



# American Opto Plus LED

## L-513LPGC-30D

5mm Dia LED LAMP - WATER CLEAR

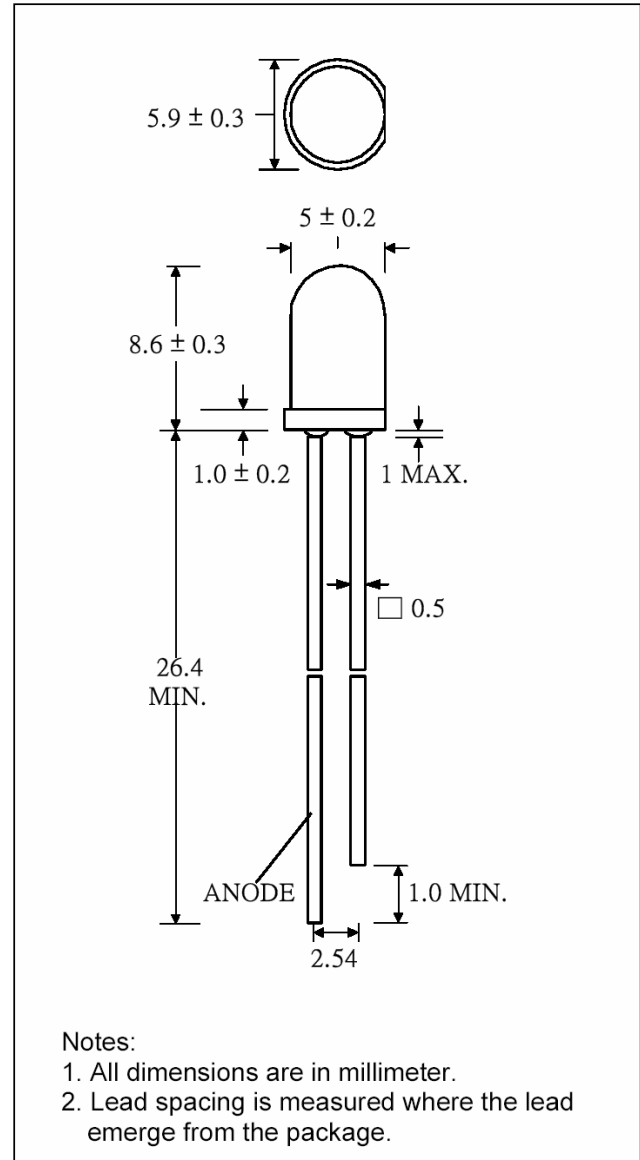
- ◆ 5.0mm DIA LED LAMP
- ◆ I.C. COMPATIBLE
- ◆ LOW POWER CONSUMPTION
- ◆ HIGH LUMINOUS INTENSITY

### DESCRIPTION

- Super bright LED Lamp
- Round type
- T1-3/4 (5mm) diameter
- Lens color: Water Clear
- With Flange
- Solder leads without stand-off

### FEATURES

- Emitted color: Super Green
- Standard Luminous intensity
- Technology: InGaN
- Peak wavelength  $\lambda_p = 525\text{nm}$
- Viewing angle:  $30^\circ$



### SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
InGaN	Super Green	Water Clear	$30^\circ$



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**ABSOLUTE MAXIMUM RATINGS**

(Ta=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P <sub>D</sub>	78	mW
Pulse Forward Current (1/10 Duty Cycle @1KHz )	I <sub>PF</sub>	100	mA
Forward Current	I <sub>F</sub>	30	mA
Reverse Voltage	V <sub>R</sub>	5.0	V
Operating Temperature Range	T <sub>OPR</sub>	-40~+85	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+100	°C

Solder temperature 1.6 mm from body for 5 seconds at 260°C

**OPTICAL-ELECTRICAL CHARACTERISTICS**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	3200	4500		mcd
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA		3.5	4.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V			10	uA
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> = 20mA		30		deg.
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 20mA		523		
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA		525		nm



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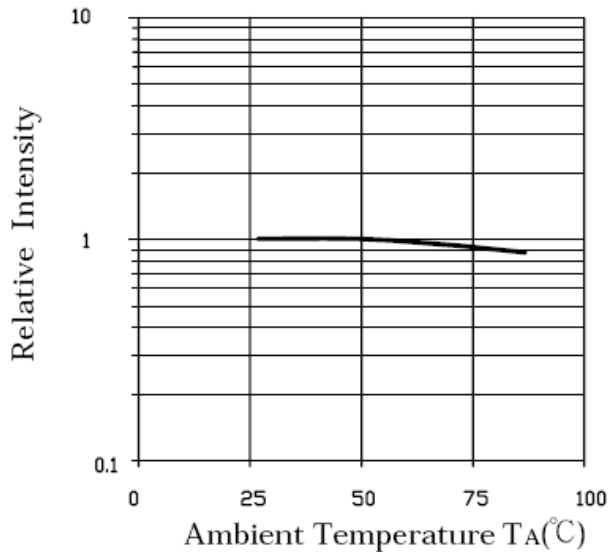
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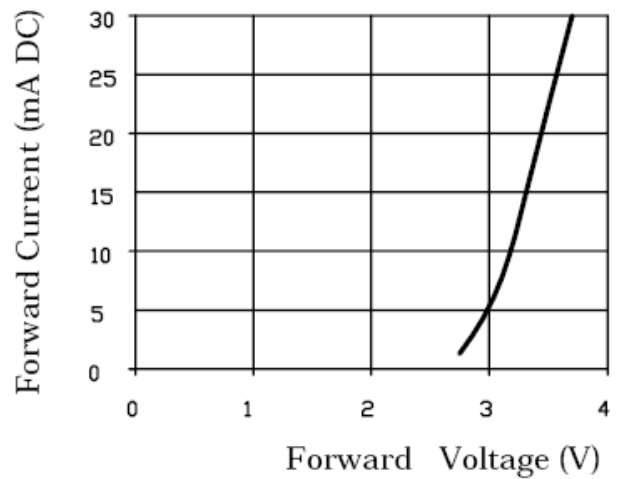
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### Typical Electro-Optical Characteristic Curves (Ambient Temperature: 25°C)

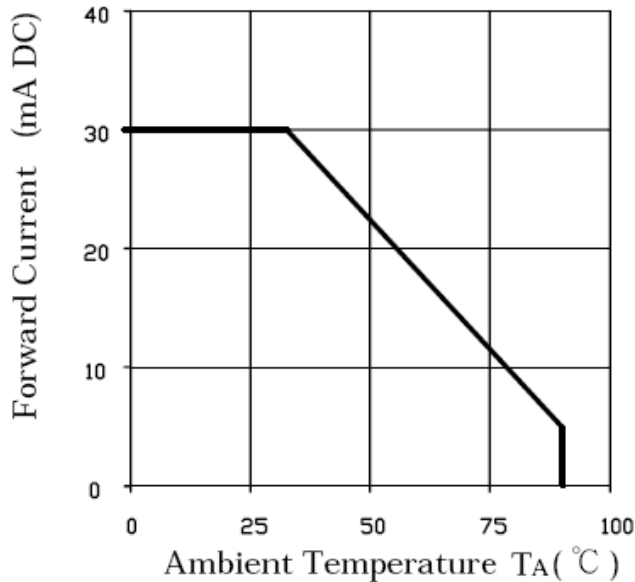
Luminous Intensity vs. Ambient Temperature



Forward Current vs. Forward Voltage



Forward Current Derating Curve



Luminous Intensity vs. Forward Current

