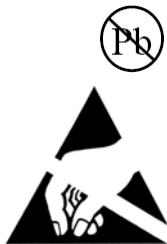
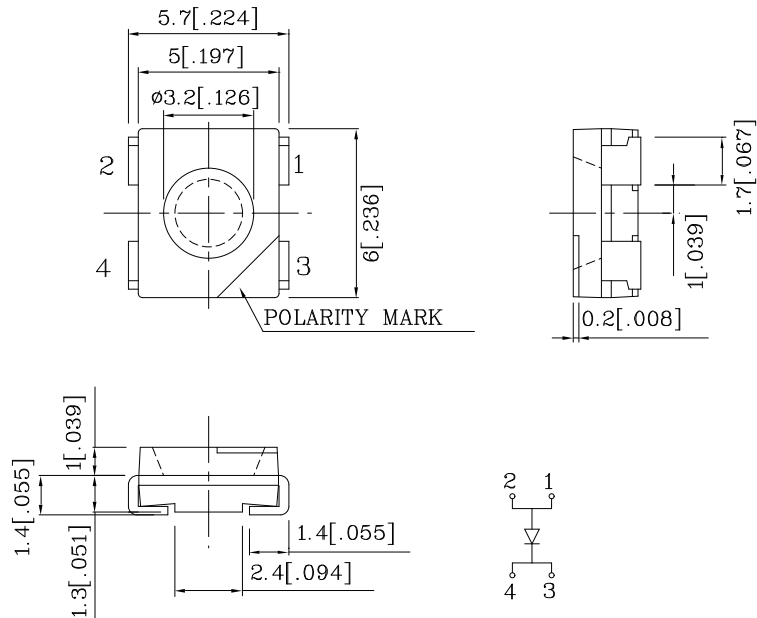


Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)		FBB (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	mA
Power Dissipation	PD	120	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

Operating Characteristics (TA=25°C)		FBB (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	V
Reverse Current (Max.) (VR=5V)	IR	50	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λP	465	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λD	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	$\Delta\lambda$	22	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	100	pF

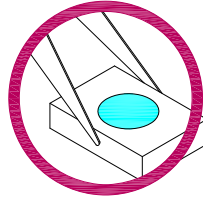
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=30mA) mcd		Wavelength nm λP	Viewing Angle 2 θ 1/2
				min.	typ.		
XZFBB82S	Blue	InGaN	Water Clear	300	497	465	100°

Handling Precautions

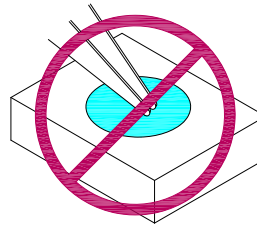
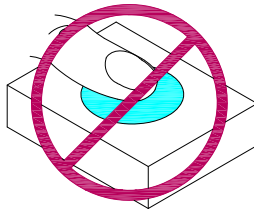
Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

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.

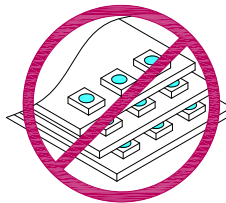
1. Handle the component along the side surfaces by using forceps or appropriate tools.



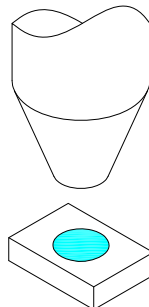
2. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.

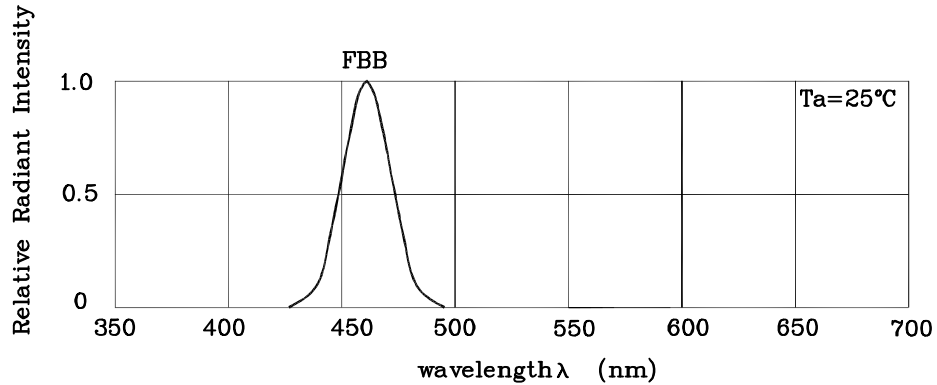


3. Do not stack together assembled PCBs containing exposed LEDs. Impact may scratch the silicone lens or damage the internal circuitry.



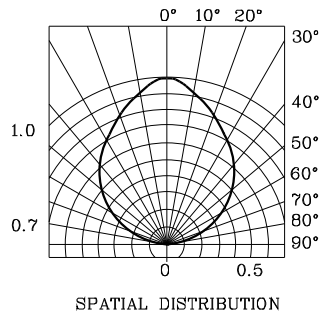
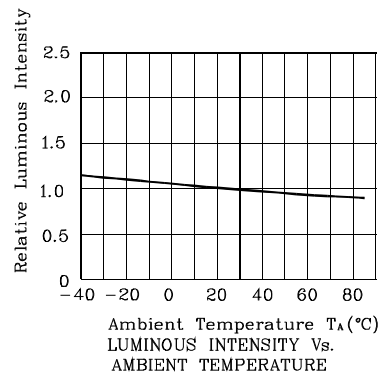
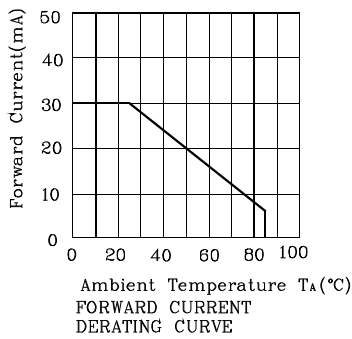
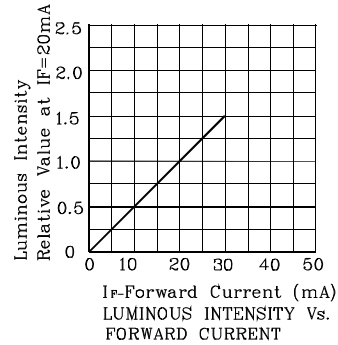
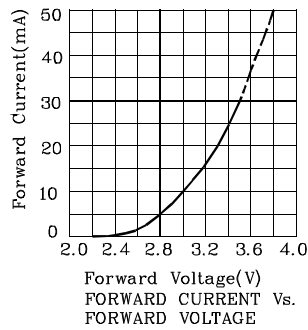
4. During surface-mounting, the pickup capillary diameter should be larger than the silicone lens to insure the capillary does not scratch or damage the lens.





RELATIVE INTENSITY Vs. WAVELENGTH

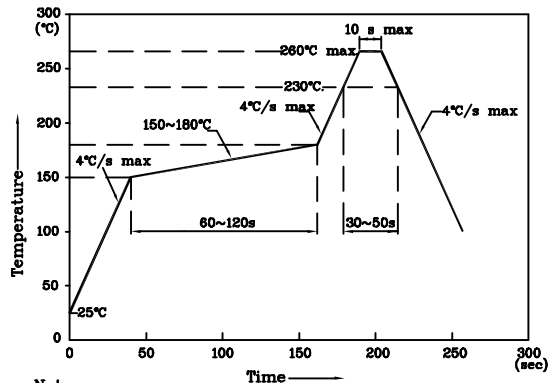
❖ **FBB**





Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

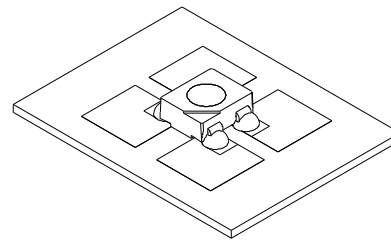
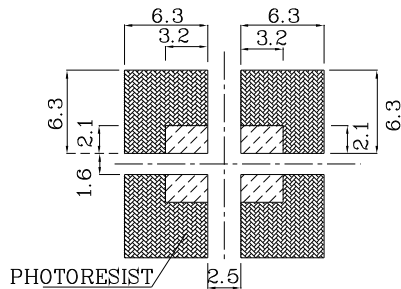


Notes:

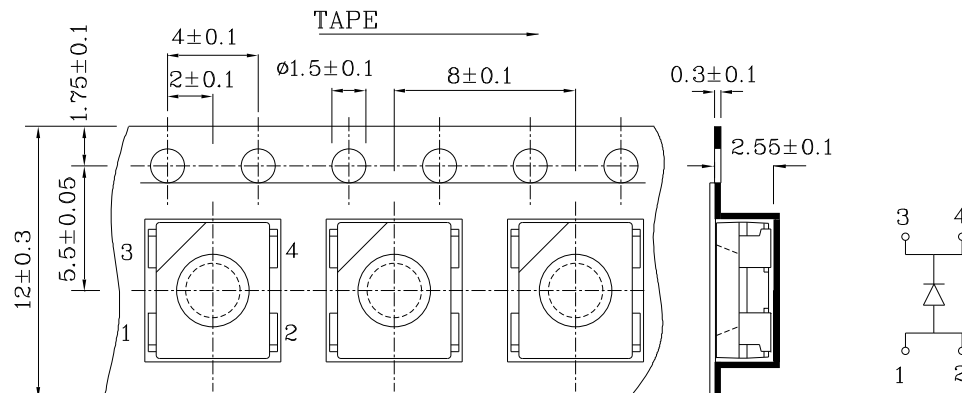
1. Maximum soldering temperature should not exceed 260°C
2. Recommended reflow temperature: 145°C-260°C
3. Do not put stress to the epoxy resin during high temperatures conditions

❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)

❖ The device has a single mounting surface. The device must be mounted according to the specifications.



❖ Tape Specification (Units : mm)



Remarks:

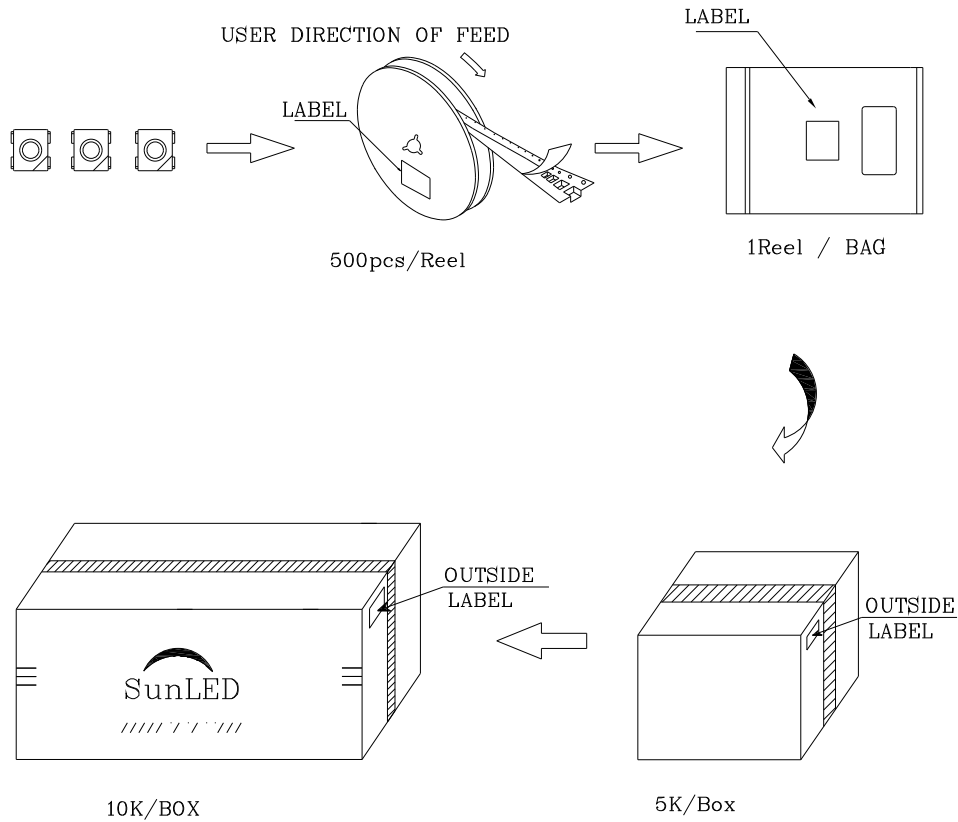

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

XZFBB82S

Q.C	
Q C	
XX XX XXXX	
PASSED	
P/NO : XZxx82x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	