

SunLED www.SunLEDusa.com

Surface Mount Display

#### **Features**

- 0.3 inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 550pcs/ ReelMSL (Moisture Sensitivity Level): 2a
- RoHS compliant



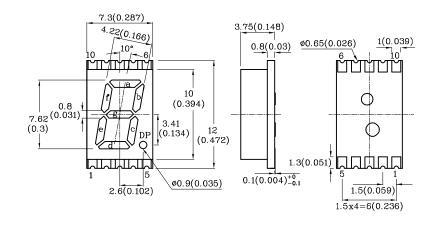




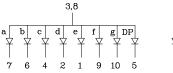
## ATTENTION

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

## **Package Schematics**









- 1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 2. Specifications are subject to change without notice.
- 3. The gap between the reflector and PCB shall not exceed 0.25mm.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	Yellow (AlGaInP)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	175	mA	
Power Dissipation	PD	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics $(T_A=25^{\circ}C)$		Yellow (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.95	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.35	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	μА
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	590*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd		CIE127-2007*		ng al CIE127-2007* CII		Wavelength CIE127-2007* nm λP	Description
			min.	typ.						
XZFMYK07A	Yellow	AlGaInP	21000	35990	590*	Common Anode, Rt.				

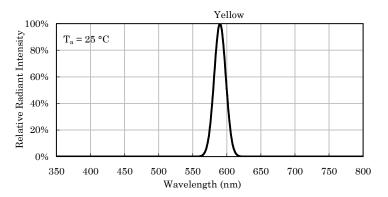
5600\*

12990\*

Hand Decimal.

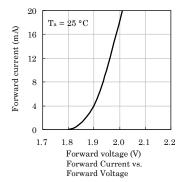
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Dec 09.2020

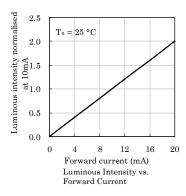


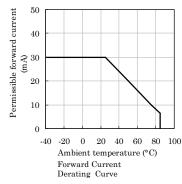


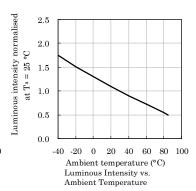
Relative Intensity Vs. CIE Wavelength

## **❖** Yellow



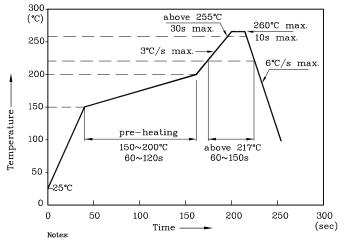






# LED is recommended for reflow soldering and soldering profile is shown below.

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

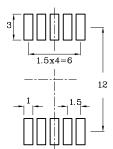


- 1. All temperatures refer to the center of the package, measured on the package body surface facing up during reflow
- 2. Do not apply any stress to the LED during high temperature conditions.

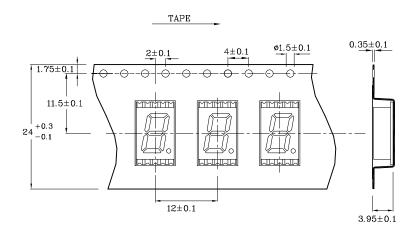
  3. Maximum number of soldering passes: 2



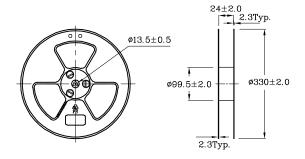
## **♦** Recommended Soldering Pattern (Units: mm; Tolerance: ±0.15)



# ❖ Tape Specification (Units:mm)



# \* Reel Dimension (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:

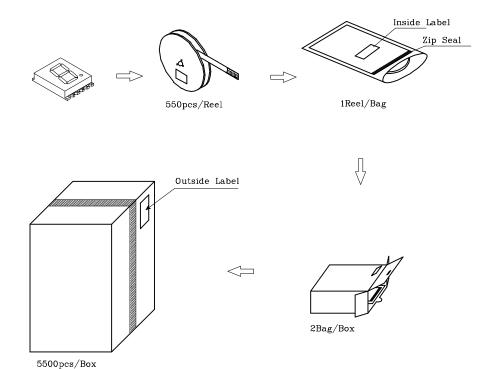
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage:  $\pm$ -0.1V

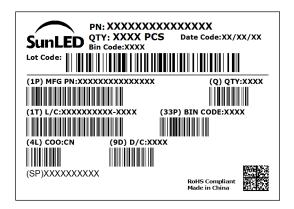
Note: Accuracy may depend on the sorting parameters.





## PACKING & LABEL SPECIFICATIONS





### TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
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- 7. Additional technical notes are available at <a href="https://www.SunLEDusa.com/TechnicalNotes.asp">https://www.SunLEDusa.com/TechnicalNotes.asp</a>