

Part Number: XZFDGK10A

SURFACE MOUNT DISPLAY

Features

- 0.4 inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 400pcs/ ReelMSL (Moisture Sensitivity Level): 2a
- RoHS compliant





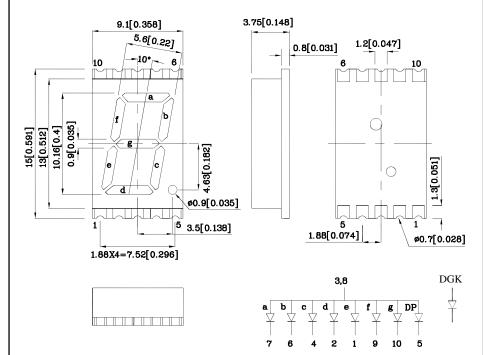


ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE

SENSITIVE

DEVICES

Package Schematics



Notes:

- 1. All dimensions are in millimeters (inches), Tolerance is ±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 _A =25°C)		DGK (InGaN)	Unit	
Reverse Voltage		5	V	
Forward Current	I_{F}	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	150	mA	
Power Dissipation	P_{D}	102.5	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)		450	V	

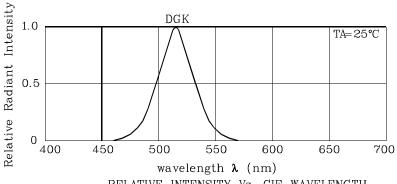
Operating Characteristics (T _A =25°C)	DGK (InGaN)	Unit	
Forward Voltage (Typ.) (I _F =10mA)	V_{F}	3	V
Forward Voltage (Max.) (I _F =10mA)	V_{F}	4.1	V
Reverse Current (Max.) (V _R =5V)	I_R	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λΡ	515*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λD	λD 525*	
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	$\triangle \lambda$	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	$\begin{array}{c} Luminous\ Intensity \\ CIE127\text{-}2007* \\ (I_F\text{=}10\text{mA}) \\ ucd \end{array}$	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XZFDGK10A	Green	InGaN	88000 189990 31000* 64990*	515*	Common Anode, Rt.Hand Decimal.

^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Jan 08.2014

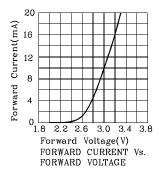


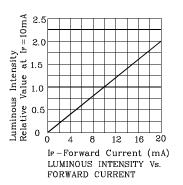


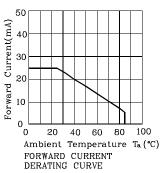


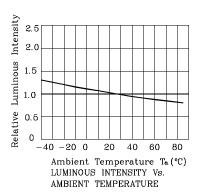
RELATIVE INTENSITY Vs. CIE WAVELENGTH

♦ DGK



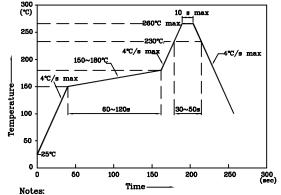






LED is recommended for reflow soldering and soldering profile is shown below.

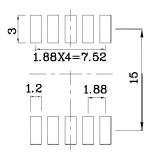
Reflow Soldering Profile for SMD Products (Pb-Free Components)



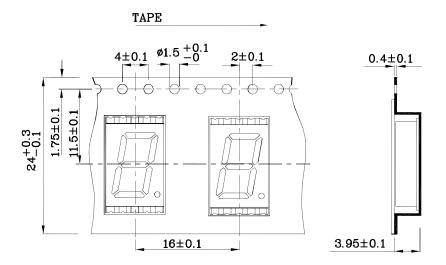
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions

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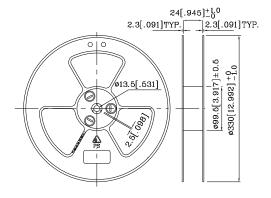
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ±0.15)



❖ 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:

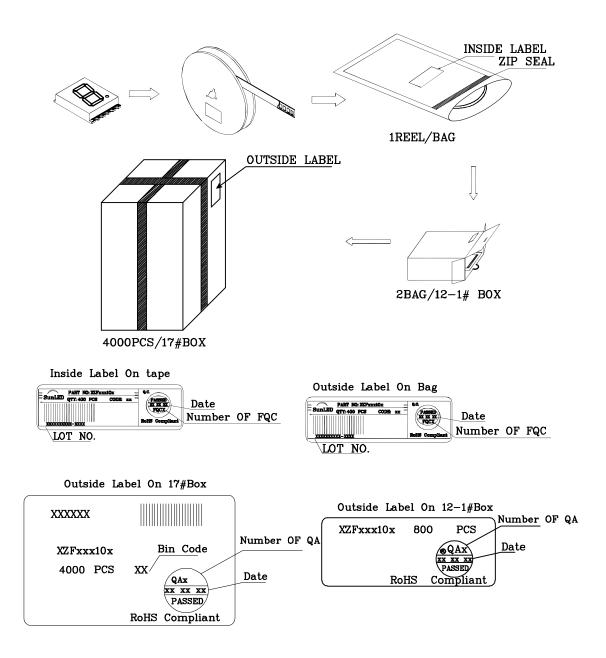
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

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. Additional technical notes are available at http://www.SunLEDusa.com/TechnicalNotes.asp