.2259	0.2676	0.2203	0.2832	0.2409	0.2762	0.2485

■ **Directive Characteristics(Ta=25°C)**



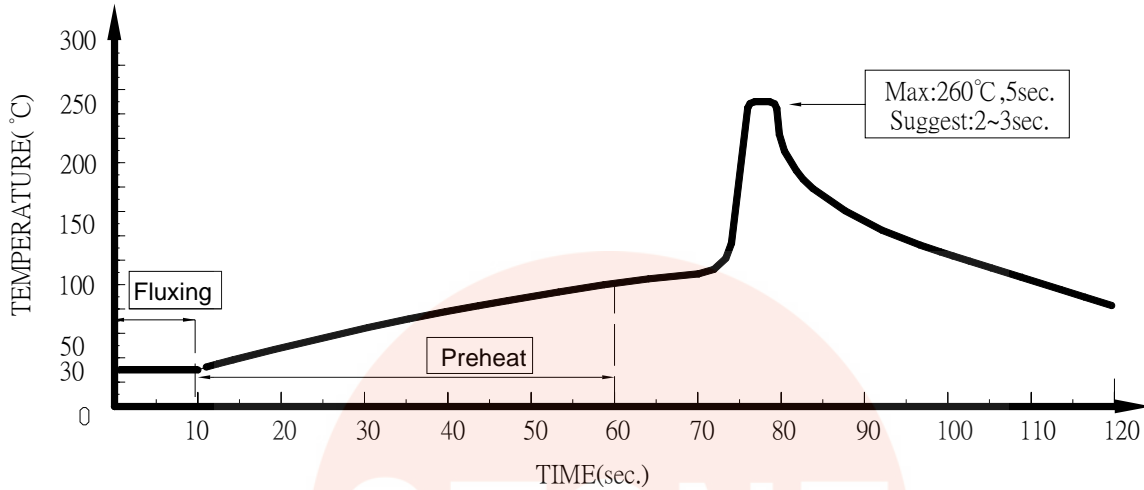
■ **Electronic-Optical Characteristics**

BL-3I(WWC)-1LL



■ Dip Soldering

BL-3I(WWC)-1LL



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.

