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3.2x1.6mm SMD CHIP LED LAMP

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- \bullet MSL (Moisture Sensitivity Level): 3
- RoHS compliant

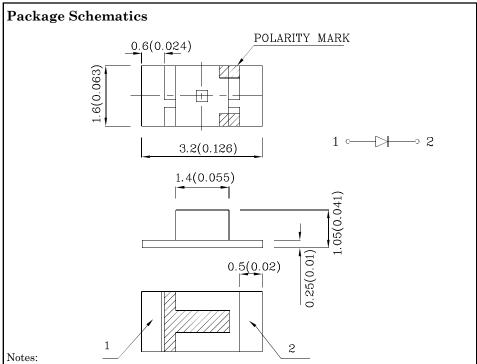






ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE

DEVICES



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)	DGK (InGaN)	Unit		
Reverse Voltage V_R		5	V	
Forward Current	I_{F}	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	150	mA	
Power Dissipation	P_{D}	102.5	mW	
Operating Temperature Ta		-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 =20mA)	V_{F}	3.3	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	4.1	V
Reverse Current (Max.) $(V_R=5V)$	$I_{ m R}$	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λΡ	515*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$\triangle \lambda$	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	45	рF

	Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* λP nm	Viewing Angle 20 1/2
ſ					min.	typ.		
	ZDGK55W-2	Green	InGaN	Water Clear	200*	347*	515*	120°

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

Feb 17,2014





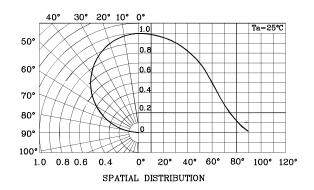
DGK

TA=25°C

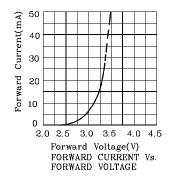
TA=25°C

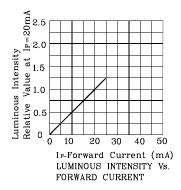
TA=25°C

wavelength λ (nm)

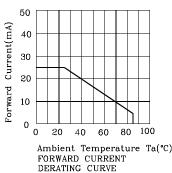


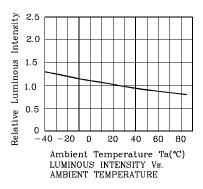
❖ DGK





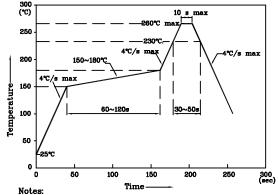
RELATIVE INTENSITY Vs. CIE WAVELENGTH





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

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

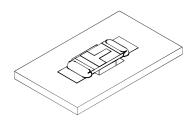


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

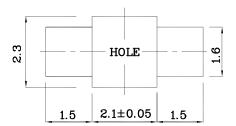


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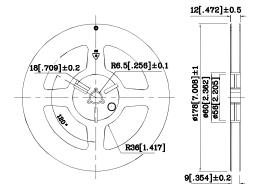
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



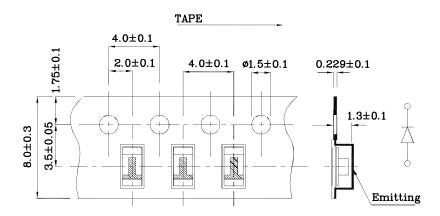
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



* Reel Dimension



❖ Tape Specification (Units:mm)



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:

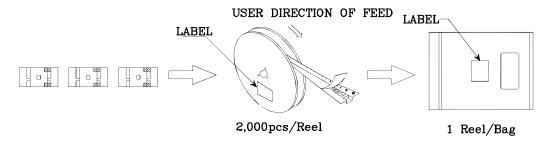
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

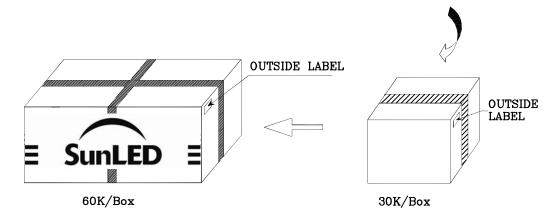
Note: Accuracy may depend on the sorting parameters.

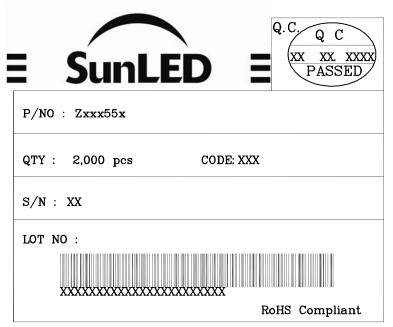




PACKING & LABEL SPECIFICATIONS







TERMS OF USE

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- 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.
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