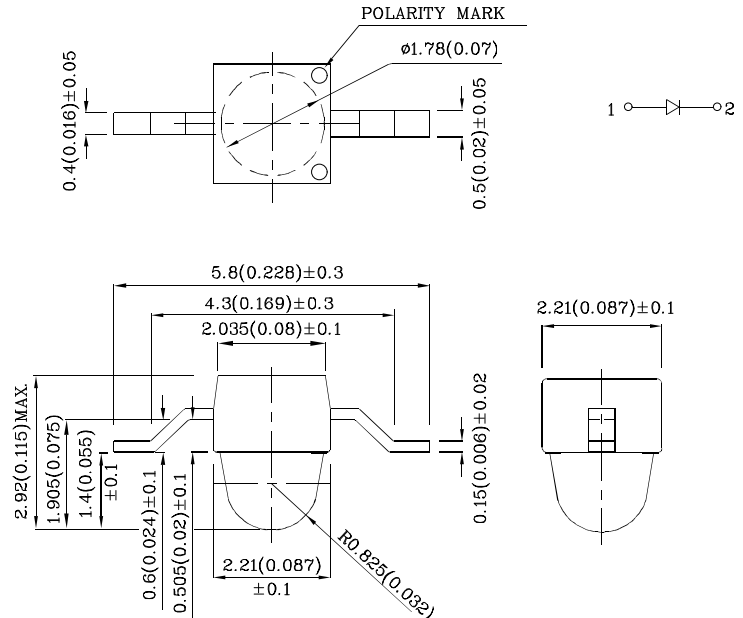# SunLED

www.SunLEDusa.com

Features

● Ideal for indication light on hand held products

● Long life and robust package

● Variety of lens types and color choices available

● Package :1000pcs / reel

● Moisture sensitivity level : level 3
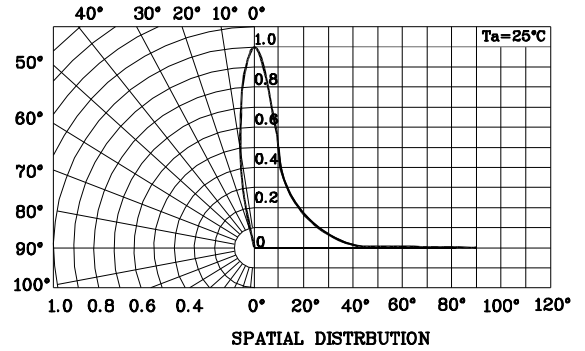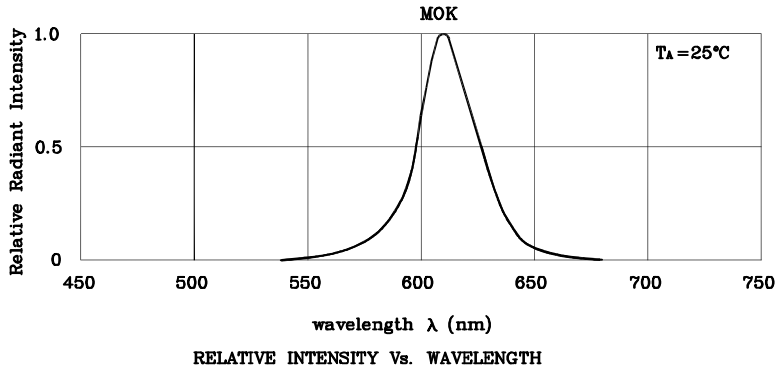
● RoHS compliant

Package Schematics

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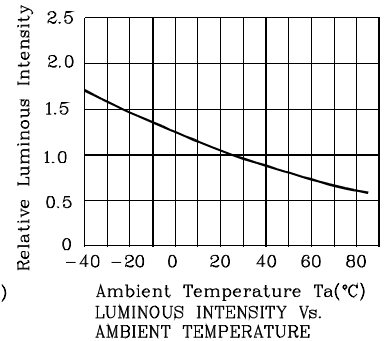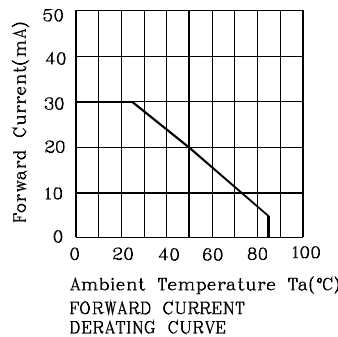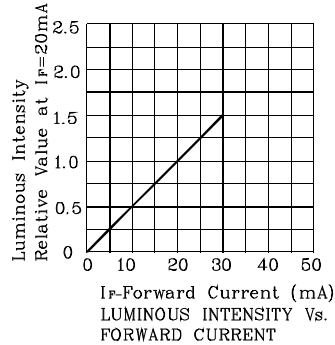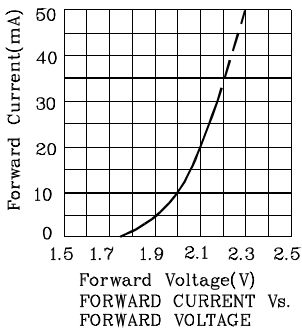3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T$_A$=25°C)		MOK (AlGaInP)	Unit
Reverse Voltage	V$_R$	5	V
Forward Current	I$_F$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i$_{FS}$	195	mA
Power Dissipation	P$_D$	75	mW
Operating Temperature	T$_A$	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

Operating Characteristics (T$_A$=25°C)		MOK (AlGaInP)	Unit
Forward Voltage (Typ.) (I$_F$=20mA)	V$_F$	2.1	V
Forward Voltage (Max.) (I$_F$=20mA)	V$_F$	2.5	V
Reverse Current (Max.) (V$_R$=5V)	I$_R$	10	uA
Wavelength of Peak Emission (Typ.) (I$_F$=20mA)	λP	610	nm
Wavelength of Dominant Emission (Typ.) (I$_F$=20mA)	λD	601	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I$_F$=20mA)	△λ	29	nm
Capacitance (Typ.) (V$_F$=0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I$_F$=20mA) mcd		Wavelength nm λP	Viewing Angle 2θ 1/2
				min.	typ.		
XZMOK64W-9	Orange	AlGaInP	Water Clear	1800	2690	610	20°

Jan 25,2011

XDSA6490   V4   Layout: Maggie L.

MOK

$T_A = 25°C$

Relative Radiant Intensity

wavelength λ (nm)

RELATIVE INTENSITY Vs. WAVELENGTH

Ta=25℃

SPATIAL DISTRBUTION

❖ **MOK**

Forward Current(mA)

Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE

Luminous Intensity Relative Value at $I_F = 20mA$

I_F-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT

Forward Current(mA)

Ambient Temperature Ta(℃)
FORWARD CURRENT
DERATING CURVE

Relative Luminous Intensity

Ambient Temperature Ta(℃)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

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

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

300
(℃)
250
200
150
100
50
0

Temperature

10 s max
260℃ max
230℃
4℃/s max
150~180℃
4℃/s max
4℃/s max
25℃
60~120s
30~50s

0   50   100   150   200   250   300
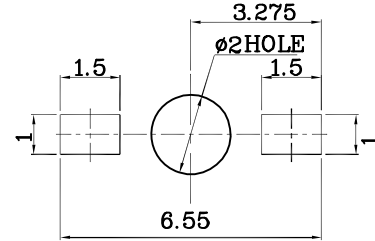(sec)
Time

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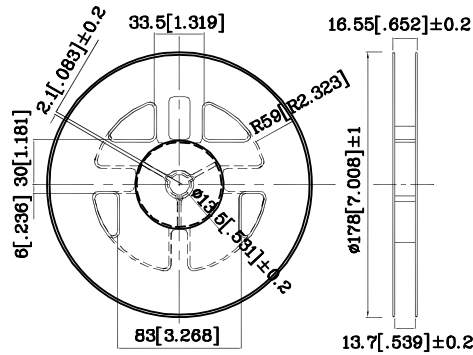   high temperatures conditions

❖ **The device has a single mounting surface. The device must be mounted according to the specifications.**
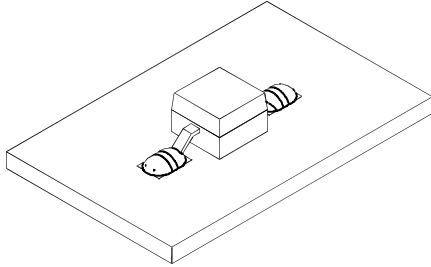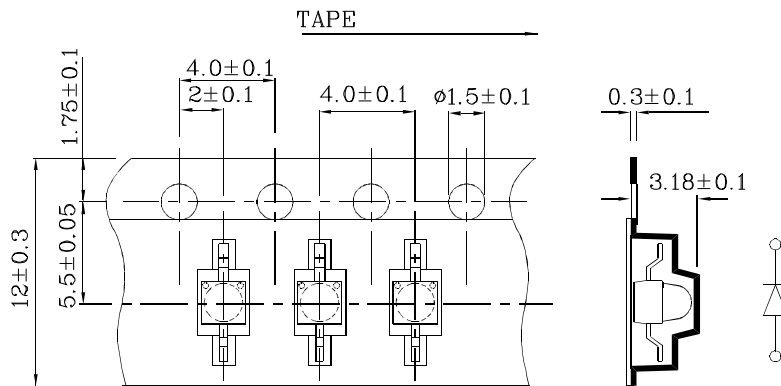
❖ **Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)**
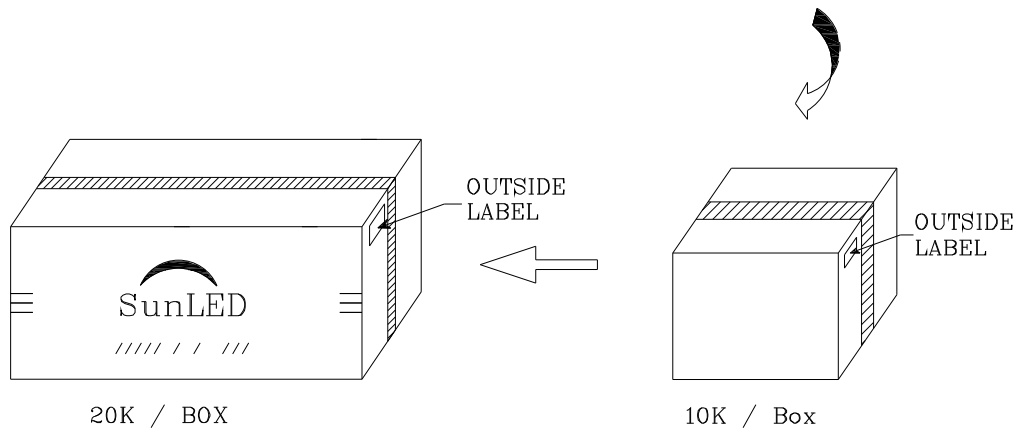

❖ **Reel Dimension**

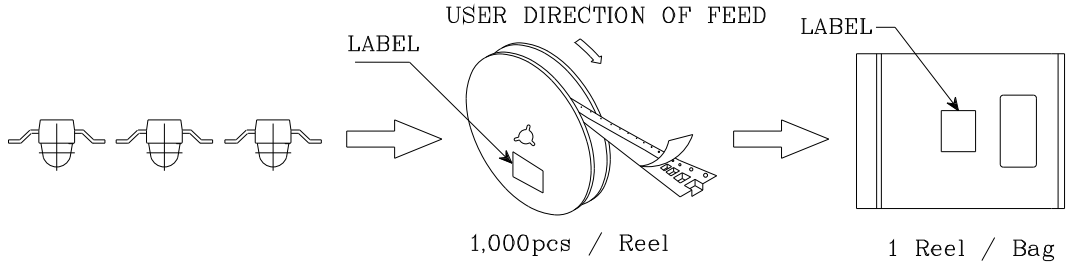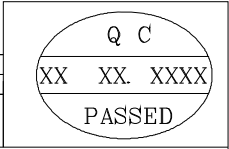

❖ **Tape Specification (Units : mm)**

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.

Jan 25,2011   XDSA6490   V4   Layout: Maggie L.

PACKING & LABEL SPECIFICATIONS

USER DIRECTION OF FEED

LABEL

LABEL

1,000pcs / Reel

1 Reel / Bag

OUTSIDE LABEL

OUTSIDE LABEL

SunLED

20K / BOX

10K / Box

Q C

XX XX. XXXX

PASSED

P/NO : XZxx64x-9

QTY : 1,000 pcs   CODE: XXX

S/N : XX

LOT NO:

XXXXXXXXXXXXXXXXXXXX

RoHS Compliant