

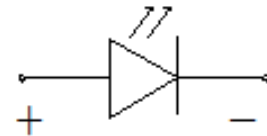
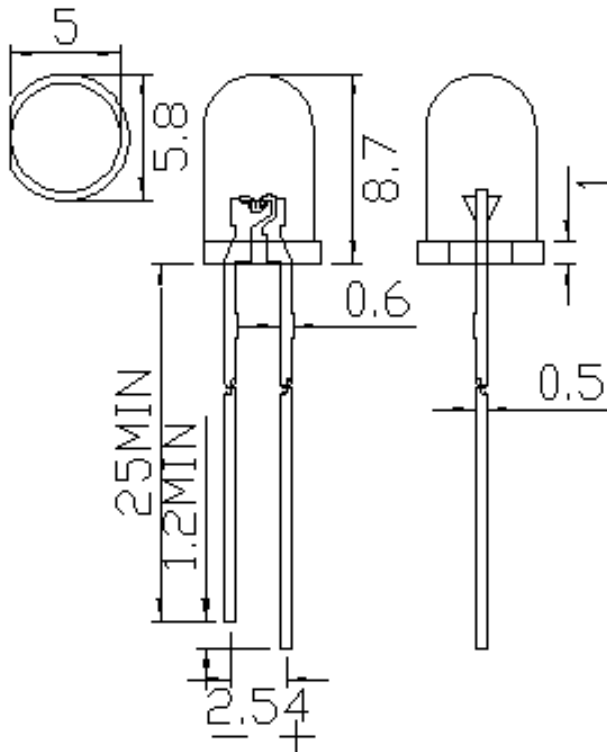


**American Opto Plus LED Corp.**

**L513K-NUBC-20D**

**5mm Blue Water Clear LED Lamp**

**PACKAGE DIMENSION**



**Notes**

1. All dimensions are in millimeters
2. Tolerance is  $\pm 0.15\text{mm}$  unless otherwise noted



# American Opto Plus LED Corp.

## L513K-NUBC-20D

5mm Blue Water Clear LED Lamp

### ABSOLUTE MAXIMUM RATINGS

	Symbol	Rating	Unit
Forward Current	$I_F$	30	mA
Peak Forward Current (Duty Cycle 1/10, Pulse width 0.1ms)	$I_{FP}$	60	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation per dice	$P_d$	100	mW
Operating temperature	$T_{opr}$	-25~+85	°C
Storage temperature	$T_{stg}$	-30~+85	°C
Storage Humidity	--	45%-85%	RH
Solder Temperature	$T_{sld}$	260°C for 5 sec	--

### OPTICAL-ELECTRICAL CHARACTERISTICS

( $T_a=25^\circ\text{C}$ )

	Symbol	Test condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$	2.8	--	3.4	V
Luminous Intensity	$I_v$		4000	--	7000	mcd
Dominant Wavelength	$\lambda_d$		465	--	470	nm
Viewing Angle	$2\theta_{1/2}$		--	20	--	Deg
Reverse Current	$I_R$	$V_R=5\text{V}$	--	--	5	$\mu\text{A}$



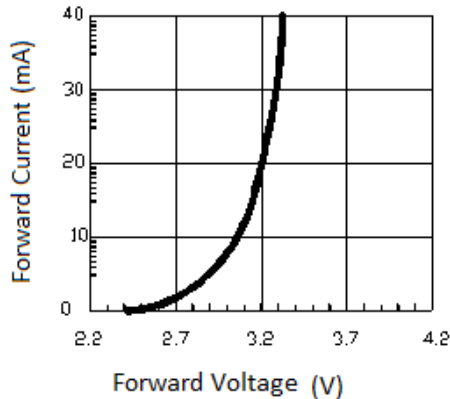
# American Opto Plus LED Corp.

## L513K-NUBC-20D

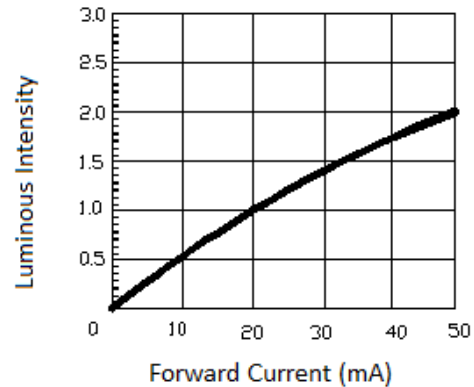
5mm Blue Water Clear LED Lamp

### TYPICAL ELECTRICAL-OPTICAL CHARACTERISTIC CURVES

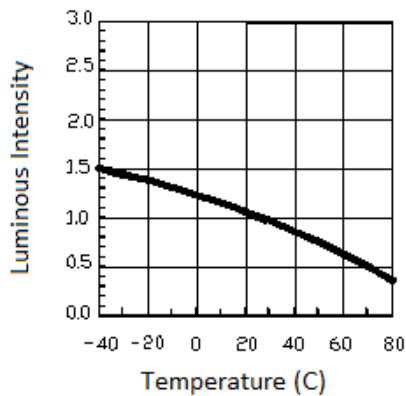
Forward Current vs Forward Voltage



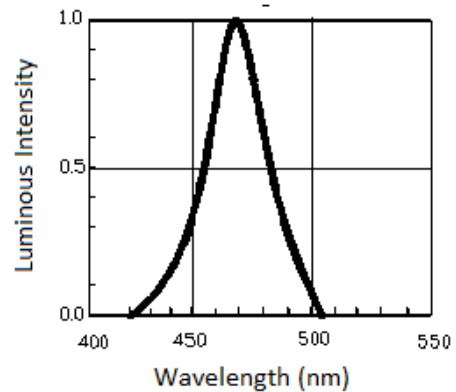
Forward Current vs Luminous Intensity



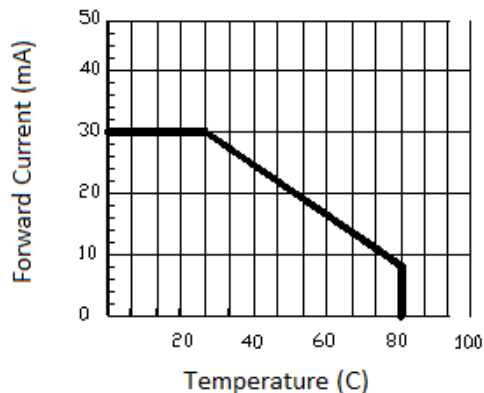
Luminous Intensity vs Ambient Temperature



Luminous Intensity vs Wavelength



Forward Current vs Ambient Temperature



Radiation Diagram

