SunLED
www.SunLEDusa.com

Part Number: **XLDG20DLSDLCR**

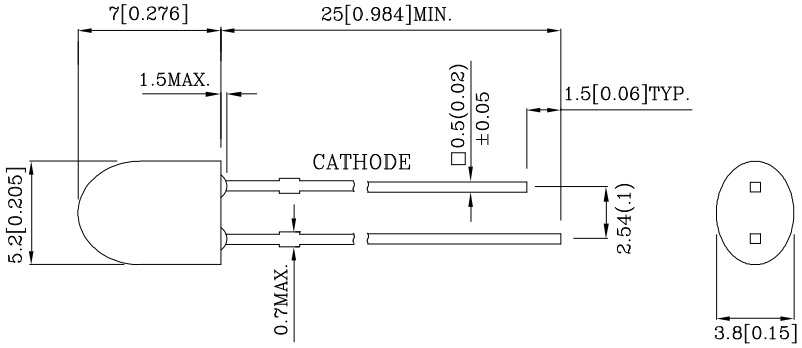
OVAL SOLID STATE LAMP

PRELIMINARY SPEC

Features

- Outstanding material efficiency.
- Reliable and rugged.
- RoHS compliant.

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



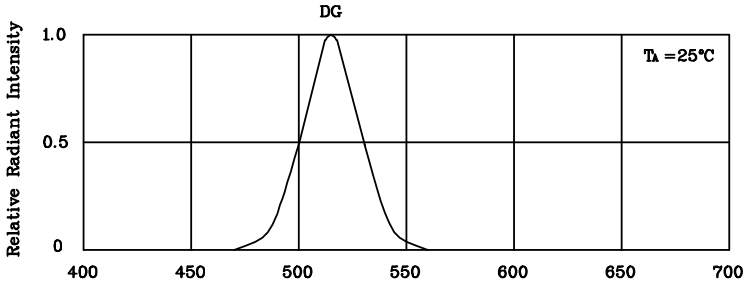
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3.Specifications are subject to change without notice.

Absolute maximum ratings (T_A=25°C)		**DG (AlInGaN)**	**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_{FS}	150	mA
Power Dissipation	P_T	102.5	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	245°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	245°C For 5 Seconds		

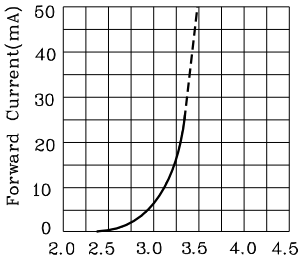
Operating Characteristics (T_A=25°C)		**DG (AlInGaN)**	**Unit**
Forward Voltage (Typ.) (I_F=20mA)	V_F	3.3	V
Forward Voltage (Max.) (I_F=20mA)	V_F	4.1	V
Reverse Current (Max.) (V_R=5V)	I_R	10	uA
Wavelength of Peak Emission (Typ.) (I_F=20mA)	λ P	515	nm
Wavelength of Dominant Emission (Typ.) (I_F=20mA)	λ D	525	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=20mA)	Δλ	30	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLDG20DLSDLCR	Green	AlInGaN	Green Semi Diffused	1200	3790	515	100°(H) 50°(V)

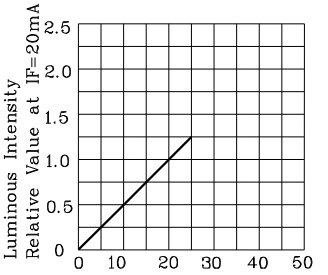


RELATIVE INTENSITY Vs. WAVELENGTH

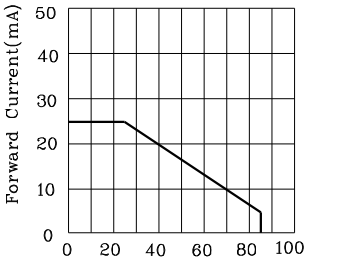
❖ DG



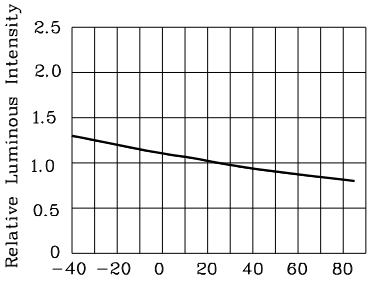
FORWARD CURRENT Vs.
FORWARD VOLTAGE



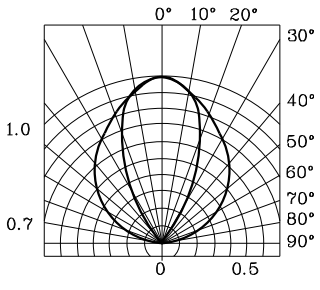
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

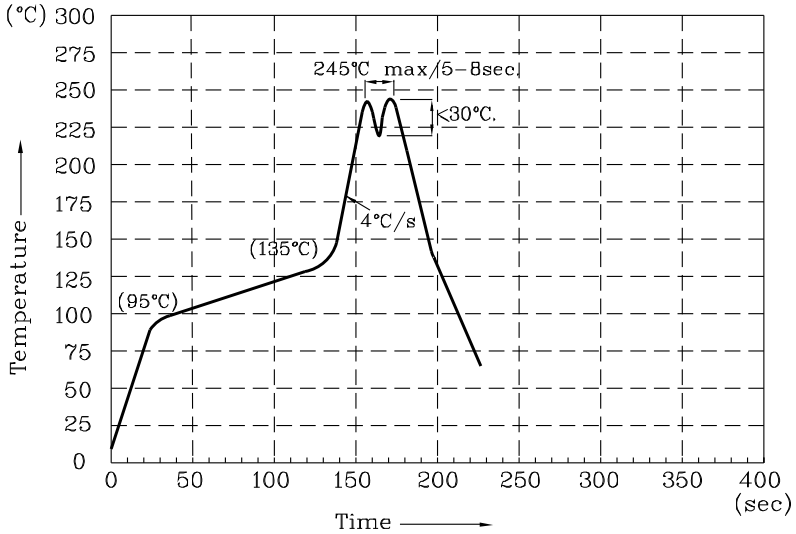


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:
1. Recommend the wave temperature 230℃~245℃.The maximum soldering temperature should be less than 245℃.
2. Do not apply stress on epoxy resins when temperature is over 85 degree℃.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

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 **XLDG20DLSDLCR**