



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

L-13QBD-D

BLUE

### PRELIMINARY SPEC

#### Features

- MOUNTS FLUSH WITH PANEL.
- LOW POWER CONSUMPTION.
- SUITABLE FOR AUDIO PANEL INDICATOR.
- FITS 2mm HOLE IN PANEL UP TO 3.5mm (.138").
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

#### Description

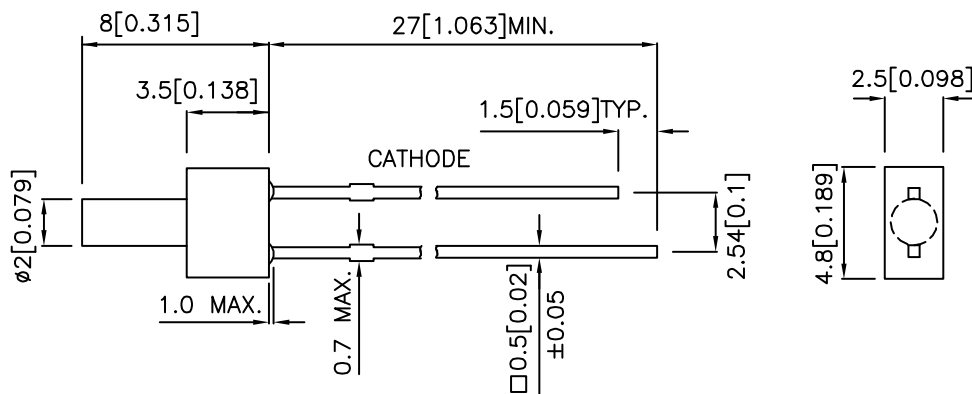
The Blue source color devices are made with GaN on Sapphire Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

#### 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 leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 $\theta$ 1/2
L-13QBD-D	BLUE (GaN)	BLUE DIFFUSED	70	200	70°

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 TA=25°C

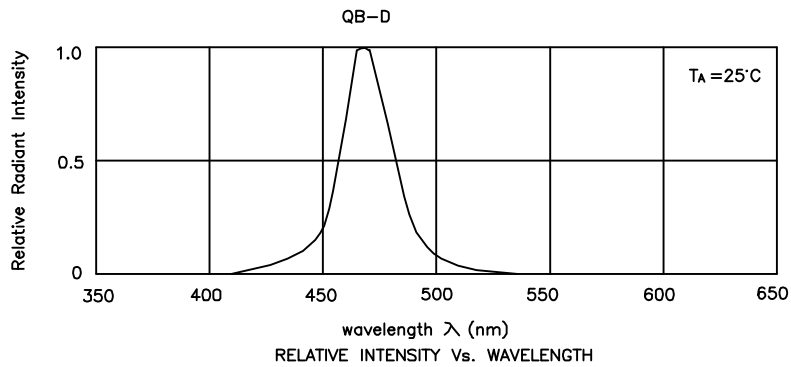
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Blue	468		nm	IF=20mA
$\lambda_D$	Dominant Wavelength	Blue	470		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	IF=20mA
C	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF	Forward Voltage	Blue	3.5	4.0	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

## Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



**Blue**

**L-13QBD-D**

