1. Descriptions

The SIB2336E-HD2 is a Ice blue LED consisting of small and thin plastic leaded chip carrier (PLCC) 2-pin package, InGaN blue chip and phoshpr.

2. Features

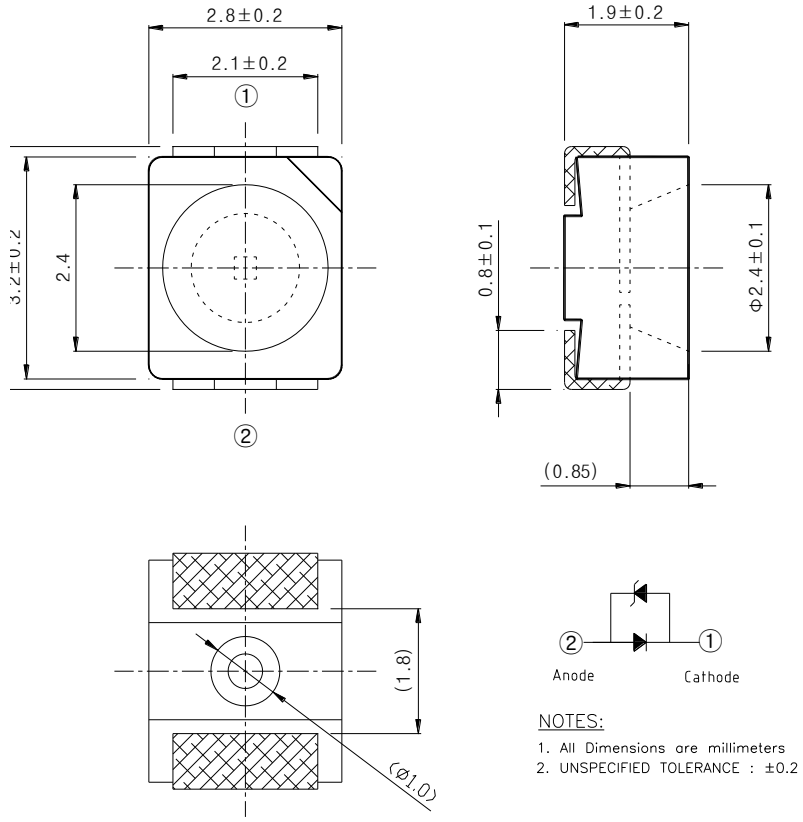
- Small Footprint Surface Mount Package (3.5 L × 2.8 W × 1.9 H [mm^3])
- Typical Forward Voltage(V_F) : 3.1 V @ Forward Current(I_F)=20mA
- Operation Temperature from -40℃ to +100℃
- Soldering methods : IR reflow soldering
- Taping : 8㎜ conductive black carrier tape & antistatic clear cover tape

3. Applications

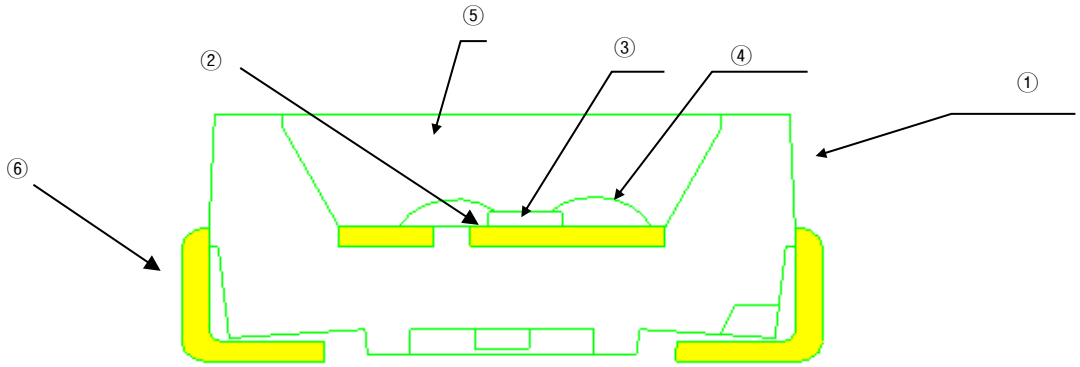
- Interior lighting
- General lighting
- Indoor and out door displays
- Architectural / Decorative lighting

4. Outline Dimensions and Material Descriptions

◆ Outline Dimensions



◆ Material Descriptions



No.	Item	Material
①	Package	PPA
②	Die Adhesive	Clear Sillicone
③	LED Chip	InGaN
④	Wire	Au
⑤	Encapsulant	Sillicone + Phsphor
⑥	Lead	Fe Alloy

5. Absolute Maximums

Item	Symbol	Min.	Max.	Unit	Conditions
Forward Current	I_F	-	30	mA	
Peak Forward Current*1	I_{FP}	-	90	mA	
Power Dissipation	P_D	-	114	mW	
Reverse Voltage	V_R	-	5	V	
Operating Temperature	T_{OP}	-40	100	℃	
Storage Temperature	Ts	-40	100	℃	
Soldering Temperature* 2	T_{sol}	-	260	℃	

*1. I_{FP} was measured at Tw ≤ 1 msec of pulse width and D ≤ 1/10 of duty ratio.

*2. Soldering time : 5 Sec

6. Electro-Optical Characteristics (T_A = 25℃)

Item	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage*3	V_F	2.7	3.2	3.8	V	I_F=20mA
Reverse voltage	V_R	0.5	-	1.5	V	I_R=5mA
Luminous intensity*1,3	I_V	700	1100	1600	cd	I_F=20mA
Chromaticity coordiante*3	x	0.1850	-	0.2075	-	I_F=20mA
	y	0.2700	-	0.3050	-	I_F=20mA
Half angle*2	$2\Theta_{1/2}$	-	120	-	deg	I_F=20mA

*1. The luminous intensity IV was measured at the peak of the spatial pattern which may not be aligned with the mechanical axis of the LED package.

*2. $2\Theta_{1/2}$ is the off-axis where the luminous intensity is 1/2 of the peak intensity.

*3. Measuring Tolerance

- V_F : ± 0.1 V, I_V : ± 10%, Ra : ± 3, X,Y : ± 0.01

7. Ranks

◆ I_V, V_F, Color Rank Table[*1]

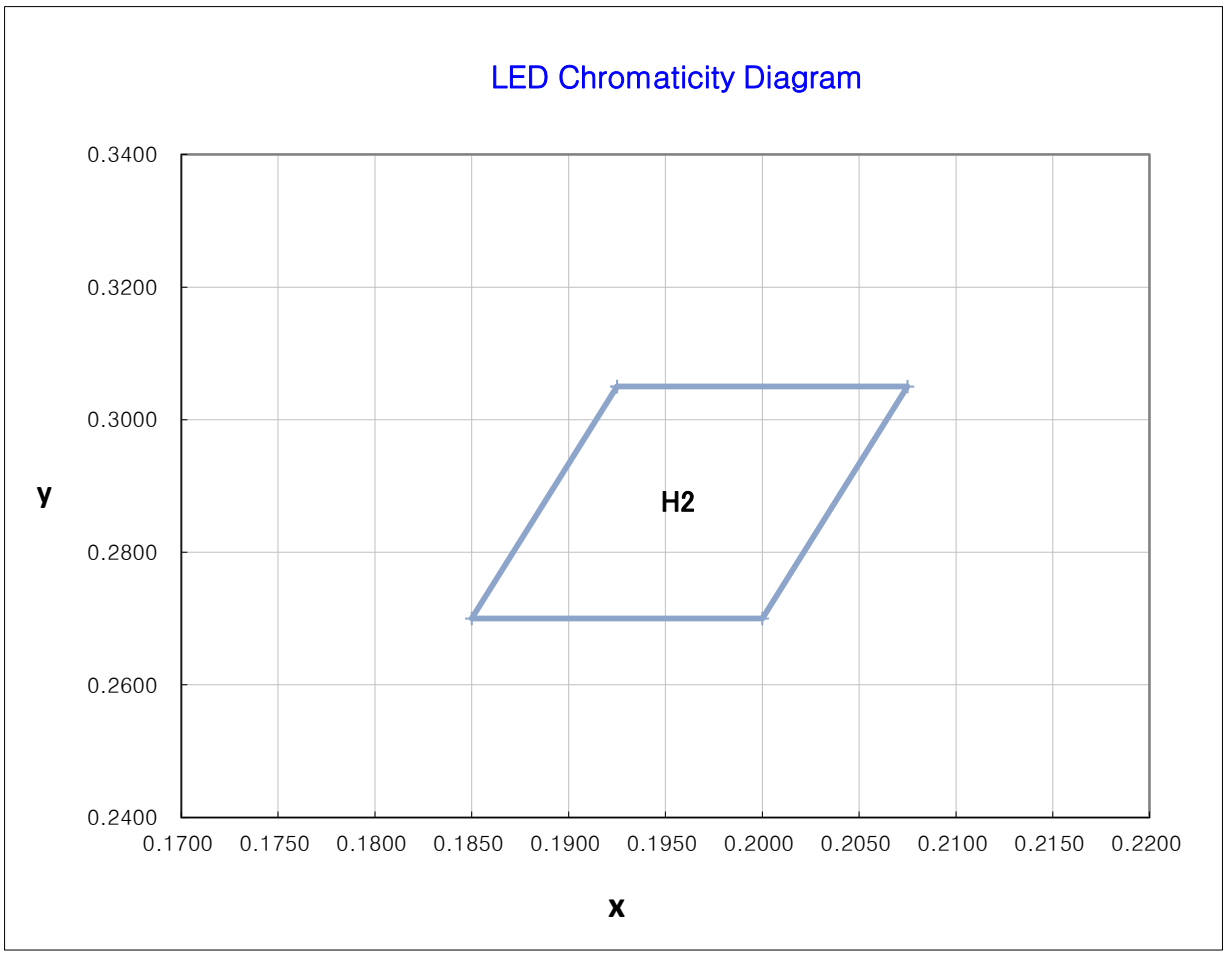
V_F, I_V, Color Rank @ IF = 20 mA		
Forward Voltage [V]	**Luminuous Intensity [mcd]**	**Chromaticity**
1 : 2.7 ~ 3.1	**P** : 700 ~ 1000	**H2**
2 : 3.1 ~ 3.8	**Q** : 1000 ~ 1300	-
-	**R** : 1300 ~ 1600	-
-	-	-

*1. SIB2336E-HD2 marked as 2QH2(V_F, I_V, Color Rank) has the I_V range 700~1600mcd, VF rank 3.1~3.8V and Color range H2 area.

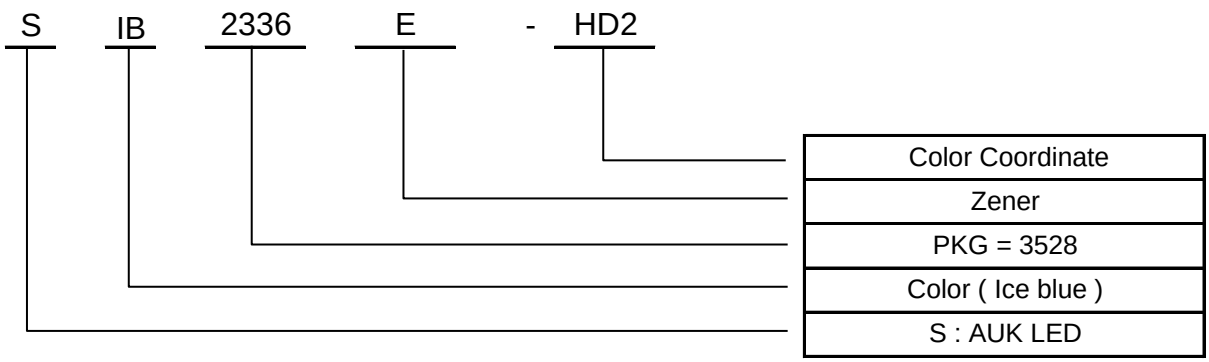
◆ Color Coordinate Rank

H2		**-**		**-**		**-**	
x	y	x	y	x	y	x	y
0.1925	0.3050	-	-	-	-	-	-
0.1850	0.2700	-	-	-	-	-	-
0.2000	0.2700	-	-	-	-	-	-
0.2075	0.3050	-	-	-	-	-	-

◆ The CIE(x, y) Chromaticity Diagram

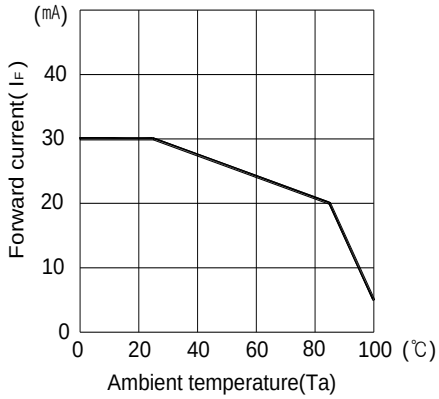


8. Part Numbering

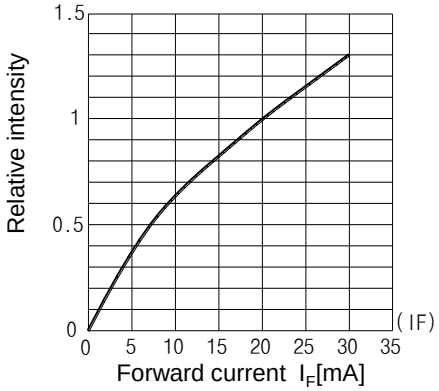


9. Characteristic Graphs

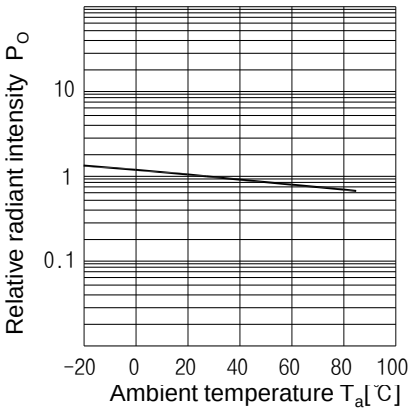
Forward current vs. Ambient temperature



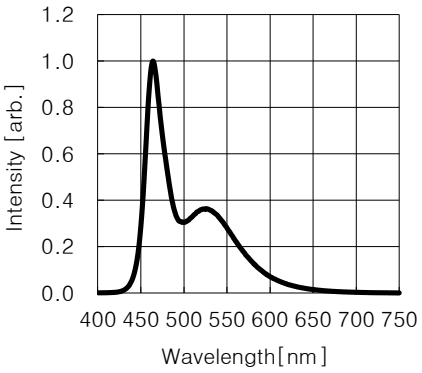
Luminous Intensity vs. Forward current



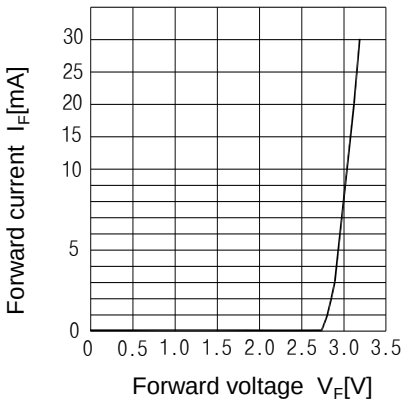
Relative luminous intensity vs. Ambient temperature



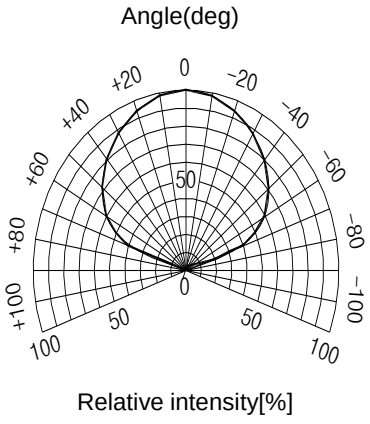
Relative intensity vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern



The contents of this data sheet are subject to change without advance notice for the purpose of improvement.
When using this product, would you please refer to the latest specifications.