



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

DD-12PBWB

BLUE

PRELIMINARY SPEC

Features

- SUITABLE FOR LEVEL INDICATORS.
- LOW CURRENT OPERATION.
- WIDE VIEWING ANGLE.
- MECHANICALLY RUGGED.
- DIFFERENT COLORS IN ONE UNIT AVAILABLE.
- STANDARD: BLACK FACE, WHITE SEGMENT.
- RoHS COMPLIANT.

Description

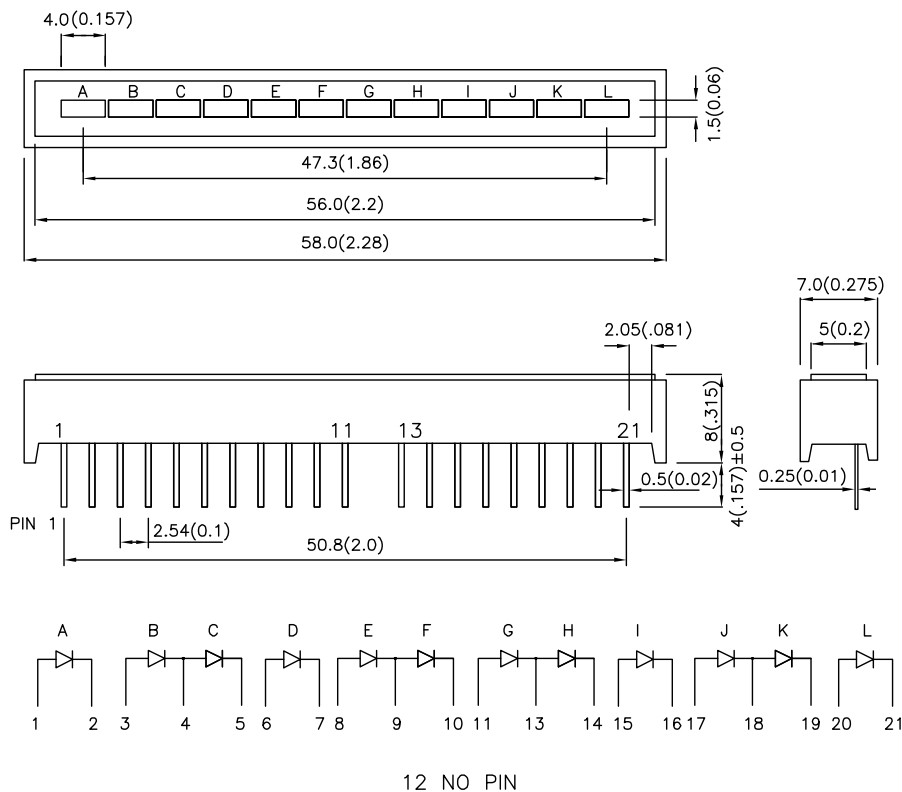
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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 & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
2. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (ucd) @ 10mA | | Description |
|-----------|--------------|----------------|--------------------|------|---------------------------------|
| | | | Min. | Typ. | |
| DD-12PBWB | BLUE (InGaN) | WHITE DIFFUSED | 1200 | 9200 | 12 Segments Bargraph-Display |

Electrical / Optical Characteristics at T_A=25°C

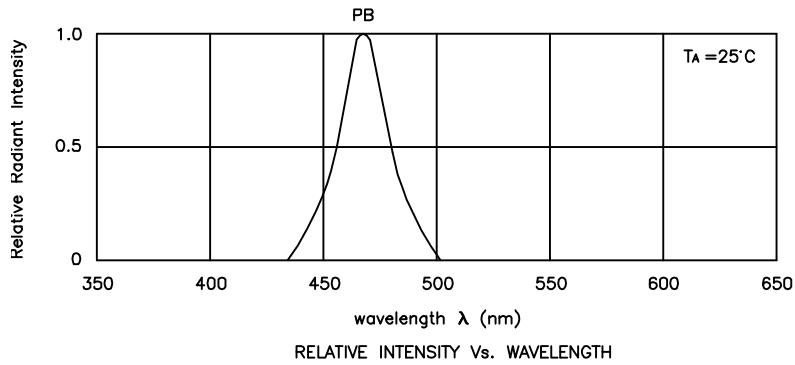
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | Blue | 468 | | nm | I _F =20mA |
| λ_D | Dominant Wavelength | Blue | 470 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Blue | 25 | | nm | I _F =20mA |
| C | Capacitance | Blue | 65 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | Blue | 3.65 | 4.2 | V | I _F =20mA |
| I _R | Reverse Current | Blue | | 10 | uA | V _R = 5V |

Absolute Maximum Ratings at T_A=25°C

| Parameter | Blue | Units |
|---------------------------------|---------------------|-------|
| Power dissipation | 102 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 160 | mA |
| Reverse Voltage | 5 | V |
| Operating / Storage Temperature | -40°C To +85°C | |
| Lead Solder Temperature [2] | 260°C For 5 Seconds | |

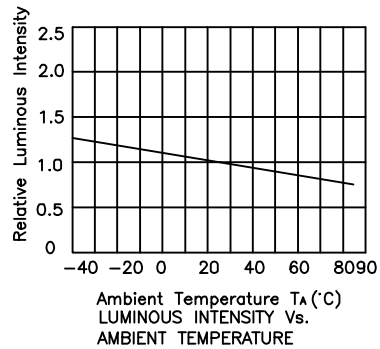
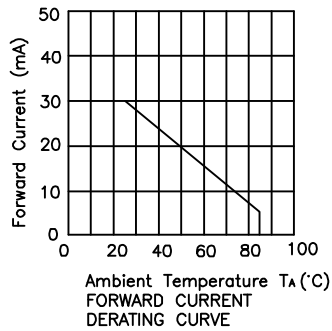
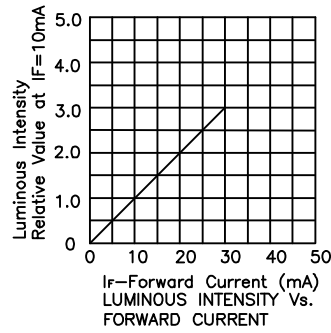
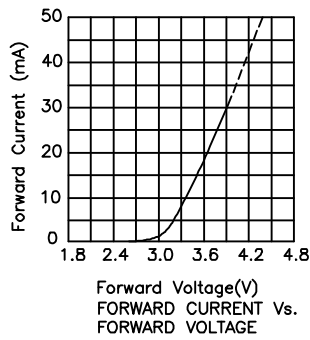
Notes:

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



Blue

DD-12PBWB



Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.