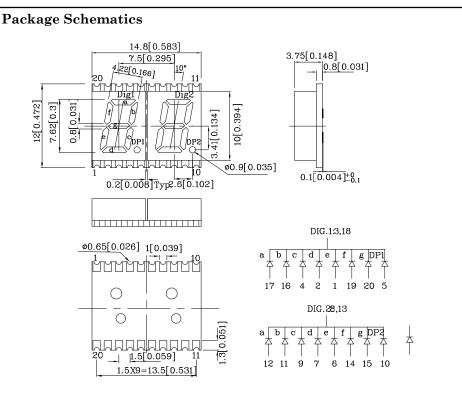


## SURFACE MOUNT DISPLAY

### Features

- $\bullet~0.3$  inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 300pcs/ Reel
- MSL (Moisture Sensitivity Level): 2a
- RoHS Compliant







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  $0.25 \mathrm{mm}.$ 

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Red (GaAsP/GaP)	Unit
Reverse Voltage	$V_{\mathrm{R}}$	5	V
Forward Current	$I_{\rm F}$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	160	mA
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	mW
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C
Storage Temperature	Tstg	-40 ~ +85	чU

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)

Part

Number

XZFUR07C2

Operating Characteristics (T <sub>A</sub> =25°C)		Red (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	1.9	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	2.3	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	μΑ
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λP	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$ riangle\lambda$	45	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	pF
Luminous Intensity Wavelength CIE127-2007* CIE127-2007 <sup>3</sup> (I <sub>F</sub> =10mA) ucd nm λP	*	Description	
min. typ.			
$\begin{array}{cccc} 1400 & 2490 \\ 360^{*} & 690^{*} \end{array} \qquad 627^{*}$		Common Cathode Rt.Hand Decimal	·

\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Feb 21,2019

Red

Emitting

Color

Emitting

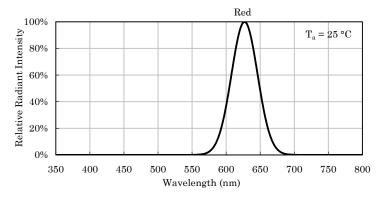
Material

GaAsP/GaP

XDSA9182 V10-X Layout: Maggie L.

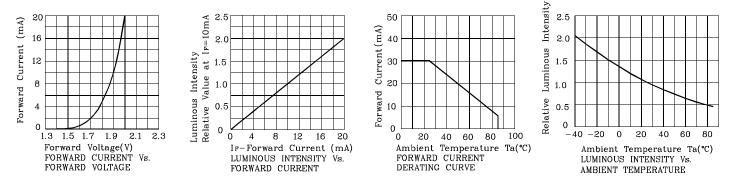


## SURFACE MOUNT DISPLAY



Relative Intensity Vs. CIE Wavelength

### Red



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

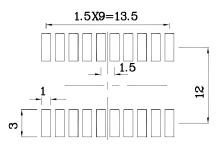
Reflow Soldering Profile for SMD Products (Pb-Free Components) 300 above 255°C (°C) 260°C max. 30s max. 10s max. 250 3°C/s max 6°C/s max 200 150 Temperature pre-heating 100 150~200°C above 217°C 60~120s 60~150s 50 25°C 0 50 100 200 250 300 0 150 Time (sec) Notes: 1. All temperatures refer to the center of the package,

measured on the package body surface facing up during reflow.

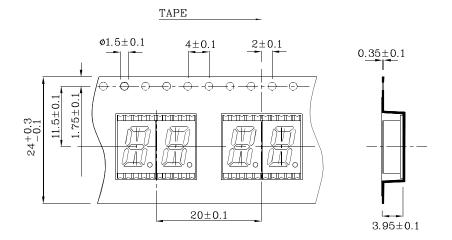
Do not apply any stress to the LED during high temperature conditions.
Maximum number of soldering passes: 2



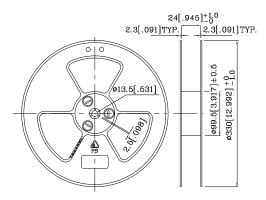
# **Recommended Soldering Pattern (Units : mm; Tolerance: ±0.15)**



## 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

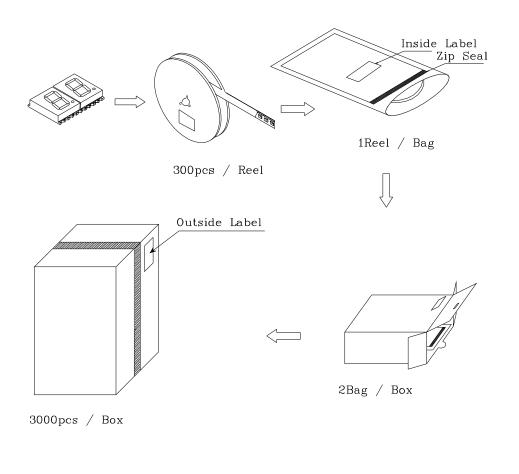
2. Luminous intensity / luminous flux: +/-15\%

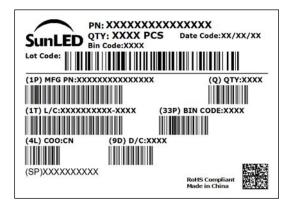
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



**PACKING & LABEL SPECIFICATIONS** 





#### 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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- 6.When any special process such as potting is required for LED assembly, please consult with SunLED representative before proceeding.
- $7. \ Additional \ technical \ notes \ are \ available \ at \ \underline{https://www.SunLEDusa.com/TechnicalNotes.asp}$