

# Part Number: XLDGK20DLSDLCR

# OVAL SOLID STATE LAMP

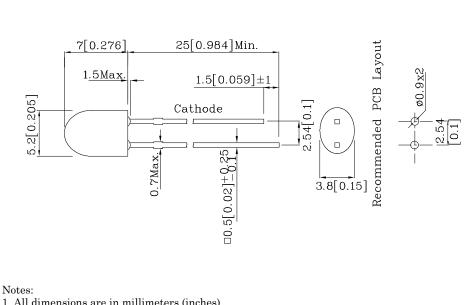
## **Features**

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- RoHS Compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



1. All dimensions are in millimeters (inches).

**Package Schematics** 

- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	Green (InGaN)	Unit			
Reverse Voltage	$V_{\mathrm{R}}$	5	V		
Forward Current	$\mathbf{I}_{\mathbf{F}}$	25	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA		
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	102.5	mW		
Operating Temperature	$T_{\rm A}$	$T_{\rm A}$ -40 ~ +85			
Storage Temperature	Tstg	-40 ~ +85	°C		
Electrostatic Discharge Threshold (HBM)	450	V			
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

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)

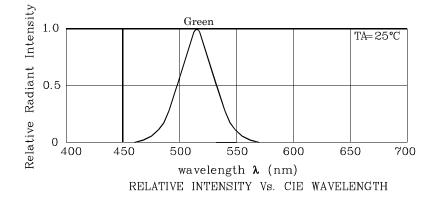
Operating Characteristics (T <sub>A</sub> =25°C)		Green (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	3.3	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	4.1	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA
Wavelength of Peak Emission CIE127-2007* (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	pF

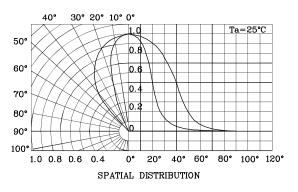
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XLDGK20DLSDLCR	Green	InGaN	Green Semi Diffused	1500*	2590*	515*	80°(H) 40°(V)

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

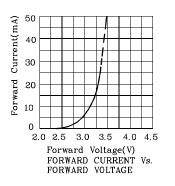
Oct 08,2016

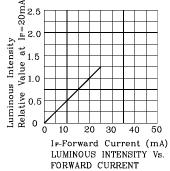


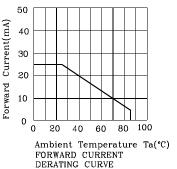


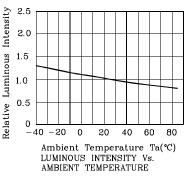


Green



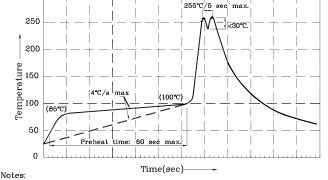






(°C)300

Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



I.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

2.Peak wave soldering temperature between  $245^{\circ}$ C ~  $255^{\circ}$ C for 3 sec (5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above 85°C. 4.Fixtures should not incur stress on the component when mounting and during process.

during soldering process. 5.SAC 305 solder alloy is recommended.

6.No more than one wave soldering pass

#### 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:

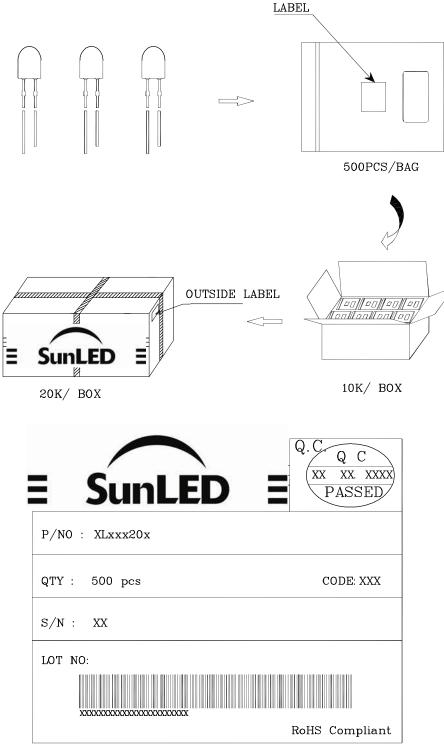
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



OVAL SOLID STATE LAMP





### TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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- 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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