









Release Date: 07 September 2022 Version: A1.0

# PRODUCT DATASHEET



- ► LED Light Bar Display
- ► 10x7mm Rectangular 6.5t
- ▶ Blue (470nm)

N0B62D37



# **LED Light Bar Display**



#### **FEATURES:**

Package: PTH Light Bar Module 10x7x6.5mm Rectangular

Forward Current: 20mA Forward Voltage (typ.): 3.2V

Colour: Blue

Dominant Wavelength: 470nm

**Materials:** 

Die: InGaN

Resin: Epoxy (Blue Diffused) Operating Temperature: -40~+85°C

Storage Temperature: -40~+100°C

**Grouping parameters:** 

Forward voltage

Luminous intensity

Dominant wavelength

Soldering methods: Hand Solder or Reflow

Preconditioning: acc. to JEDEC Level 3

Packing: bulk in carton

LED Light Bar Display

## **APPLICATIONS:**

- **Decorative Light**
- **LED Display**
- Commercial Lighting
- 3C Consumer Goods



## **CHARACTERISTICS:**

# Absolute Maximum Characteristics (Ta=25°C)

| Parameter                            | Symbol           | Ratings  | Unit |
|--------------------------------------|------------------|----------|------|
| Forward Current                      | l <sub>F</sub>   | 30       | mA   |
| Peak Forward Current Duty 1/10 @1KHz | I <sub>FP</sub>  | 100      | mA   |
| Reverse Voltage                      | V <sub>R</sub>   | 5        | V    |
| Reverse Current @5V                  | I <sub>R</sub>   | 10       | μΑ   |
| Power Dissipation                    | P <sub>D</sub>   | 85       | mW   |
| Electrostatic Discharge (HBM)        | ESD              | 200      | V    |
| Operating Temperature                | T <sub>OPR</sub> | -40~+85  | °C   |
| Storage Temperature                  | T <sub>STG</sub> | -40~+100 | °C   |

# Electrical & Optical Characteristics (Ta=25°C)

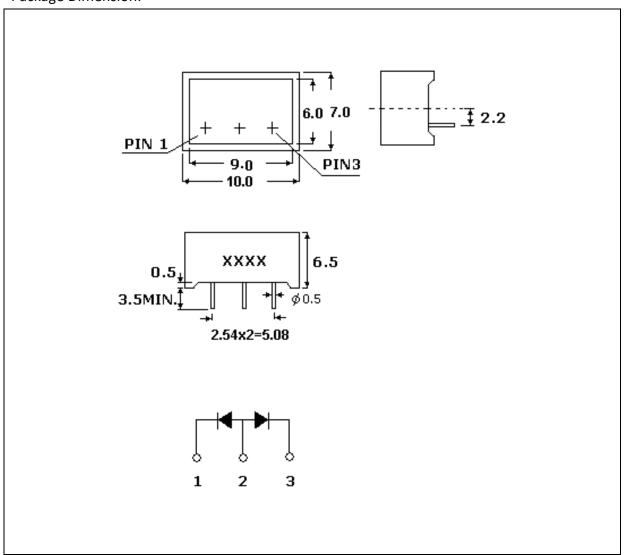
| Darameter                   | Symbol                | Values |      |      | Unit | Test                 |
|-----------------------------|-----------------------|--------|------|------|------|----------------------|
| Parameter                   | Зуппоп                | Min.   | Тур. | Max. | Onit | Condition            |
| Forward Voltage             | $V_{F}$               | 2.8    | 3.2  | 3.6  | V    | I <sub>F</sub> =20mA |
| Luminous Intensity          | IV                    | 18     | 25   | 35   | mcd  | I <sub>F</sub> =20mA |
| Peak Wavelength             | $\lambda_{	extsf{P}}$ |        | 470  |      | nm   | I <sub>F</sub> =20mA |
| Dominant Wavelength         | $\lambda_{D}$         | 465    | 468  | 472  | nm   | I <sub>F</sub> =20mA |
| Spectral Line<br>Half-Width | Δλ                    |        | 45   |      | nm   | I <sub>F</sub> =20mA |

<sup>1.</sup> Luminous intensity (Iv)  $\pm 15\%$ , Forward Voltage (V<sub>F</sub>)  $\pm 0.1V$ , Viewing angle( $2\theta_{1/2}$ )  $\pm 5\%$ 



## **OUTLINE DIMENSION:**

## Package Dimension:



- 1. All dimensions are in millimetre (mm).
- 2. Tolerance ±0.25mm, unless otherwise noted.



#### **PRECAUTIONS OF USE:**

#### Storage:

It is recommended to store the products in the following conditions:

- Humidity: 60% R.H. Max.
- Temperature: 5°C~30°C (41°F ~86°F).

Shelf life in sealed bag: 12 months at 5°C~30°C and <60% R.H.

Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a damp-proof box with descanting agent <10% R.H. and apply baking before use.

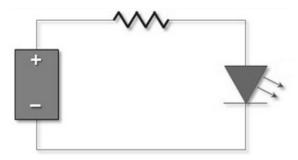
### Baking:

It is recommended to bake the LED before soldering if the pack has been unsealed for longer than 24hrs. The suggested baking conditions are as followings:

• 60±3°C x 24hrs and <5%RH, bulk package.

It's normal to see slight color fading of carrier (light yellow) after baking in process.

## **Testing Circuit:**



Must apply resistor(s) for protection (over current proof).

### Cleaning:

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LED carrier / package. Avoid putting any stress force directly on to the LED lens.

## ESD (Electrostatic Discharge):

Static Electricity or power surge will damage the LED. Use of a conductive wrist band or anti-electrosatic glove is recommended when handing the LED all time. All devices, equipment, machinery, work tables, and storage racks must be properly grounded.

In the events of manual working in process, make sure the devices are well protected from ESD at any time.



# **REVISION RECORD:**

| Version | Date       | Summary of Revision |
|---------|------------|---------------------|
| A1.0    | 07/09/2022 | Datasheet set-up.   |