

PRELIMINARY SPEC

Part Number: L-7104QBDL-D

Blue



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

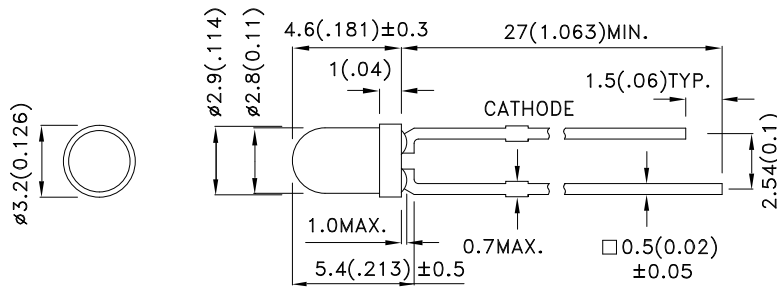
Features

- Low power consumption.
- Popular T-1 diameter package.
- General purpose leads.
- Reliable and rugged.
- Long life - solid state reliability.
- Available on tape and reel.
- RoHS compliant.

Description

The Blue source color devices are made with InGaN 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) [2] @ 20mA | | Viewing Angle [1] |
|--------------|--------------|---------------|------------------------|------|----------------------|
| | | | Min. | Typ. | 2θ1/2 |
| L-7104QBDL-D | Blue (InGaN) | BLUE DIFFUSED | 480 | 1200 | 30° |

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Blue | 468 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | Blue | 470 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Blue | 25 | | nm | I _F =20mA |
| C | Capacitance | Blue | 100 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Blue | 3.3 | 4 | V | I _F =20mA |
| I _R | Reverse Current | Blue | | 10 | uA | V _R = 5V |

Notes:

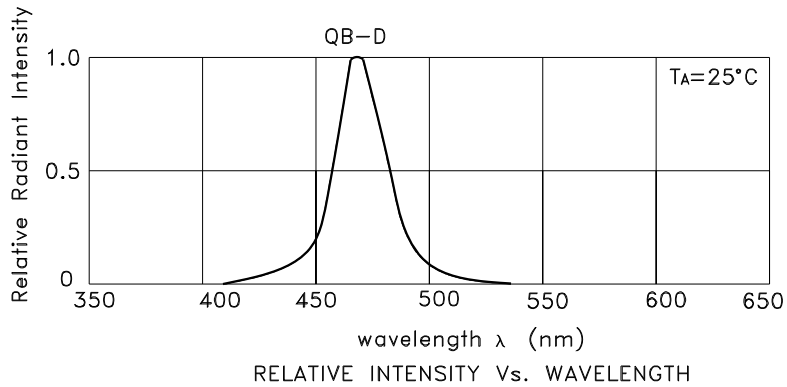
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | Blue | Units |
|-------------------------------|---------------------|-------|
| Power dissipation | 120 | 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 | |

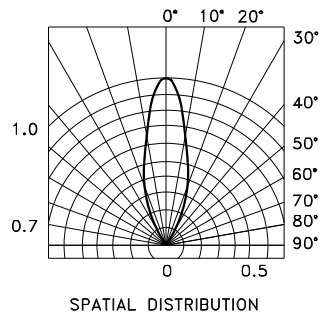
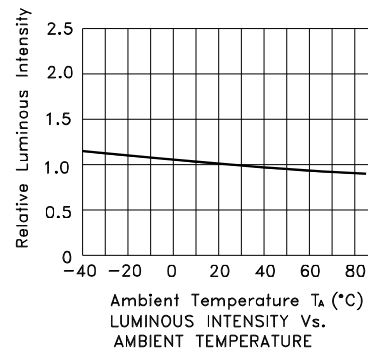
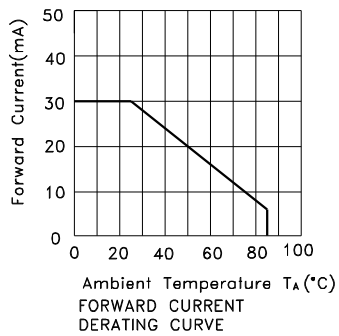
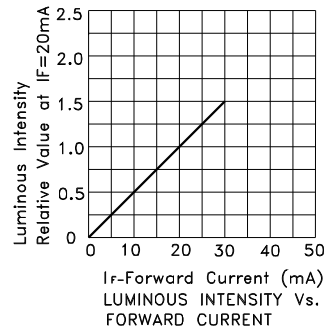
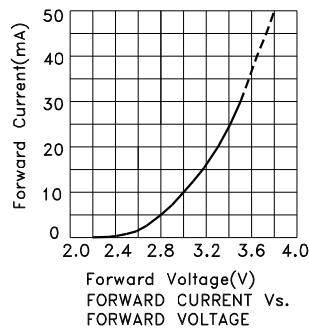
Notes:

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



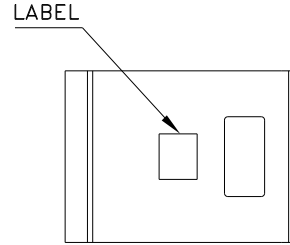
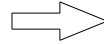
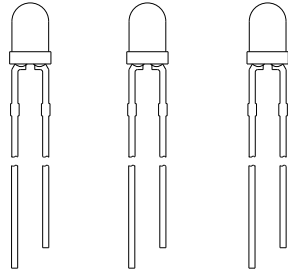
Blue

L-7104QBDL-D



PACKING & LABEL SPECIFICATIONS

L-7104QBDL-D



500PCS / BAG

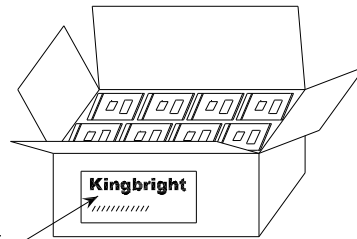


20K / 9# BOX

OUTSIDE LABEL



OUTSIDE LABEL



10K / 5# BOX

| | |
|--|--|
| <h1 style="margin: 0;">Kingbright</h1> | |
| P/NO: L-7104xxx | |
| QTY: 500 pcs | Q.C. Q C xx xx xxxx PASSED |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
| <p style="font-size: small; margin: 0;">xxxxxxxxxxxxxxxxxxxxxxxx</p> | |
| RoHS Compliant | |