

PRELIMINARY SPEC

Features

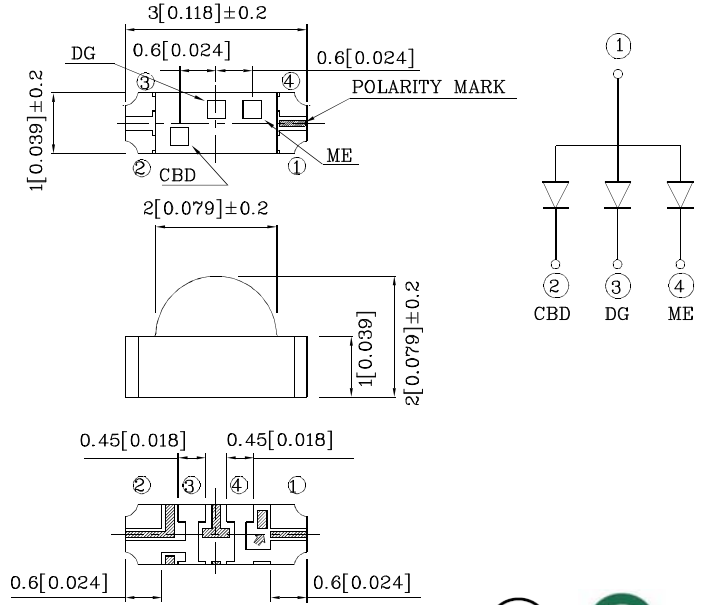
- Low power consumption.
- 3.0mmx1.0mm right angle SMT LED, 2.0mm thickness.
- Can produce any color in visible spectrum, including white light.
- Package: 2000pcs/ reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

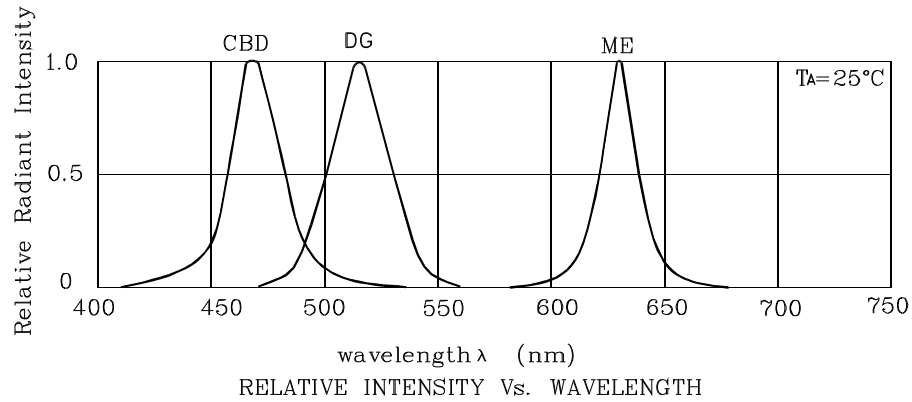
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
3. Specifications are subject to change without notice.



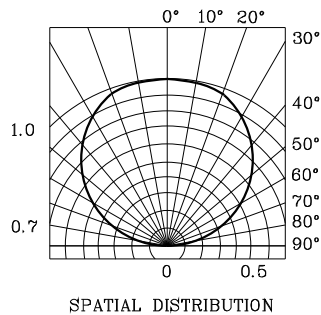
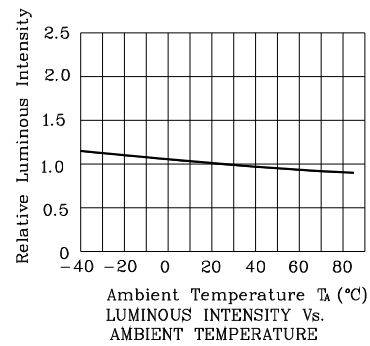
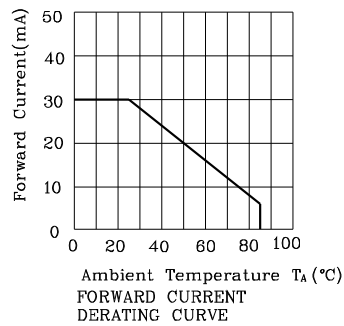
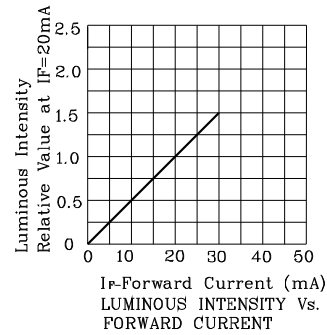
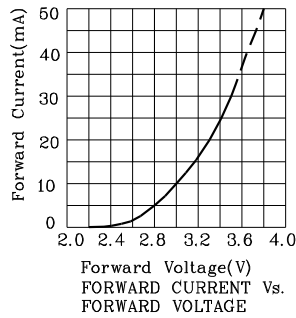
Absolute Maximum Ratings (TA=25°C)		CBD (InGa N)	DG (InGa N)	ME (AlGa InP)	Unit
Reverse Voltage	VR	5	5	5	V
Forward Current	IF	30	25	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	150	195	mA
Power Dissipation	PD	120	102.5	75	mW
Operating Temperature	TA	-40 ~ +85			°C
Storage Temperature	Tstg	-40 ~ +85			

Operating Characteristics (TA=25°C)		CBD (InGa N)	DG (InGa N)	ME (AlGa InP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	3.3	2.0	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	4.1	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	10	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λ P	468	515	630	nm
Wavelength of Domi- nant Emission (Typ.) (IF=20mA)	λ D	470	525	621	nm
Spectral Line Full Width At Half- Maximum (Typ.) (IF=20mA)	Δλ	25	30	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	100	45	25	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZCBDDGME56W-3	Blue	InGaN	Water Clear	50	98	468	120°
	Green	InGaN		110	347	515	
	Red	AlGaInP		110	297	630	

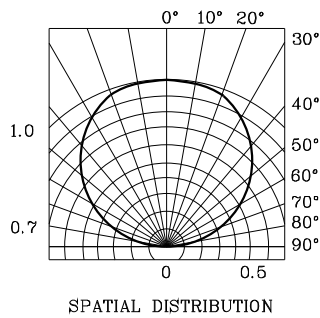
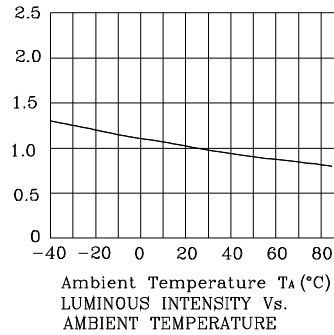
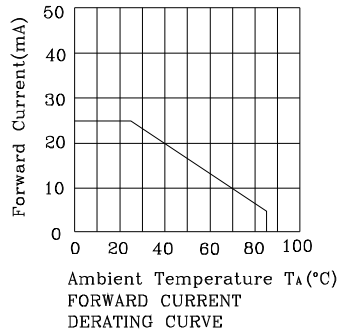
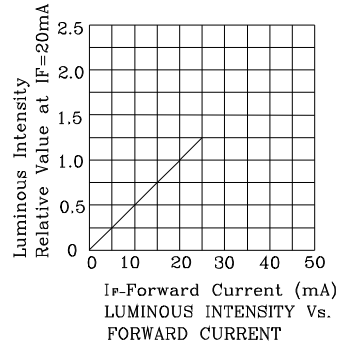
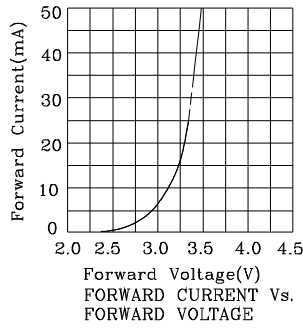


❖ CBD

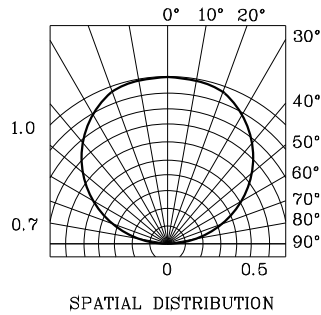
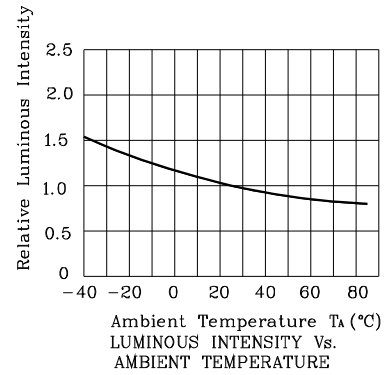
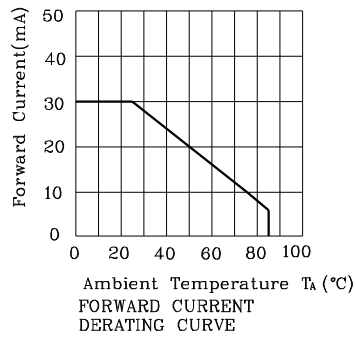
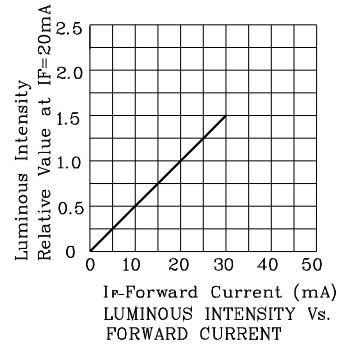
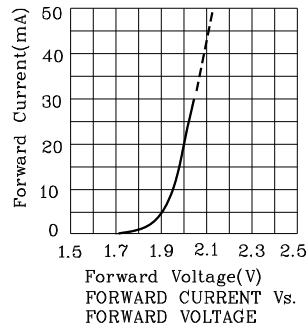




❖ DG



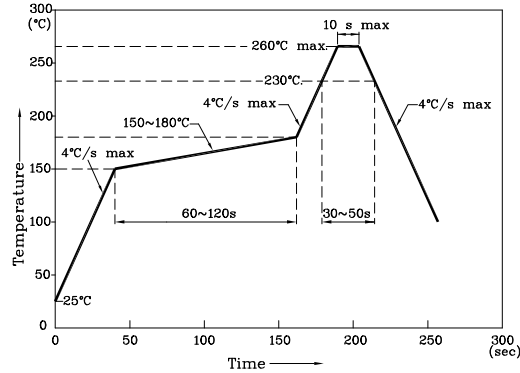
❖ ME





**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.**

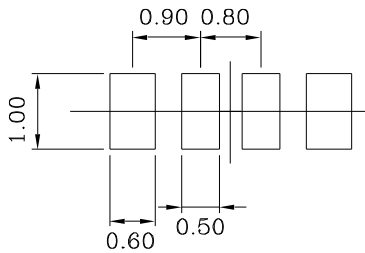
Reflow Soldering Profile For Lead-free SMT Process.



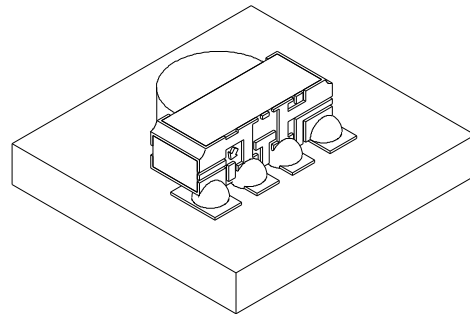
NOTES:

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.

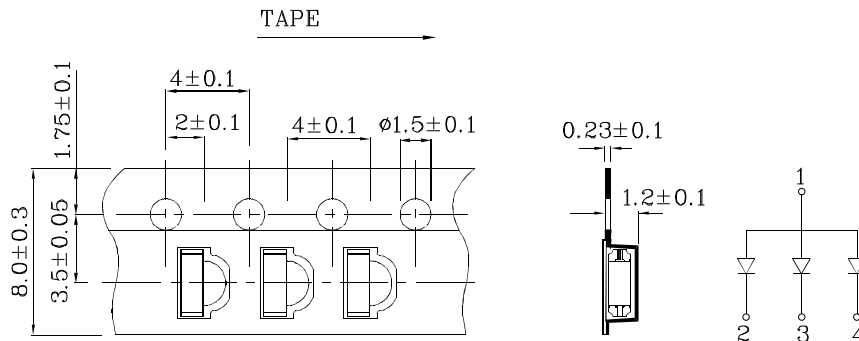
❖ **Recommended Soldering Pattern**
(Units : mm; Tolerance: ± 0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

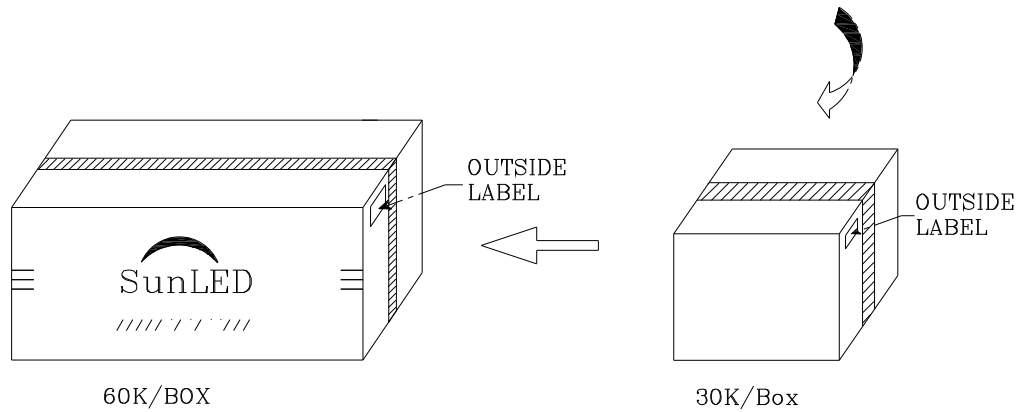
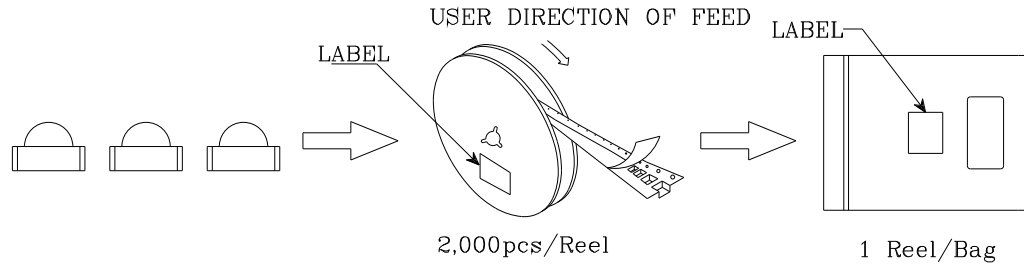

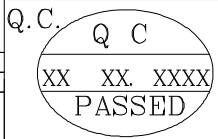
If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:


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

XZCBDDGME56W-3

P/NO : XZxxx56x-3	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	