



American Opto Plus LED Corp.

L314LBD

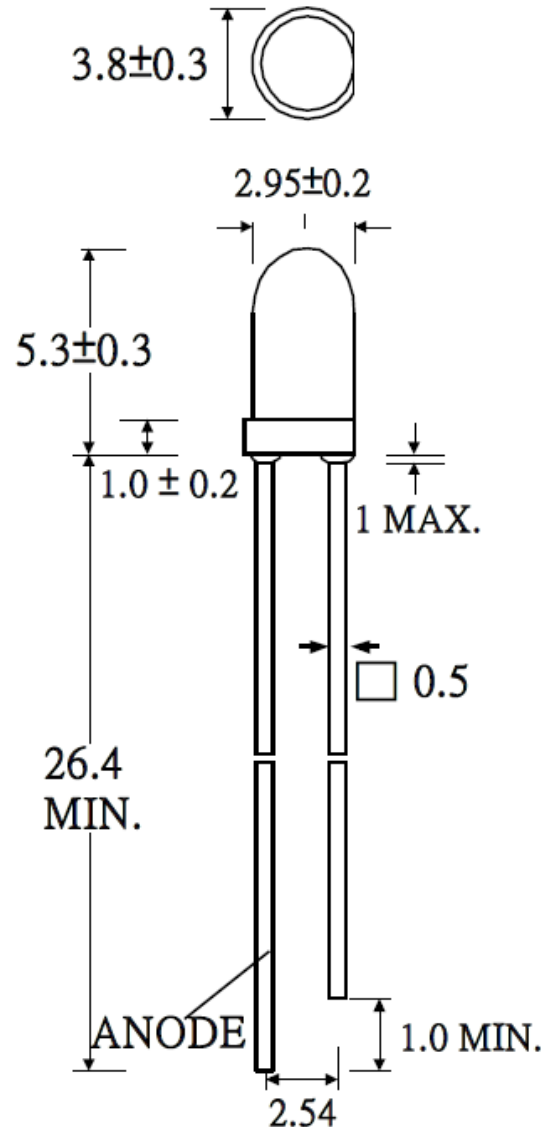
3mm Blue LED Lamp

DESCRIPTION

- Super bright LED Lamp
- Round Type
- T-1 3mm Diameter
- Lens Color: Blue Diffused
- With Flange
- Solder leads without standoffs
- Compliant with RoHS

FEATURES

- Emitted Color: Blue
- High Luminous intensity
- Technology: InGaN
- Peak wavelength $\lambda_p = 468\text{nm}$
- Viewing Angle: 60°



NOTES:

1. All dimensions are in millimeters tolerance is $\pm 0.25\text{mm}$ unless otherwise noted;

Part Number	Material	Lens Color	
		Emitted	Lens
L314LBD	InGaN	Blue	Blue Diffused



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ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Parameter	Symbol	Ratings	Unit
Peak Forward Current Duty 1/10 @ 10KHz	I_{FP}	120	mA
Reverse Voltage	V_R	5.0	V
Power Dissipation	P_D	100	mW
Operating temperature range	T_{opr}	-40~+85	°C
Storage temperature range	T_{stg}	-40~+100	°C

Soldering: 1.6mm from body for 3 second at 260°C

OPTICAL-ELECTRICAL CHARACTERISTICS

(Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	I_R	$V_R=5V$	--	--	10	μA
Forward Voltage	V_F	$I_F=20mA$	-	3.2	3.8	V
Luminous Intensity	I_V		800	1200	--	mcd
Peak Wavelength	λ_P		--	468	--	nm
Spectral Half-width	$\Delta\lambda$		--	30	--	nm
Dominant Wavelength	λ_D		--	470	--	nm
Viewing Angle	$2\theta_{1/2}$		--	60	--	deg

Note:

1. Tolerance of Viewing Angle: -10/+5 deg

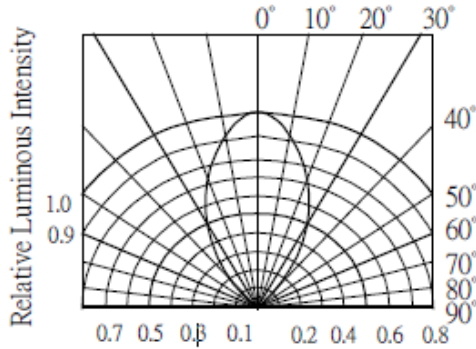


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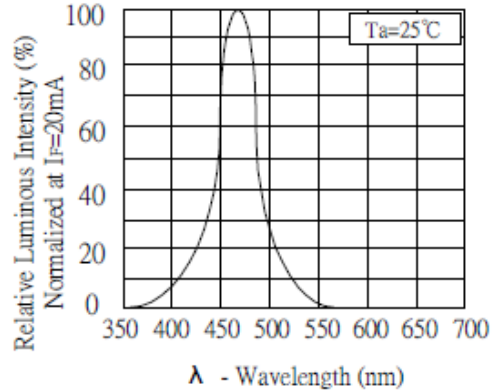
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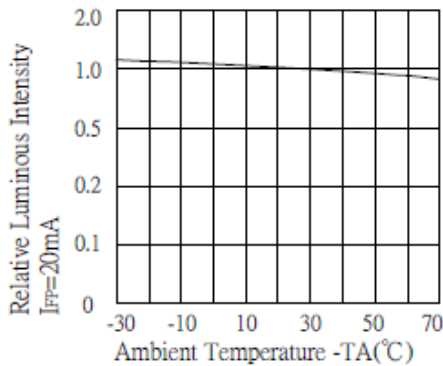
TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVE



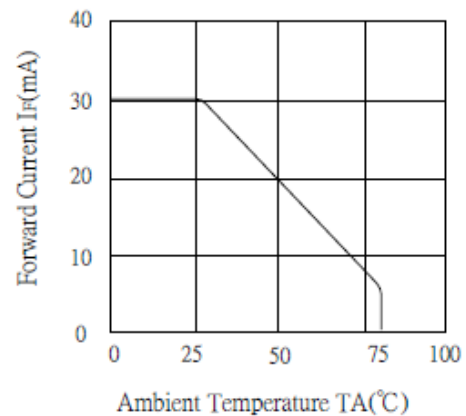
RADIATION DIAGRAM



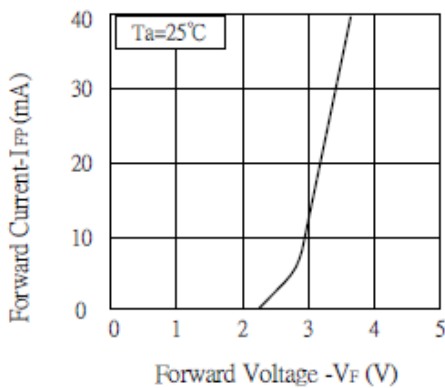
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



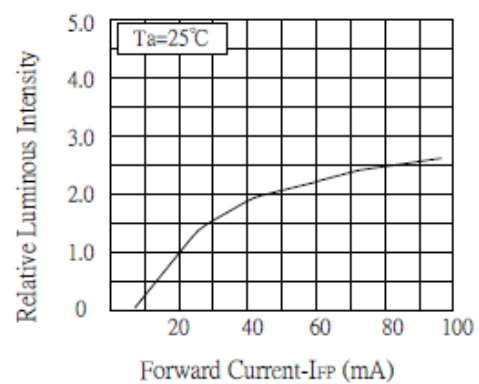
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT