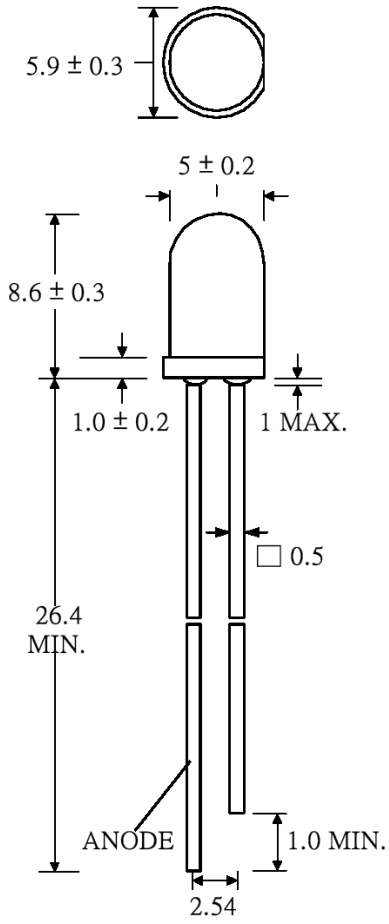
American Opto Plus LED
L513SGD-20D

5mm 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



Notes:
1. All dimensions are in millimeter.
2. Lead spacing is measured where the lead emerge from the package.

FEATURES

- Emitted color: Green
- Standard luminous intensity
- Technology: GaP
- Dominant wavelength λ_D = 568nm
- Viewing angle: 20°

SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
GaP	Green	Green Diffused	20°

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ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P_D	85	mW
Pulse Forward Current (1/10 Duty Cycle @1KHz)	I_{FP}	50	mA
Forward Current	I_F	30	mA
Reverse Voltage	V_R	5.0	V
Operating Temperature Range	T_{OPR}	-40~+85	°C
Storage Temperature Range	T_{STG}	-40~+85	°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_V	I_F = 20mA	40	60		mcd
Forward Voltage	V_F	I_F = 20mA	--	2.1	2.6	V
Reverse Current	I_R	V_R = 5V	--	--	10	uA
Viewing Angle	2θ1/2	I_F = 20mA	---	20	--	deg.
Peak Wavelength	λ_P	I_F = 20mA	--	568	--	nm
Dominant Wavelength	λ_D	I_F = 20mA		570		nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	I_F = 20mA	--	30	--	nm

Tolerance of viewing angle: -10 / +5 deg.

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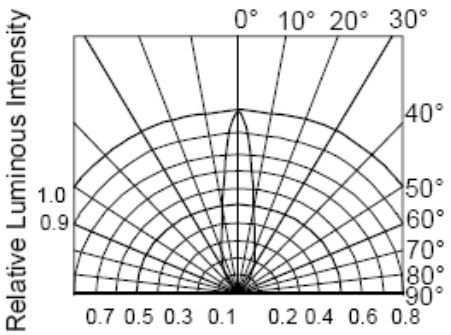
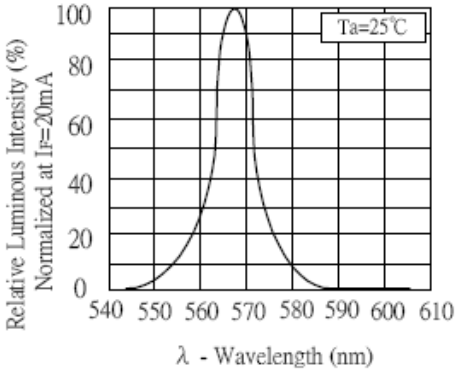
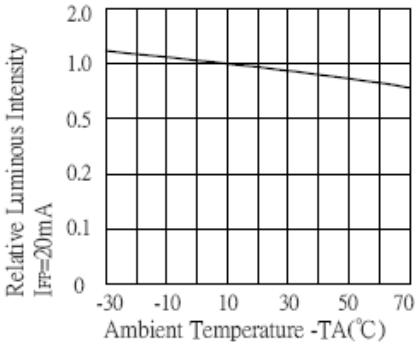
TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES



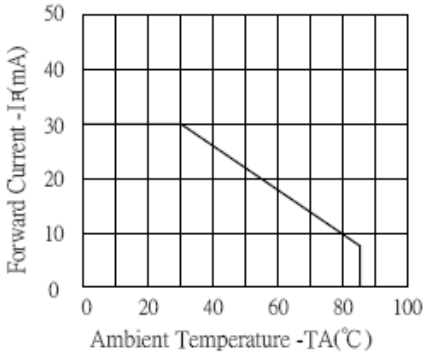
RADIATION DIAGRAM



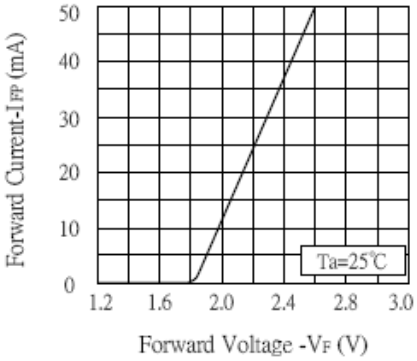
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



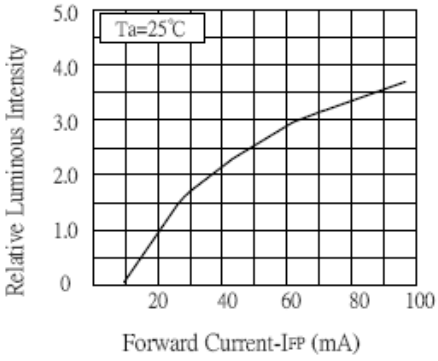
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT