

Features

- 3.5mm X 3.5mm X 1.15mm SMD LED
- Zener diode provided for ESD Protection
- IR-reflow compatible
- Ideal for accent lighting
- Standard Package: 2,000pcs / Reel
- MSL (Moisture Sensitivity Level): 2a
- RoHS compliant

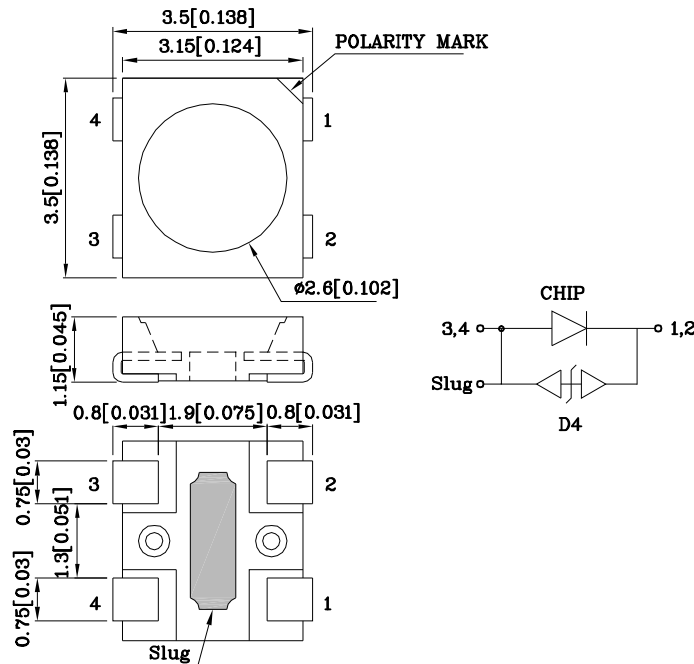
Applications

- Signal and symbol luminaire for orientation.
- Marker lights (e.g. steps, exit ways, etc).
- Decorative and entertainment lighting.
- Commercial and residential lighting.
- Automotive interior lighting.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



Notes:

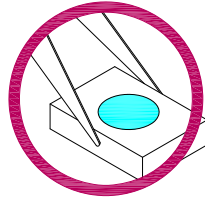
1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Handling Precautions

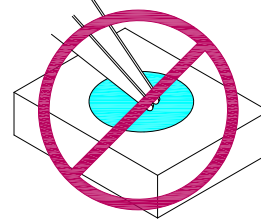
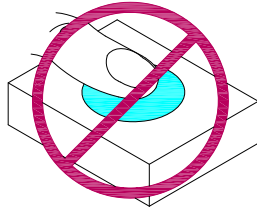
Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

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.

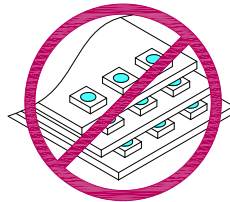
1. Handle the component along the side surfaces by using forceps or appropriate tools.



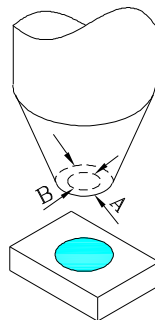
2. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.



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



- 4.1. The inner diameter of the SMD pickup nozzle should not exceed the size of the LED to prevent air leaks.
- 4.2. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.
- 4.3. The dimensions of the component must be accurately programmed in the pick-and-place machine to insure precise pickup and avoid damage during production.



5. As silicone encapsulation is permeable to gases, some corrosive substances such as H₂S might corrode silver plating of leadframe. Special care should be taken if an LED with silicone encapsulation is to be used near such substances.

Selection Guide

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =150mA)[2] cd		Luminous Flux CIE127-2007* (I _F =150mA)[2] lm		Viewing Angle 2 θ 1/2 [1]
				min.	typ.	min.	typ.	
XZMYLA92S-4	Yellow	AlGaInP	Water Clear	1.6*	2.69*	10*	13.7*	120°

Notes:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
 2. Luminous intensity / luminous flux: +/-15%.
 3. LEDs are binned according to their luminous flux.
- * Luminous intensity / luminous flux value is in accordance with CIE127-2007 standards.

Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	495	mW
Junction Temperature [1]	T _J	110	°C
Operating Temperature	T _{op}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	°C
Reverse Voltage	V _R	5	V
DC Forward Current [1]	I _F	150	mA
Peak Forward Current [2]	I _{FM}	270	mA
Thermal Resistance [1] (Junction/ambient)	R _{th j-a}	210	°C/W
Thermal Resistance [1] (Junction/solder point)	R _{th j-s}	70	°C/W
Electrostatic Discharge Threshold (HBM)		8000	V

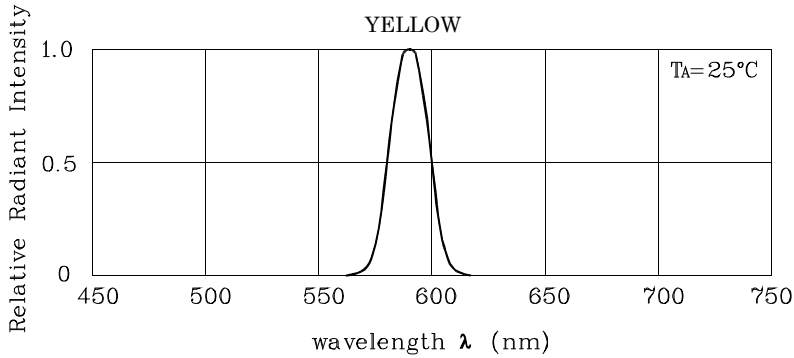
- Notes:
1. Results from mounting on PC board FR4 (pad size ≥ 70mm²), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
 2. 1/10 Duty Cycle, 0.1ms Pulse Width.

Electrical / Optical Characteristics at TA = 25°C

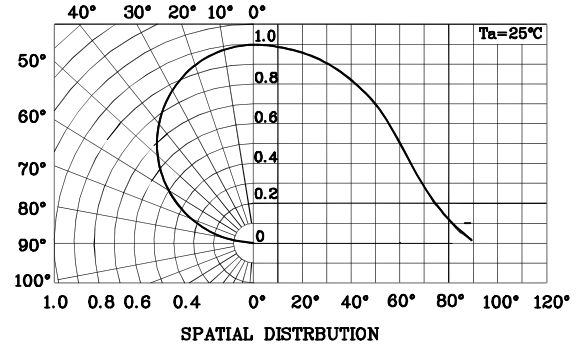
Parameter	Symbol	Value	Unit
Wavelength at peak emission CIE127-2007* I _F =150mA [Typ.]	λ _{peak}	590*	nm
Dominant Wavelength CIE127-2007* I _F =150mA [Typ.]	λ _{dom} [1]	590*	nm
Spectral Line Half-width I _F =150mA [Typ.]	Δλ	20	nm
Forward Voltage I _F =150mA [Min.]	V _F [2]	2.2	V
Forward Voltage I _F =150mA [Typ.]		2.7	
Forward Voltage I _F =150mA [Max.]		3.3	
Allowable Reverse Current [Max.]	I _R	85	mA
Temperature coefficient of λ _{peak} I _F =150mA, -10°C ≤ T ≤ 100°C [Typ.]	TCλ _{peak}	0.13	nm/°C
Temperature coefficient of λ _{dom} I _F =150mA, -10°C ≤ T ≤ 100°C [Typ.]	TCλ _{dom}	0.10	nm/°C
Temperature coefficient of V _F I _F =150mA, -10°C ≤ T ≤ 100°C [Typ.]	TCV	-1.9	mV/°C

Notes:

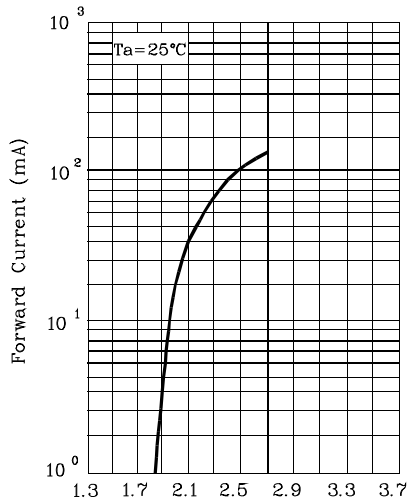
1. Wavelength: +/-1nm.
 2. Forward Voltage: +/-0.1V.
- * Wavelength is in accordance with CIE127-2007 standards.
Nov 15, 2013



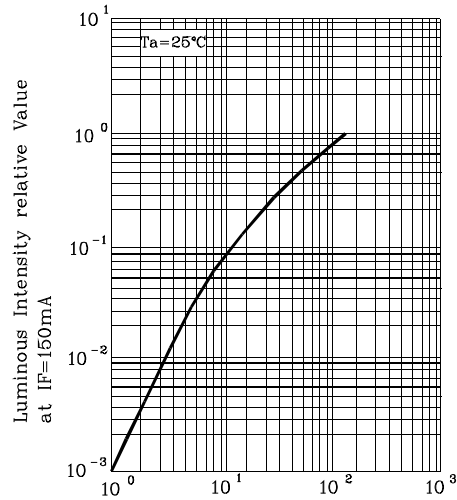
RELATIVE INTENSITY Vs. CIE WAVELENGTH



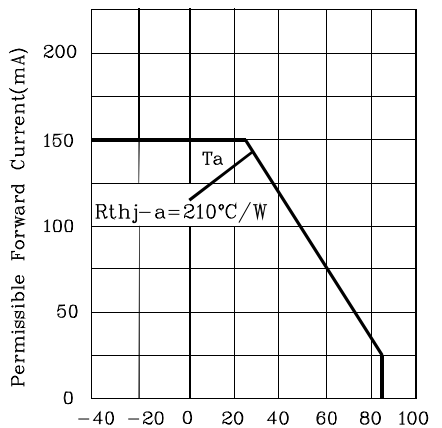
❖ MYLA



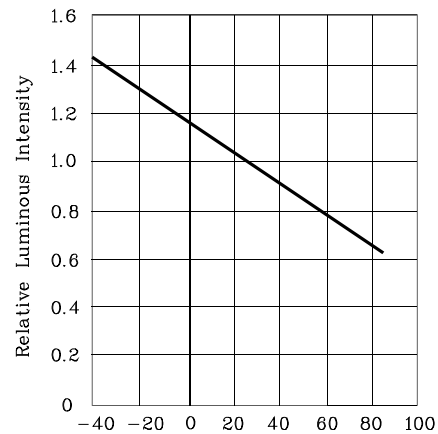
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

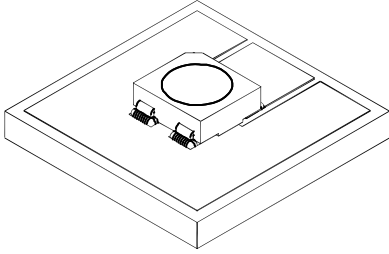


FORWARD CURRENT DERATING CURVE

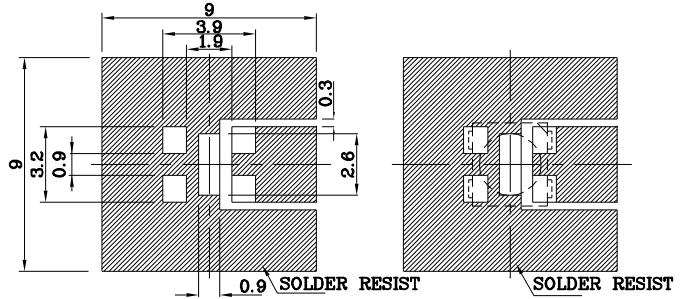


LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

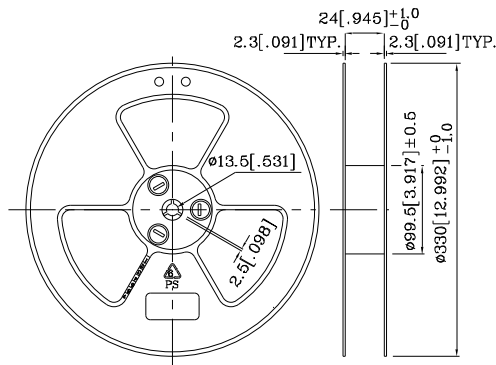
❖ The device has a single mounting surface.
The device must be mounted according to the specifications.



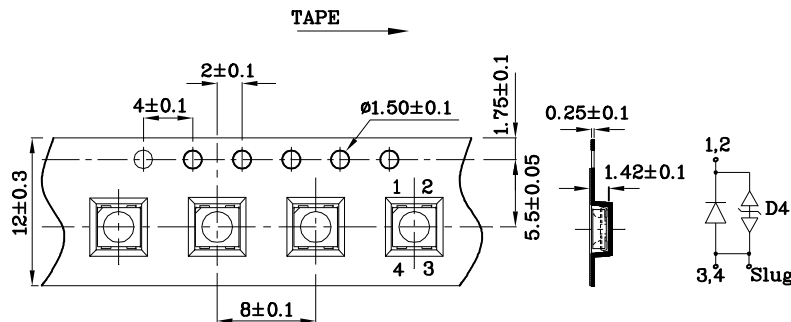
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



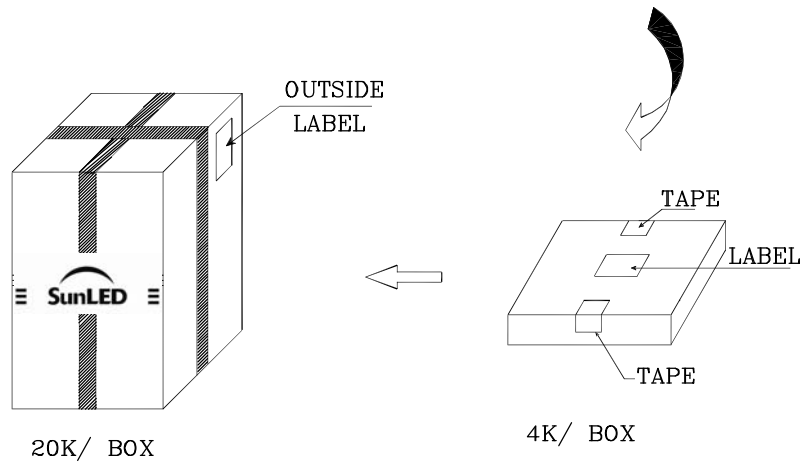
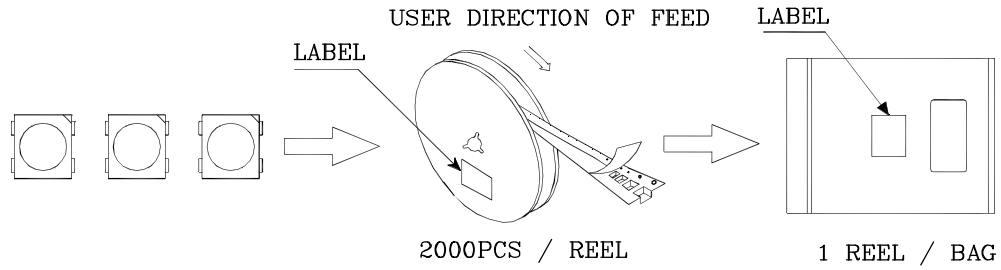
❖ Reel Dimension


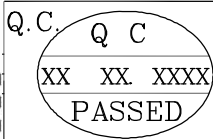



❖ Tape Specification (Units : mm)



PACKING & LABEL SPECIFICATIONS



		
P/NO : XZxxx92x		
QTY : 2000 pcs	CODE: XXX	
S/N : XX		
LOT NO :		
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX		
RoHS Compliant		

TERMS OF USE

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