



# American Opto Plus LED

## L513GD-16.51MM

5mm Dia LED LAMP – Green Diffused

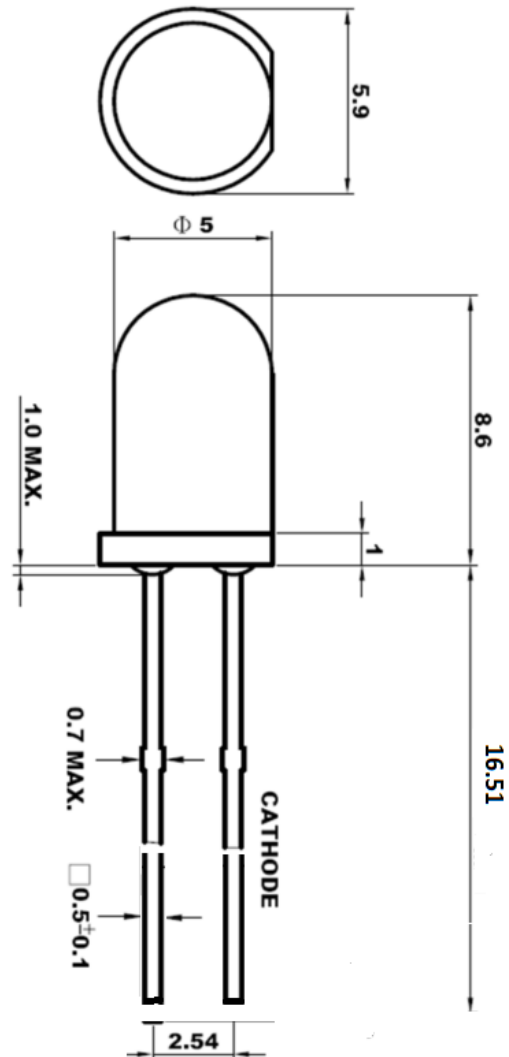
- ◆ 5.0mm DIA LED LAMP
- ◆ I.C. COMPATIBLE
- ◆ LOW POWER CONSUMPTION
- ◆ LONG LAMP LIFE

### DESCRIPTION

- Round type
- T1-3/4 (5mm) diameter
- Lens color: Green Diffused
- With flange
- Solder leads without stand-off

### FEATURES

- Emitted color: Green
- Technology: GaP
- Viewing angle: 60°
- Peak wavelength  $\lambda_p = 568\text{nm}$



### SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
GaP	Green	Green Diffused	60°



**American Opto Plus LED**  
**L513GD-16.51MM**  
5mm Dia LED LAMP – Green Diffused

- ◆ 5.0mm DIA LED LAMP
- ◆ I.C. COMPATIBLE
- ◆ LOW POWER CONSUMPTION
- ◆ LONG LAMP LIFE

**ABSOLUTE MAXIMUM RATINGS**

(Ta=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P <sub>D</sub>	65	mW
Peak Forward Current (1/10 Duty Cycle @1KHz )	I <sub>PF</sub>	100	mA
Forward Current	I <sub>F</sub>	25	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>	-40~+85	°C

Solder temperature 2 mm from body for 3 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> = 10mA	5	20		mcd
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10mA		2.05	2.6	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V			10	uA
Viewing Angle	2θ1/2	I <sub>F</sub> = 10mA		60		deg.
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 10mA		568		nm
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 10mA		570		nm
Spectrum Radiation Bandwidth	Δλ	I <sub>F</sub> = 10mA		30		nm



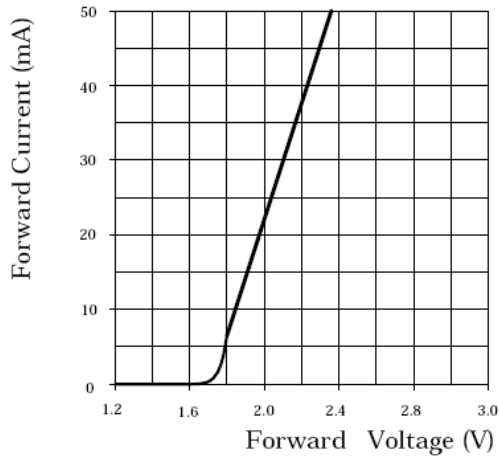
# American Opto Plus LED

## L513GD-16.51MM

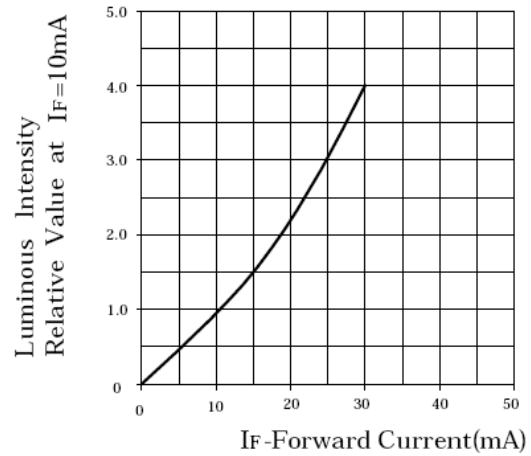
5mm Dia LED LAMP – Green Diffused

- ◆ 5.0mm DIA LED LAMP
- ◆ I.C. COMPATIBLE
- ◆ LOW POWER CONSUMPTION
- ◆ LONG LAMP LIFE

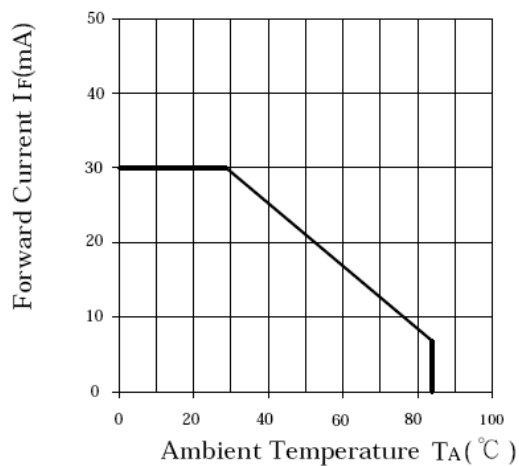
### TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES



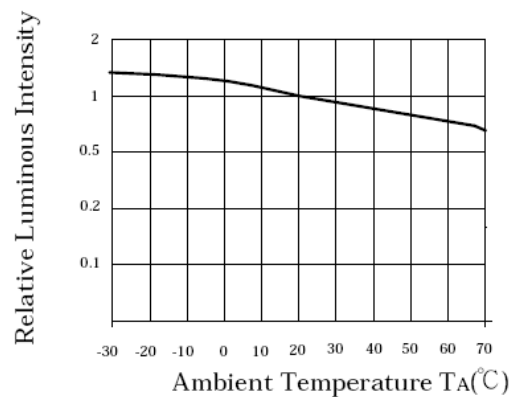
Forward Current Vs.  
Forward Voltage



Luminous Intensity Vs.  
Forward Current



Forward Current  
Derating Curve



Luminous Intensity Vs.  
Ambient Temperature