

Features

- LOW POWER CONSUMPTION.
- SOLID STATE BLUE LIGHT SOURCE.
- SUITABLE FOR FULL COLOR LED DISPLAYS AND INDICATORS DIAGNOSTIC/ANALYTICAL EQUIPMENT.

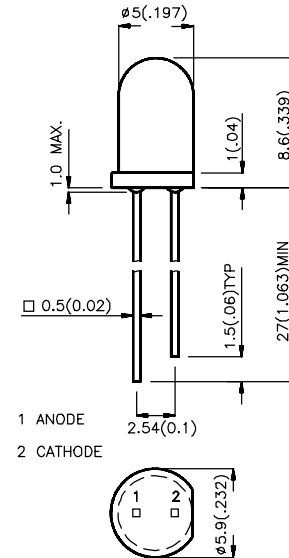
L7113NBx BLUE

L7113PBx BLUE

Description

The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Case-Color	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	$2\theta_{1/2}$
L7113NBD	Blue (InGaN)	BLUE DIFFUSED	50	75	20°
L7113NBT	Blue (InGaN)	BLUE TRANSPARENT	100	200	16°
L7113NBC	Blue (InGaN)	WATER CLEAR	200	300	16°
L7113PBD	Blue (InGaN)	BLUE DIFFUSED	300	400	20°
L7113PBT	Blue (InGaN)	BLUE TRANSPARENT	300	450	16°
L7113PBC	Blue (InGaN)	WATER CLEAR	500	1000	16°

Note:

1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

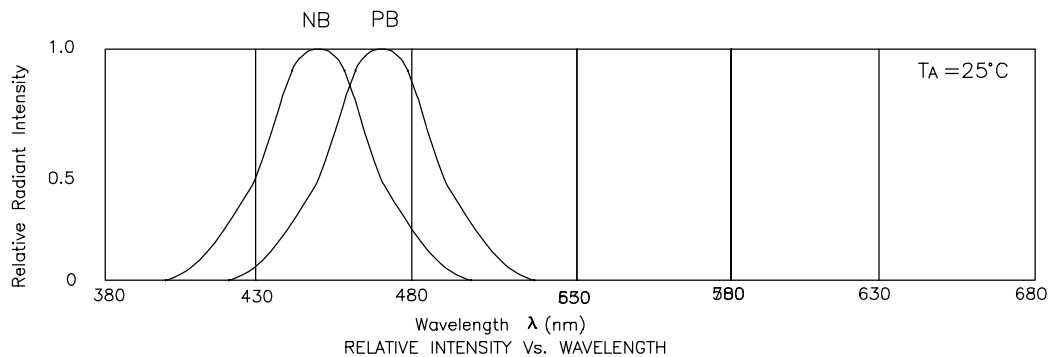
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue (NB) Blue (PB)	445 468		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Blue (NB) Blue (PB)	20 26		nm	IF=20mA
C	Capacitance	Blue (NB) Blue (PB)	110 110		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Blue (NB) Blue (PB)	3.7 3.5	4.0 4.0	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

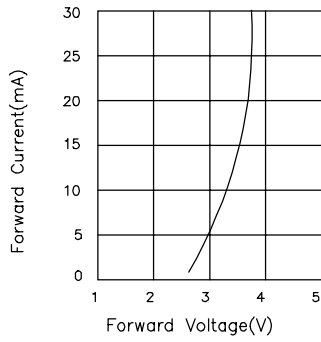
Parameter	Blue (NB)	Blue (PB)	Units
Power dissipation	120	102	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	100	100	mA
Reverse Voltage	5	5	V
Operation Temperature	-20°C To +80°C		
Storage Temperature	-30°C To +85°C		
Lead Soldering Temperature [2]	260°C For 5 Seconds		

Notes:

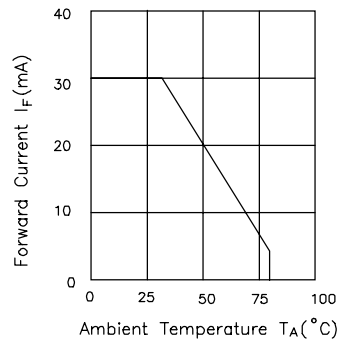
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



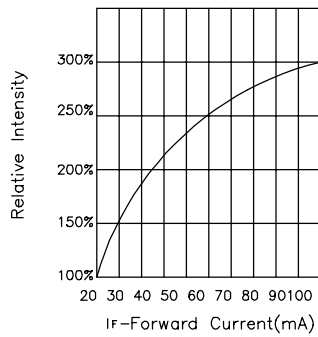
Blue L7113NBD,L7113NBC,L7113NBT



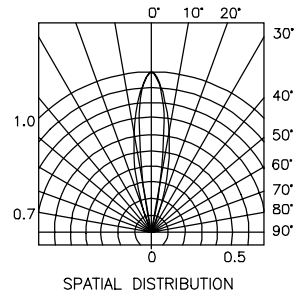
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

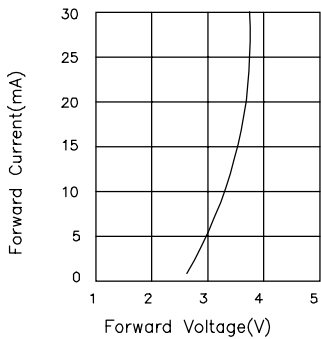


RELATIVE INTENSITY Vs. FORWARD CURRENT

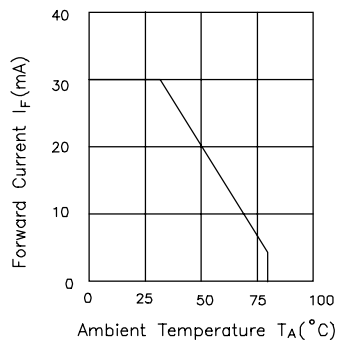


SPATIAL DISTRIBUTION

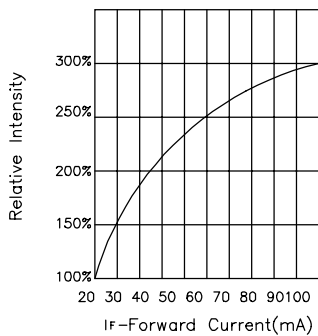
Blue L7113PBD,L7113PBC,L7113PBT



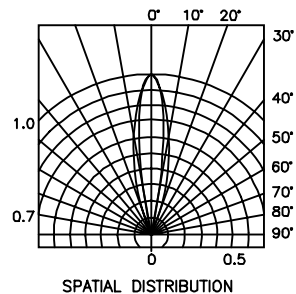
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



RELATIVE INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION