

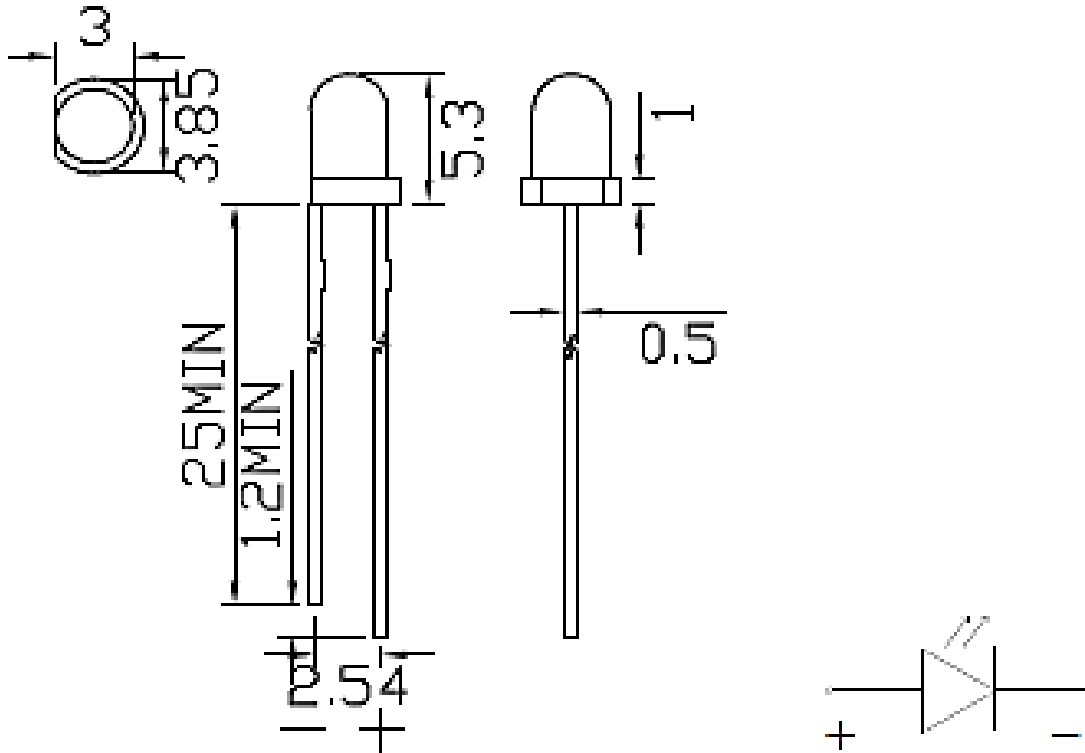


American Opto Plus LED Corp.

L314KEC

3mm Red LED Lamp

PACKAGE OUTLINES



ITEM	MATERIALS
Dice	AllnGaP
Lens Color	Water Clear
Emitted Color	Red

Notes:

1. All dimensions are in millimeters (inches)
2. Tolerances are $\pm 0.15\text{mm}$ unless otherwise noted.



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ABSOLUTE MAXIMUM RATINGS

(Ta = 25°C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	60	mW
Forward Current	I_F	30	mA
Peak Forward Current (1/10 duty, cycle: 0.1ms Pulse Width)	I_{PF}	60	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-25 ~ +85	°C
Storage Humidity	T_{SH}	45% ~ 85%	°F
Storage Temperature Range	T_{STG}	-30 ~ +85	°C
Soldering Temperature	T_{SOL}	260°C for 5 seconds	

OPTICAL-ELECTRICAL CHARACTERISTICS

(Ta = 25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	I_V	$I_F=20mA$	1000	--	1500	mcd
Forward Voltage	V_F	$I_F=20mA$	1.8	--	2.4	V
Suggested Forward Current	I_F	$I_F=20mA$	3	5~10	20	mA
Reverse current	I_R	$V_R=5V$	--	--	10	μA
Dominant Wavelength	λ_D	$I_F=20mA$	630	--	640	nm
Viewing Angle	2θ½	$I_F=20mA$	--	20	--	deg

When using LEDs in circuits, it is recommended to limit the forward current to 5~10 mA, ≤20 mA.



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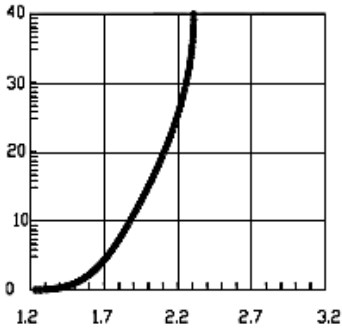
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OPTICAL CHARACTERISTIC CURVES

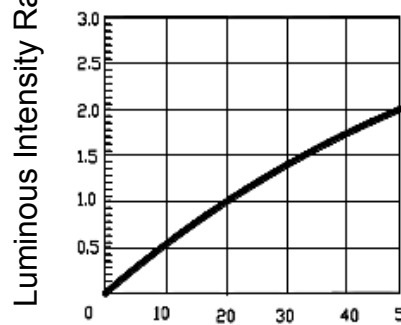
Forward Current (mA)

Forward Current vs. Forward Voltage



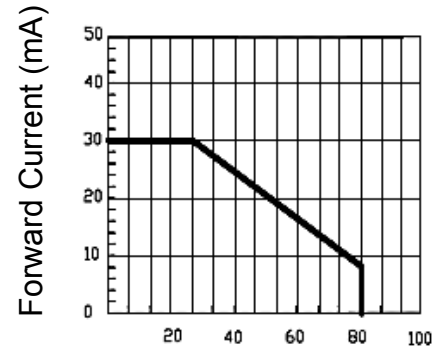
Forward Voltage (V)

Forward Current vs. Relative Luminous Intensity



Forward Current (mA)

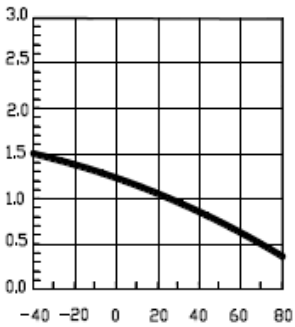
Forward Current vs. Ambient Temperature



Ambient Temperature (°C)

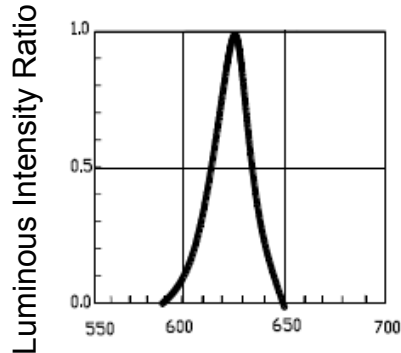
Luminous Intensity Ratio

Relative Luminous Intensity vs. Ambient Temperature



Ambient Temperature (°C)

Relative Luminous Intensity vs. Main Wavelength



Dominant Wavelength (nm)

Radiation Diagram

