

## Part Number: ZDGK45WT

3.5x2.8mm PLCC2 SMD LED

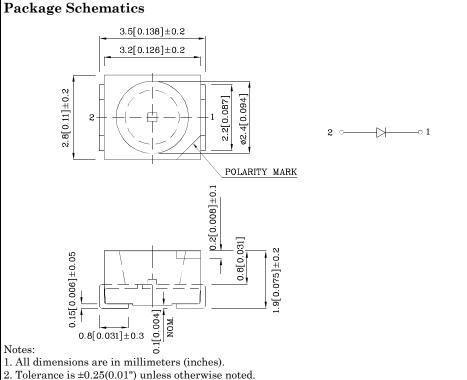
# **Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2000pcs/ Reel
- MSL (Moisture Sensitivity Level): 4
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	DGK (InGaN)	Unit		
Reverse Voltage		5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	PD	123	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	$-40 \sim +85$	-0	
Electrostatic Discharge Threshold (HBM)		450	V	

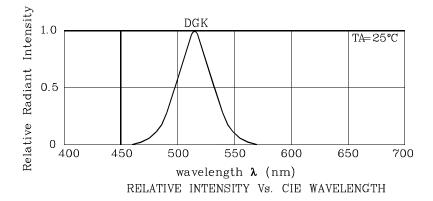
Operating Characteristics (T <sub>A</sub> =25°C)		DGK (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	3.3	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	4.1	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λP	515*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λD	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	$_{\rm pF}$

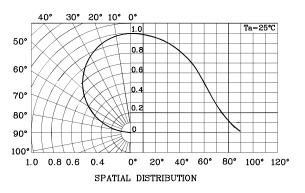
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous CIE127 (I <sub>F</sub> =20 m	7-2007* 0mA)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
ZDGK45WT	Green	InGaN	Water Clear	300*	497*	515*	120°

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

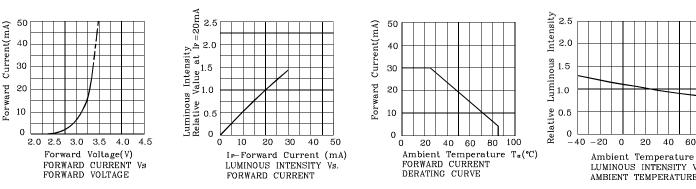
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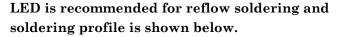


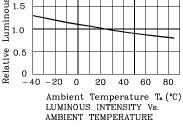




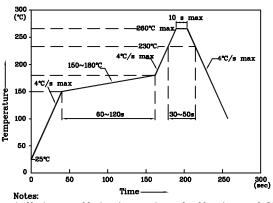
♦ DGK







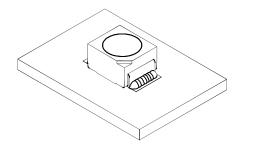
Reflow Soldering Profile for SMD Products (Pb-Free Components)



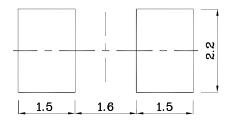
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C Do not put stress to the epoxy resin during З.
- high temperatures conditions



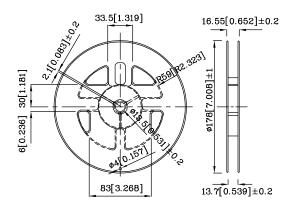
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



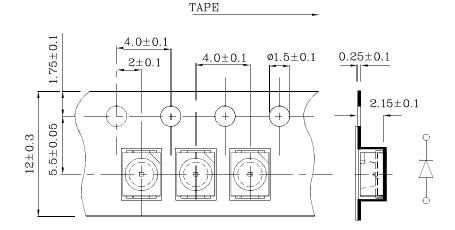
#### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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%

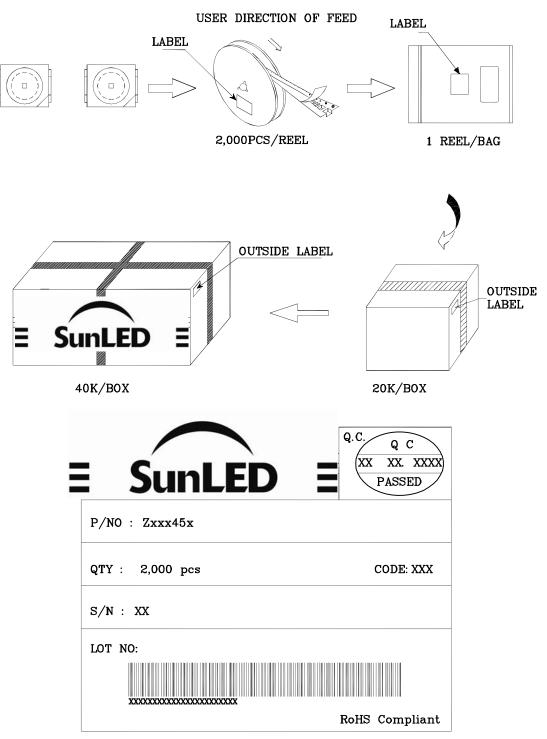
3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.

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## **PACKING & LABEL SPECIFICATIONS**



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