

5000K White LED (ENSBC-LH1Y9-F0)

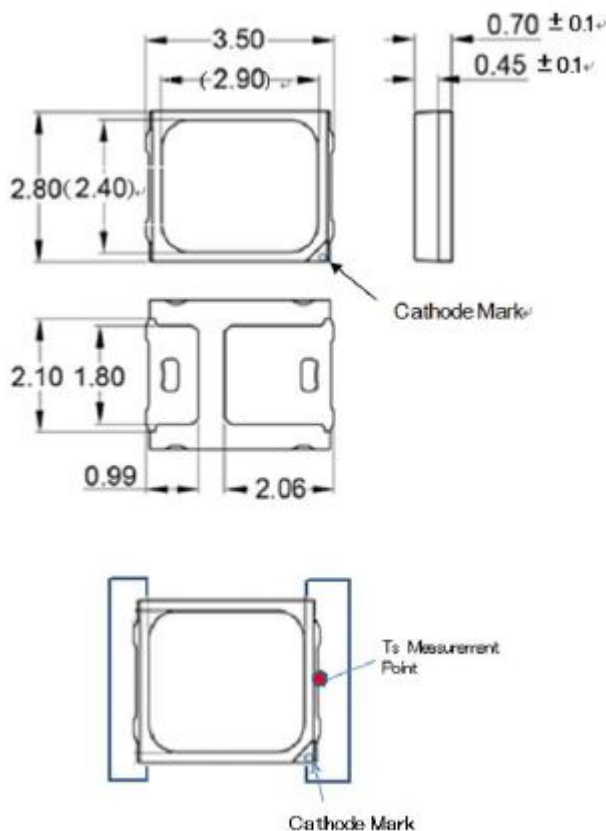
<Features>

1. Emitted Color : White, CCT:5000k
2. Lens Appearance : YellowDiffuse
3. 3.5x2.8x2.10mm standard package
4. Suitable for all SMT assembly methods
5. Compatible with infrared and vapor phase reflow solder process
6. Compatible with automatic placement equipment
7. This product doesn't contain restriction Substance, comply ROHS standard

<Applications>

1. Automotive: Dashboards, Stop Lamps, Turn Signals
2. Backlighting : LCDs, Key pads advertising
3. Status indicators : Consumer & industrial electronics
4. General use

<Package Dimensions>



NOTES:

- 1.The size of the product doesn't contain burr.
- 2.Tolerance is $\pm 0.20\text{mm}$
- 3.Specifications are subject to change without notice.

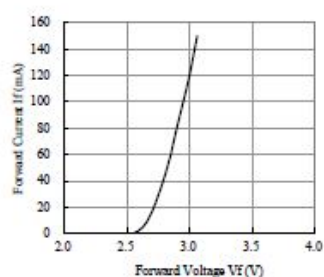
Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Rating	Unit
Power Dissipation	PD	540	mW
DC Forward Current	IF	150	mA
Pulsed Forward Current*	IFP	240	mA
Reverse Voltage	VR	5	V
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Dice Temperature	TJ	125	°C

* Condition for IFP is pulse of 1/10 duty and 10 msec.width

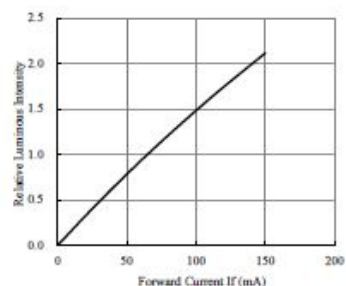
Electro-Optical Characteristics[Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=65mA		2.85	3.0	V
Luminous Flux	IV	IF=65mA	33.0	36.8	43.0	lm
Chromaticity Coordinates	x	IF=65mA		0.34		
	y	IF=65mA		0.35		
Reverse Current	IR	VR=5V			5	uA
Viewing Angle	θ1/2	IF=20mA		120		deg
Thermal Resistance	Rj-s			20		CW

Typical Electro-Optical Characteristics Curves

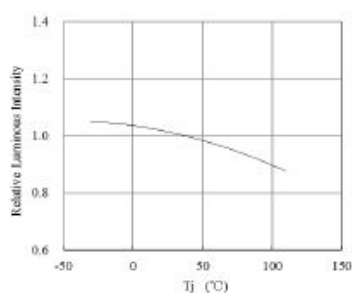
Forward Current vs Forward Voltage



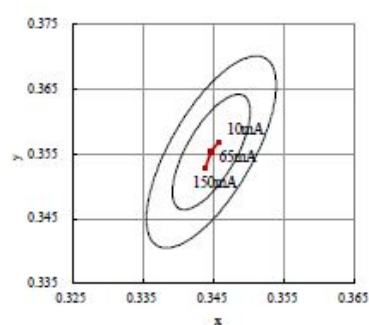
Relative Luminous Intensity vs Forward Current



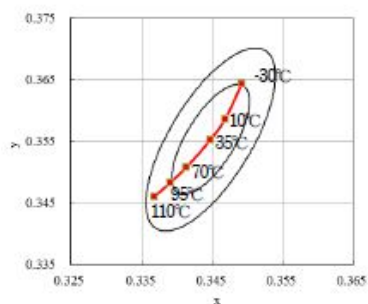
Relative Luminous Intensity vs TJ



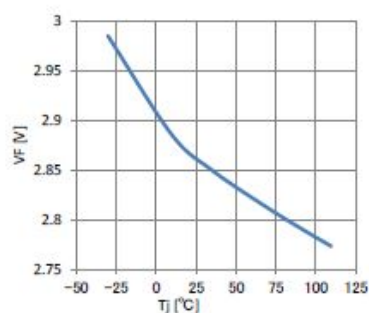
Chromaticity vs Forward Current



Chromaticity vs. TJ



Forward Voltage vs TJ

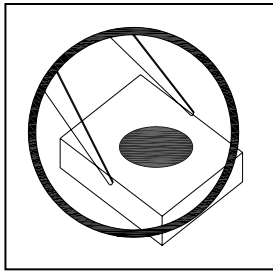


Handling Precautions

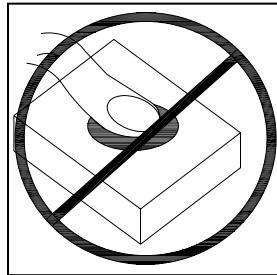
Compare to epoxy encapsulate that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might lead to damage and premature failure of the LED.

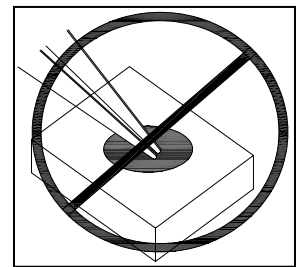
1. Handle the component along the side surfaces by using forceps or appropriate tools. (pic.1)
2. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry. (pic.2 & pic.3)
3. Do not stack together assembled PCBs containing exposed LEDs. Impact may scratch the silicone lens or damage the internal circuitry. (pic.4)
4. The outer diameter of the SMD pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible. (pic.5)
5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pick up. (pic.5)
6. The dimensions of the component must be accurately programmed in the pick-and-place machine to insure precise pickup and avoid damage during production.



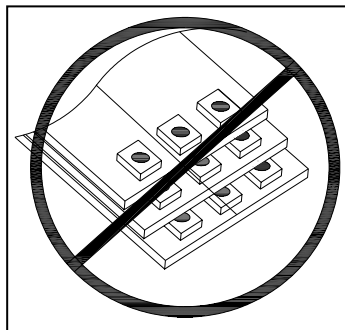
Pic.1



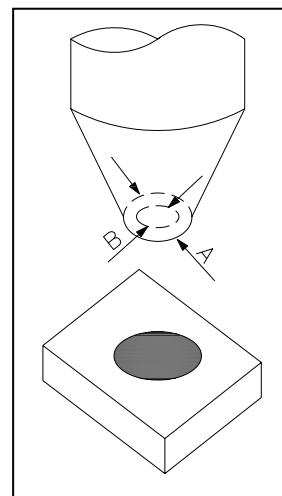
Pic.2



Pic.3



Pic.4



Pic.5