

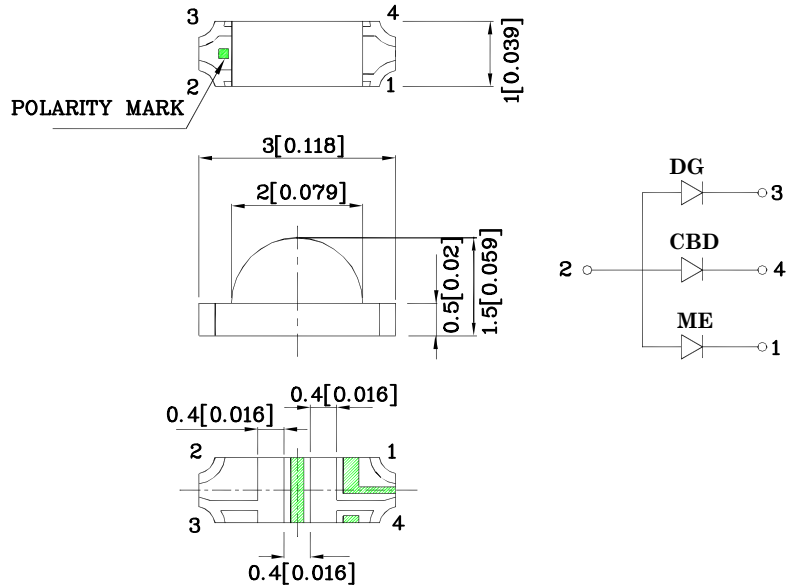
Features

- 3.0 X 1.0 X 1.5mm right angle SMD LED
- Ideal for indication on hand held products
- Low current operation
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



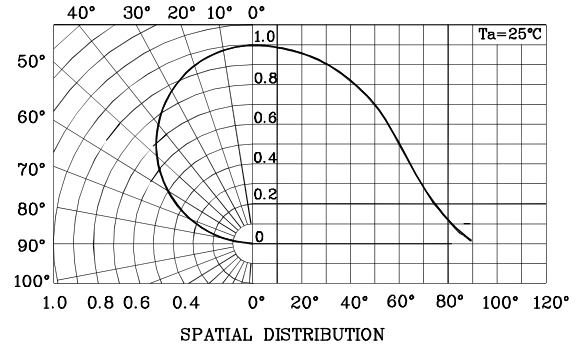
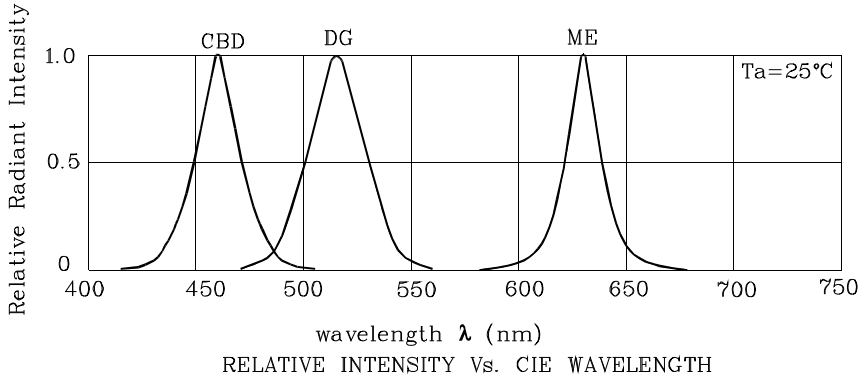
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.
3. Specifications are subject to change without notice.

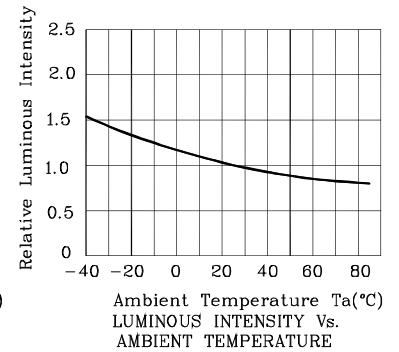
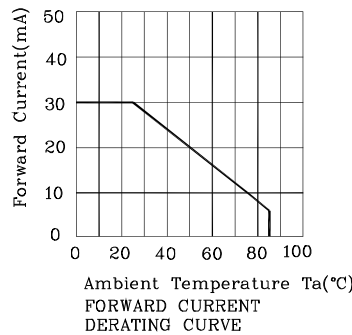
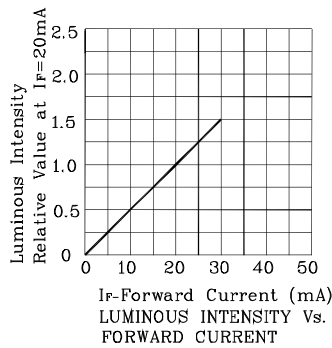
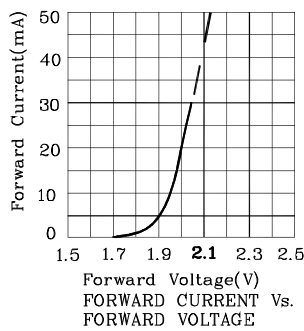
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		ME (AlGa InP)	DG (InGa aN)	CBD (InGa aN)	Unit	Operating Characteristics ($T_A=25^\circ\text{C}$)		ME (AlGaIn P)	DG (InGa N)	CBD (InGa N)	Unit
Reverse Voltage	V_R	5	5	5	V	Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	2	3.3	3.3	V
Forward Current	I_F	30	25	30	mA	Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	2.5	4.1	4.0	V
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	195	150	150	mA	Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	10	50	50	μA
Power Dissipation	P_D	75	102.5	120	mW	Wavelength of Peak Emission CIE127-2007*(Typ.) ($I_F=20\text{mA}$)	λ_P	632*	515*	460*	nm
Electrostatic Discharge Threshold (HBM)	-	-	450	250	V	Wavelength of Dominant Emission CIE127-2007*(Typ.) ($I_F=20\text{mA}$)	λ_D	624*	525*	465*	nm
Operating Temperature	T_A	-40 ~ +85			$^\circ\text{C}$	Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$)	$\Delta\lambda$	20	30	25	nm
Storage Temperature	T_{stg}					Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	25	45	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ($I_F=20\text{mA}$) mcd		Wavelength CIE127-2007* Nm λ_P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMEDG CBD56W	Red	AlGaInP	Water Clear	80*	138*	632*	120°
	Green	InGaN		200*	297*	515*	
	Blue	InGaN		40*	69*	460*	

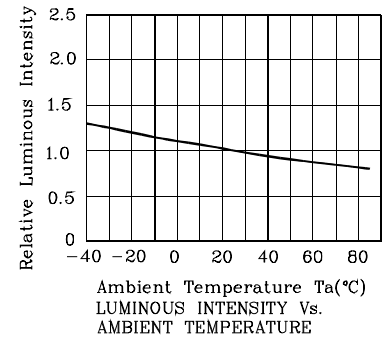
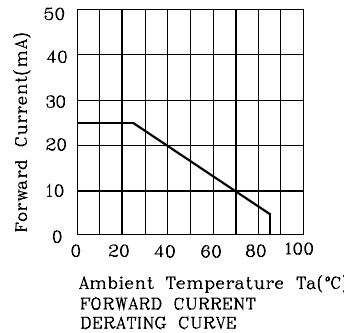
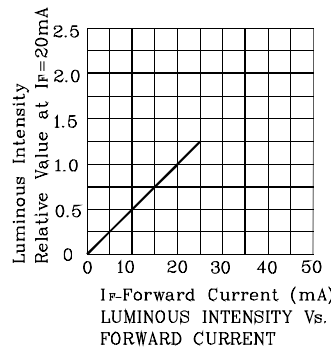
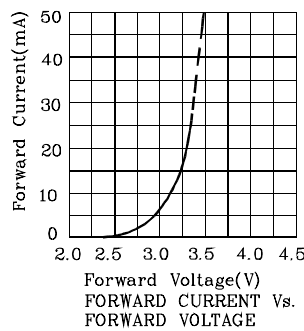
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



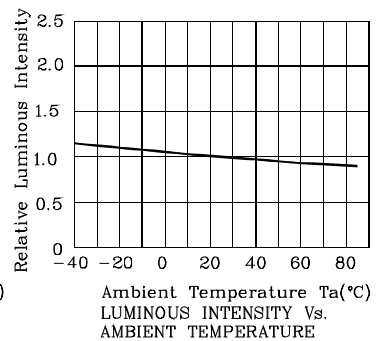
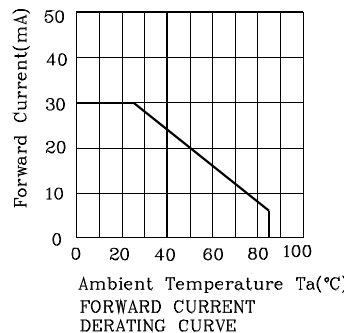
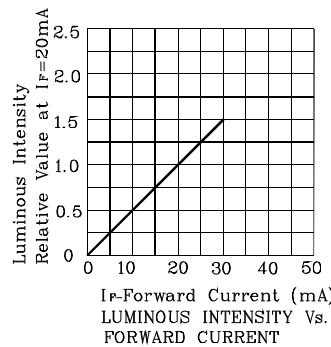
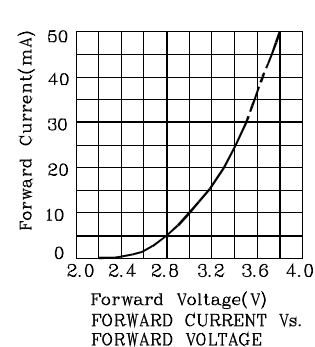
❖ ME



❖ DG



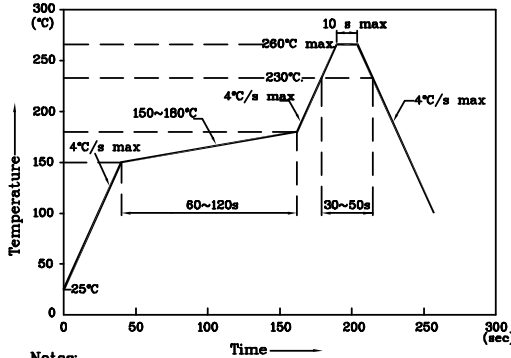
❖ CBD



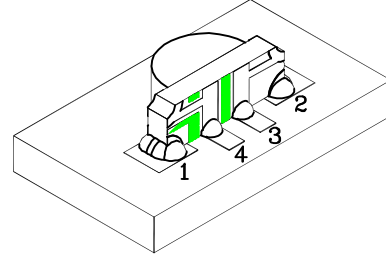
LED is recommended for reflow soldering and soldering profile is shown below.

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

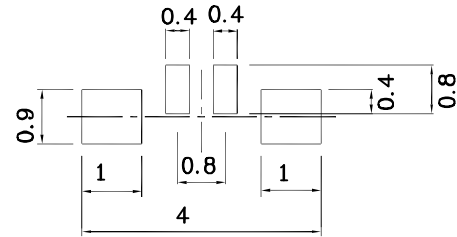
Reflow Soldering Profile for SMD Products (Pb-Free Components)



- 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

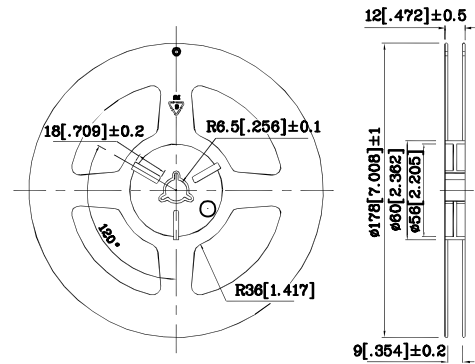
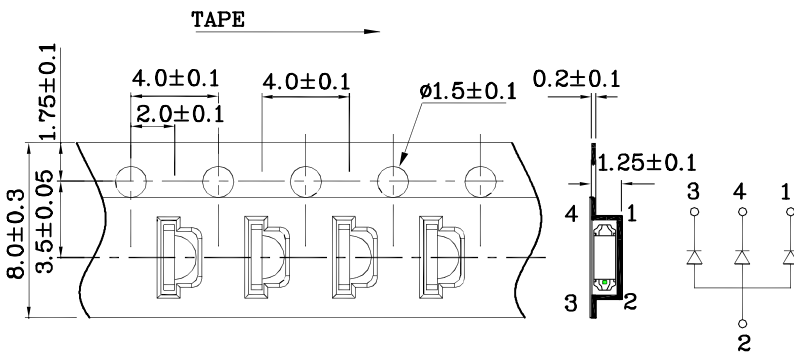


❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)

❖ Reel Dimension



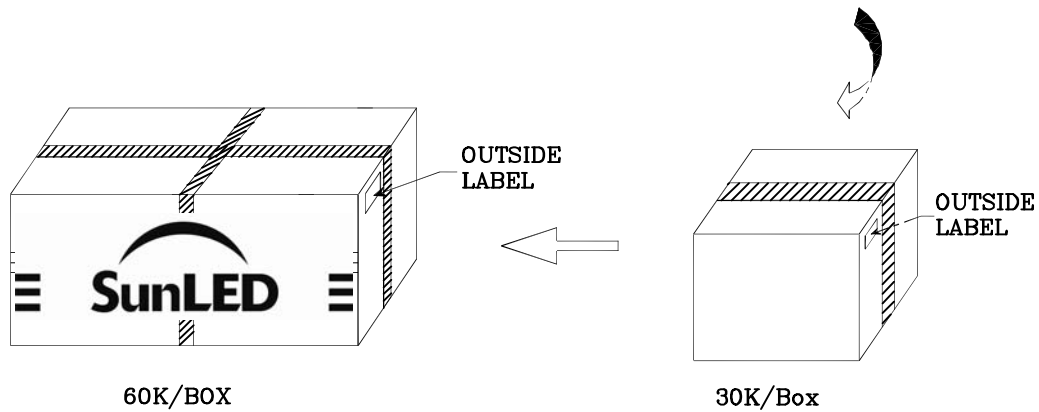
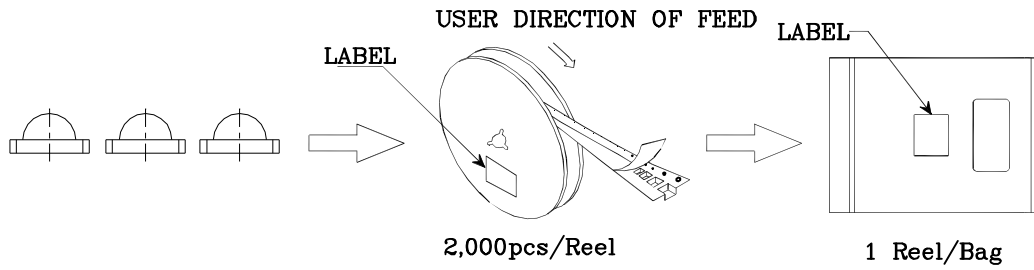
Remarks:


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






Q.C. Q C

XX XX XXXX

PASSED

P/NO : Zxxx56x	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	

TERMS OF USE

1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
2. Contents within this document are subject to improvement and enhancement changes without notice.
3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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