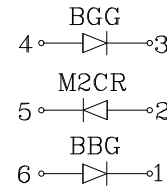
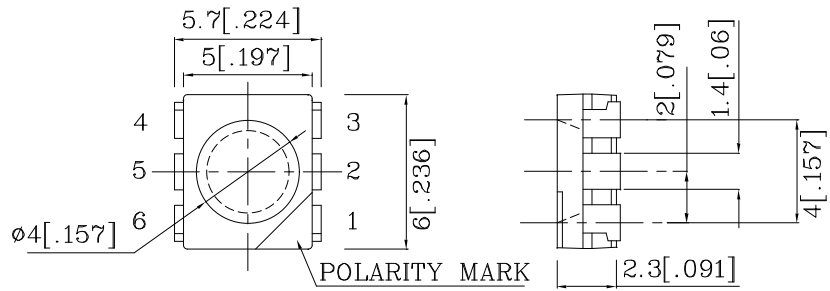


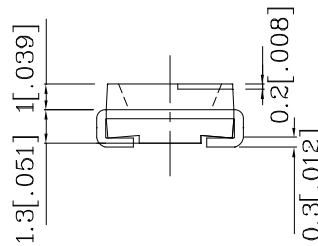
PRELIMINARY SPEC

Features

- CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



ATTENTION  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



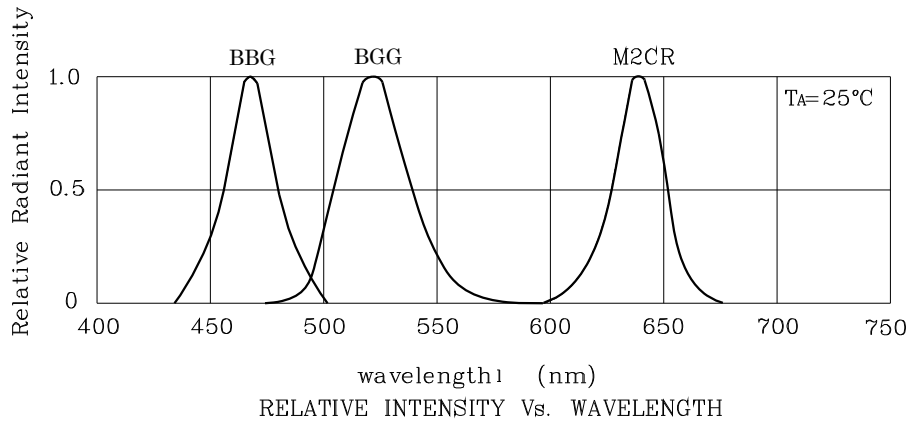
Notes:

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.

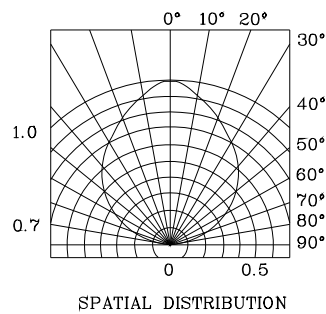
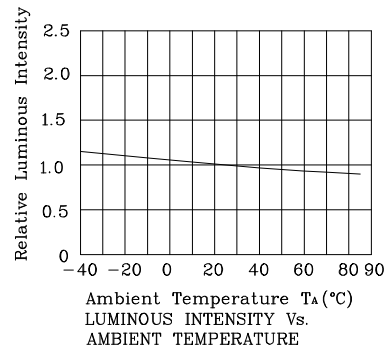
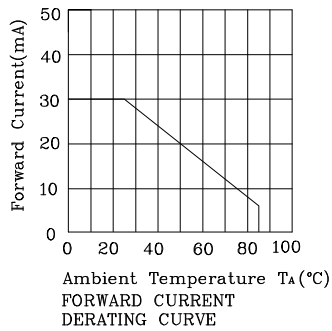
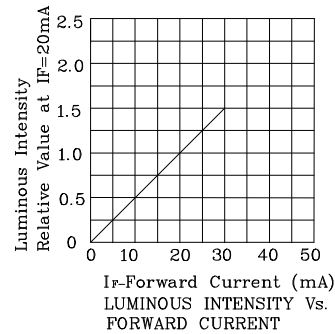
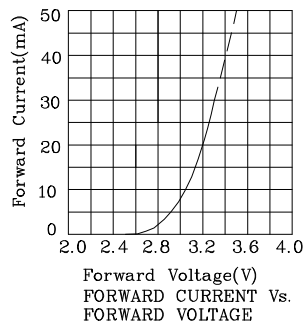
Absolute maximum ratings (TA=25°C)		BBG (InGaN)	M2CR (AlInGaP)	BGG (InGaN)	Unit
Reverse Voltage	V <sub>R</sub>	5	5	5	V
Forward Current	I <sub>F</sub>	30	50	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	150	100	mA
Total Power Dissipation Within 350mW at All Chips are Lightened	P <sub>T</sub>	350			mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85			°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85			
Electrostatic Discharge Threshold (HBM)		1000	-	1000	V

Operating Characteristics (TA=25°C)		BBG (InGaN)	M2CR (AlInGaP)	BGG (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	3.2	2.2	3.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	4.0	2.8	4.0	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	10	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ P	468	640	520	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ D	470	630	525	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	21	25	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	100	27	100	pF

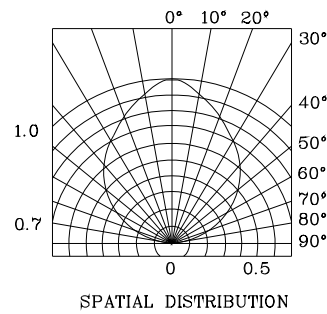
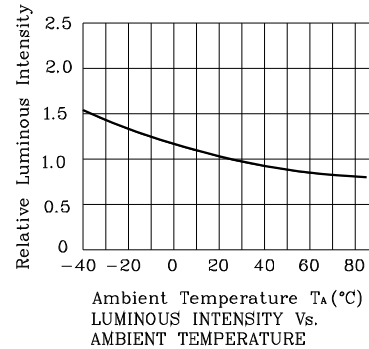
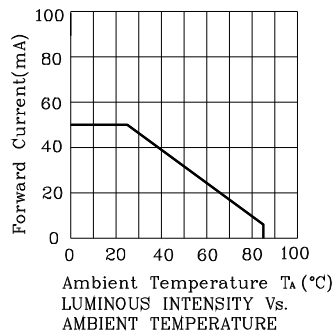
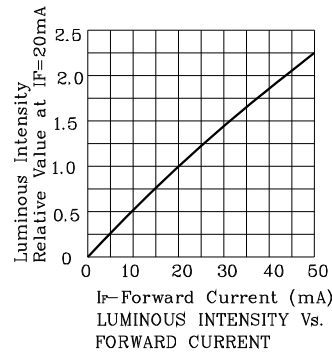
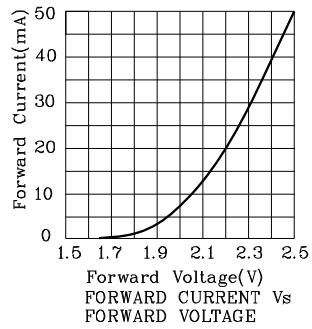
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =30mA *50mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZBBGM2CRBGG82W-2	Blue	InGaN	Water Clear	180	297	468	100°
	Red	AlInGaP		*3300	*4490	640	
	Green	InGaN		380	745	520	



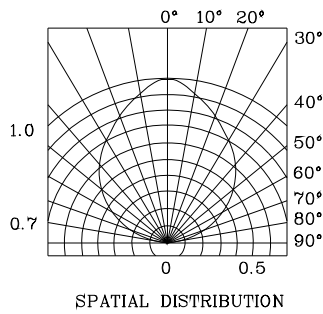
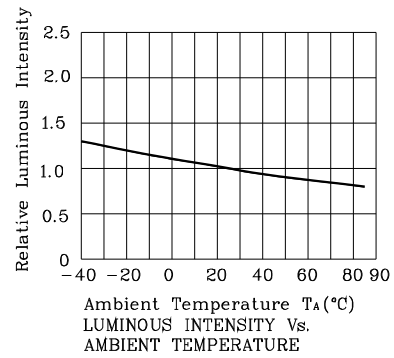
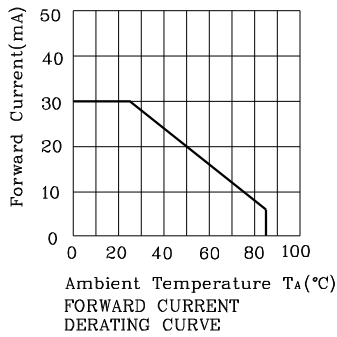
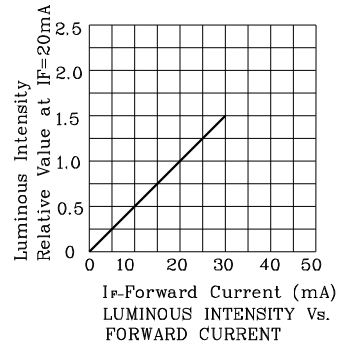
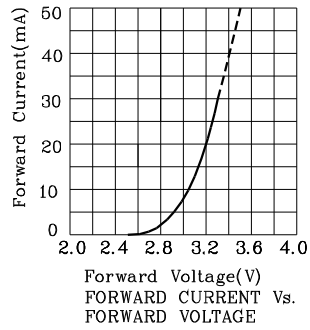
❖ **BBG**



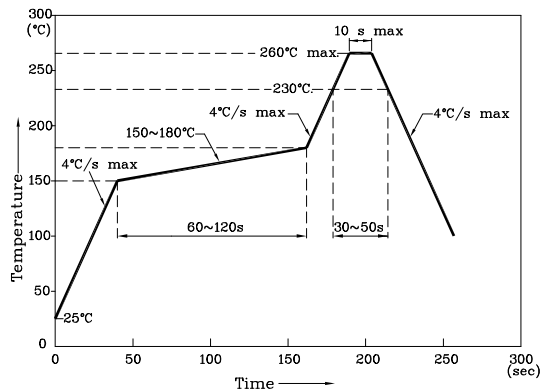
❖ **M2CR**



❖ BGG



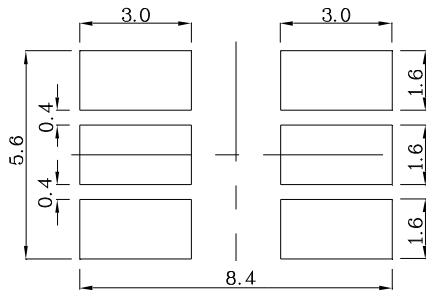
Reflow Soldering Profile For Lead-free SMT Process.



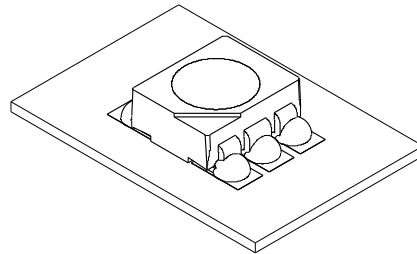
NOTES:

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.

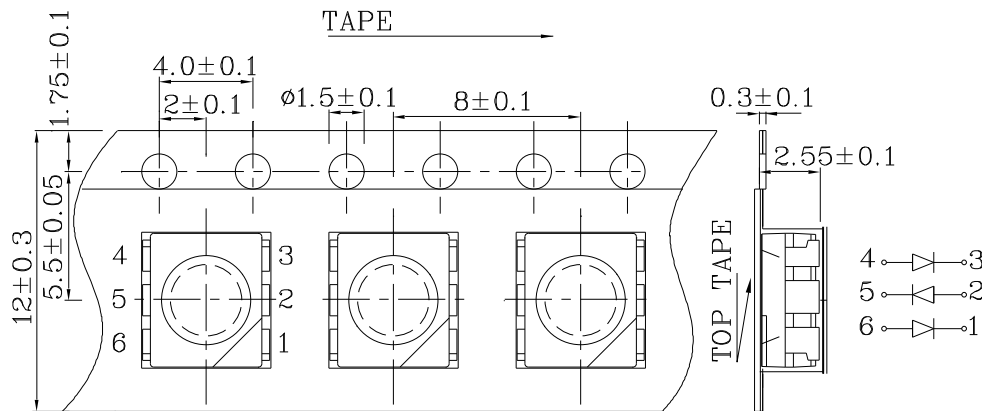
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ±0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

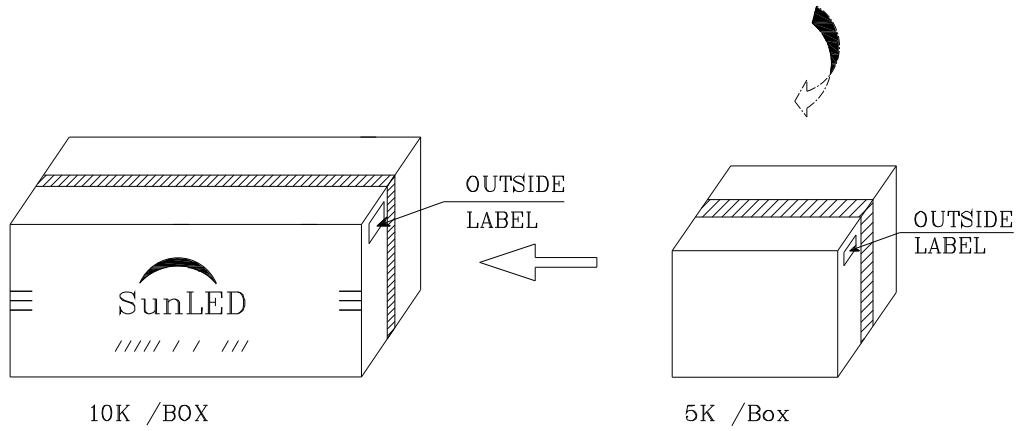
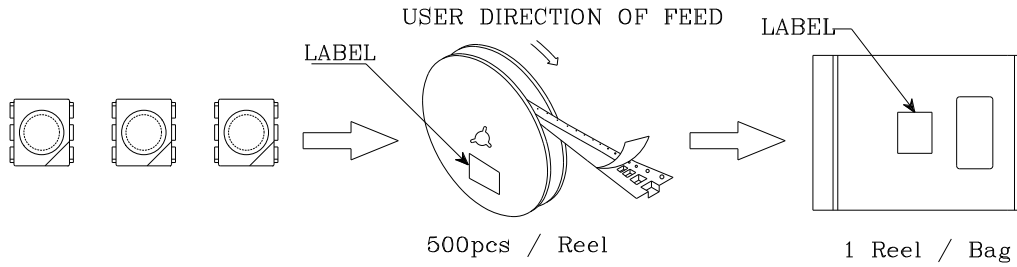

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**


**XZBBGM2CRBGG82W-2**

Q.C. Q C

XX XX. XXXX

PASSED

P/NO : XZxxx82x-2	
QTY : 500pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	