

# **Excellent Integrated System Limited**

Stocking Distributor

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SunLED XZFDGK14C

For any questions, you can email us directly: <u>sales@integrated-circuit.com</u>





# Part Number: XZFDGK14C

#### SURFACE MOUNT DISPLAY

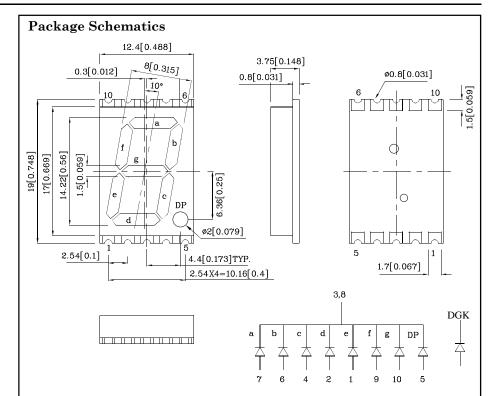
#### **Features**

- 0.56 inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white

segments

- Standard Package: 400pcs/ Reel
- MSL (Moisture Sensitivity Level): 2a
- RoHS compliant





#### Notes:

ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING

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)		DGK (InGaN)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\rm F}$	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	150	mA	
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	102.5	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$		
Electrostatic Discharge Threshold (HBM)		450	v	

Operating Characteristics (T <sub>A</sub> =25°C)	DGK (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	3	V	
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	rd Voltage (Max.) (I <sub>F</sub> =10mA) V <sub>F</sub>		
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λP	515*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	Δλ 35		nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz) C		45	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XZFDGK14C	Green	InGaN	52000 159990 21000* 50990*	515*	Common Cathode, Rt. Hand Decimal.

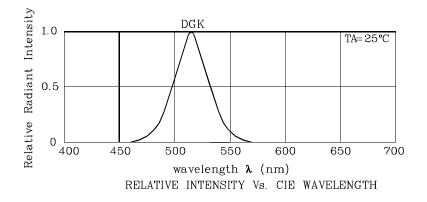
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Jan 10,2014

XDSB7694 V1-X Layout: Maggie L.

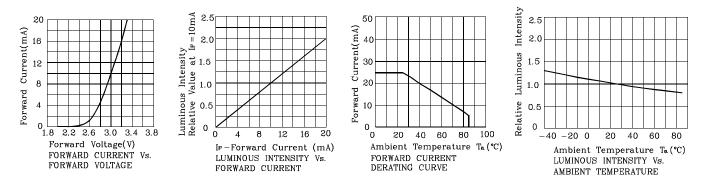


# Part Number: XZFDGK14C

SURFACE MOUNT DISPLAY

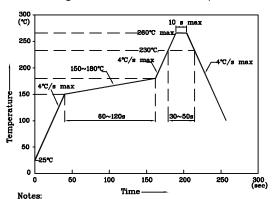


♦ DGK



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

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



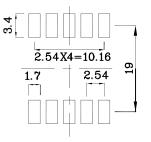
- 1. Maximum soldering temperature should not exceed 260°C 2. Recommended reflow temperature: 145°C 200°C
- Recommended reflow temperature: 145°C-260°C З.
- Do not put stress to the epoxy resin during high temperatures conditions



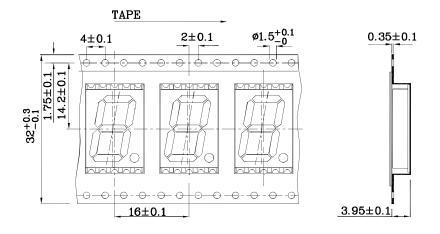
Part Number: XZFDGK14C

SURFACE MOUNT DISPLAY

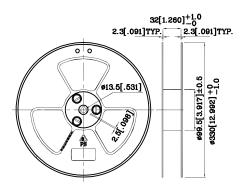
### **\*** Recommended Soldering Pattern (Units : mm; Tolerance: ±0.15)



## 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%

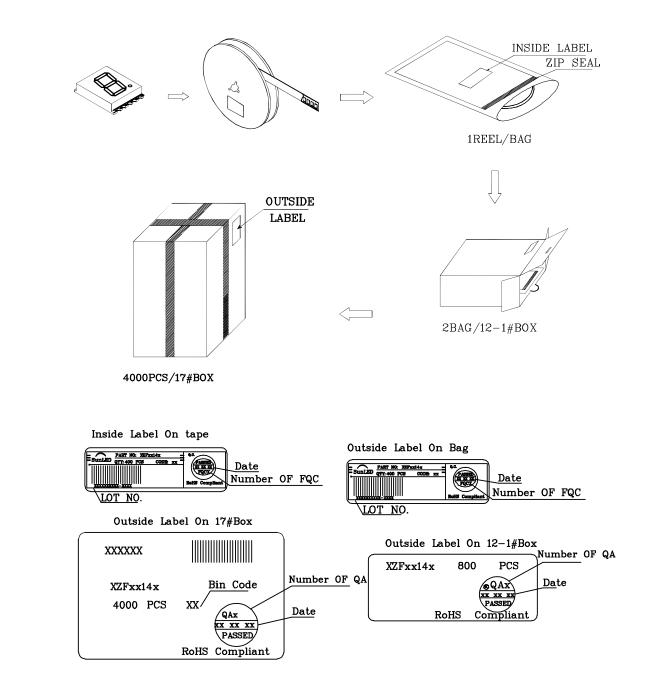
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



SURFACE MOUNT DISPLAY

PACKING & LABEL SPECIFICATIONS



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