

### PRELIMINARY SPEC

Part Number: TC08-81PBWA-A

BLUE



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

### Features

- 0.8INCH MATRIX HEIGHT.
- DOT SIZE 2mm.
- LOW CURRENT OPERATION.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE VERTICALLY AND HORIZONTALLY.
- EASY MOUNTING ON P.C.BOARDS OR SOCKETS.
- MECHANICALLY RUGGED.
- STANDARD: GRAY FACE, WHITE DOT.
- RoHS COMPLIANT.

### Description

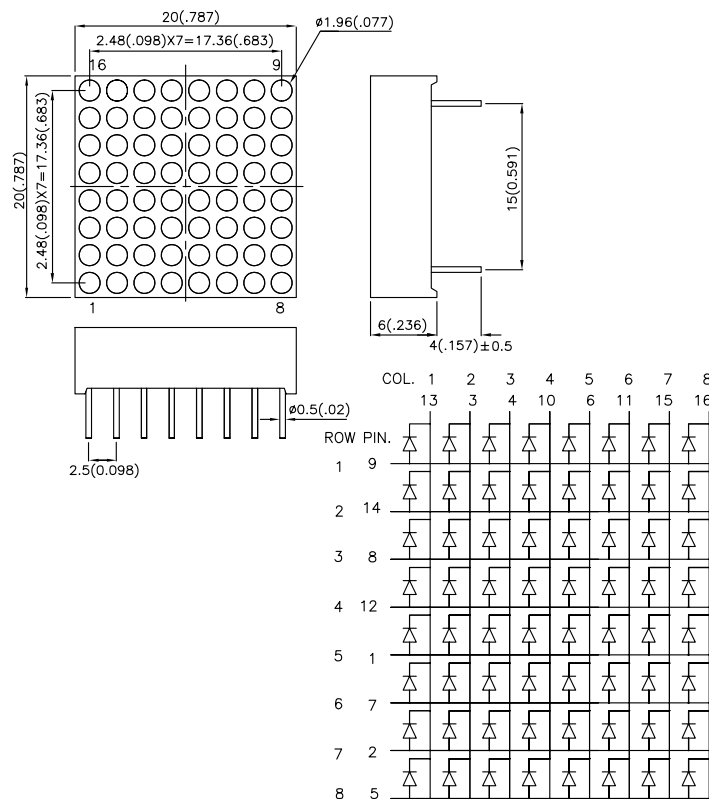
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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) [1]<br>@ 10mA |      | Description    |
|---------------|--------------|----------------|------------------------|------|----------------|
|               |              |                | Min.                   | Typ. |                |
| TC08-81PBWA-A | BLUE (InGaN) | WHITE DIFFUSED | 1200                   | 6540 | Column Cathode |

Note:

1. Luminous Intensity / Luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

| Symbol                | Parameter                | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|--------------------------|--------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | Blue   | 468  |      | nm    | IF=20mA         |
| $\lambda_D$ [1]       | Dominant Wavelength      | Blue   | 470  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Blue   | 21   |      | nm    | IF=20mA         |
| C                     | Capacitance              | Blue   | 100  |      | pF    | VF=0V;f=1MHz    |
| VF [2]                | Forward Voltage          | Blue   | 3.2  | 4.0  | V     | IF=20mA         |
| IR                    | Reverse Current          | Blue   |      | 10   | uA    | VR = 5V         |

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

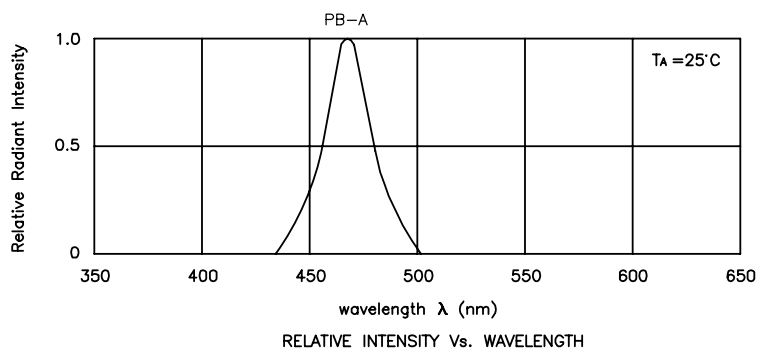
## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Blue                  | Units |
|---------------------------------|-----------------------|-------|
| Power dissipation               | 120                   | mW    |
| DC Forward Current              | 30                    | mA    |
| Peak Forward Current [1]        | 100                   | mA    |
| Reverse Voltage                 | 5                     | V     |
| Operating / Storage Temperature | -40°C To +85°C        |       |
| Lead Solder Temperature [2]     | 260°C For 3~5 Seconds |       |

Notes:

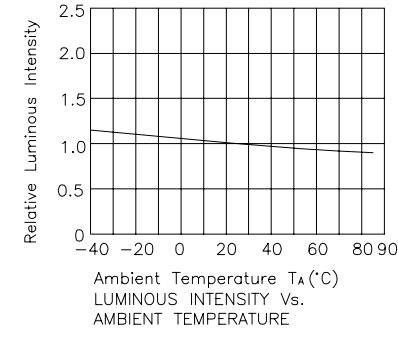
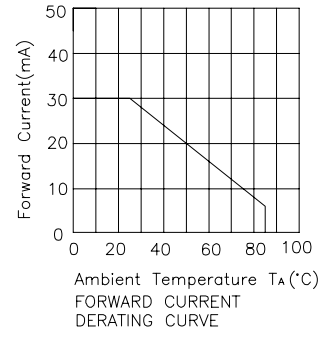
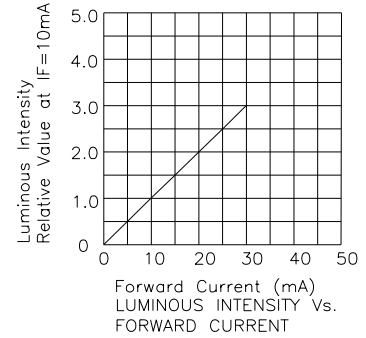
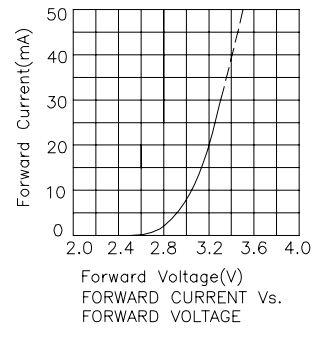
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.



Blue

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PACKING & LABEL SPECIFICATIONS

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