



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: KCDC02-110

BLUE

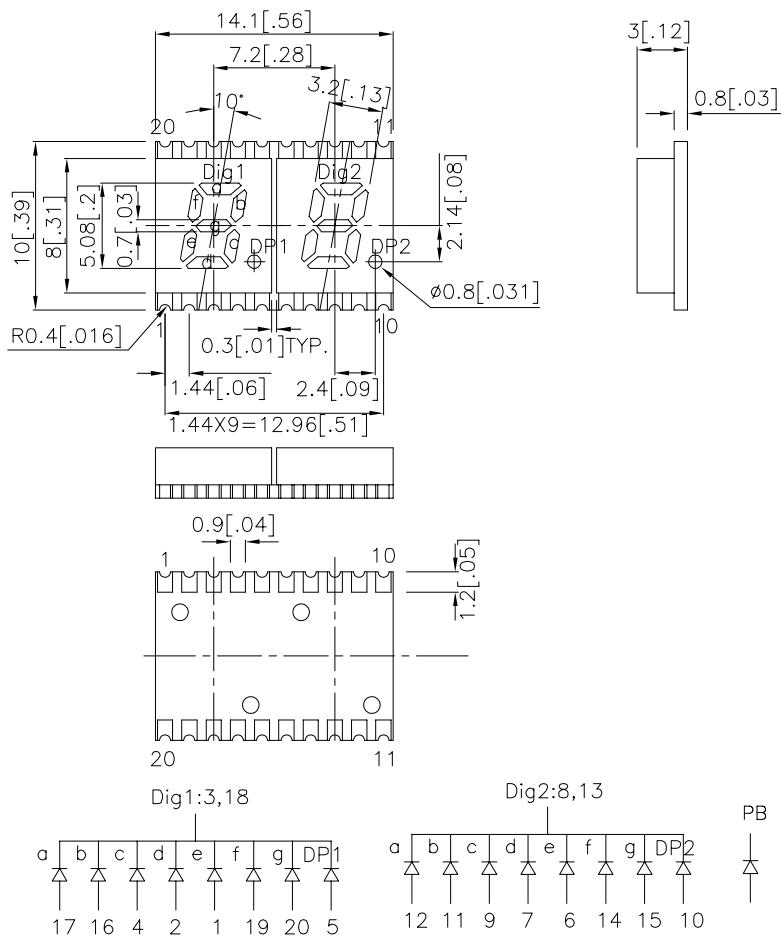
Features

- 0.2 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- PACKAGE :300PCS / REEL.
- GRAY FACE, WHITE SEGMENT.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- 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.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Selection Guide

| Part No. | Dice | Lens Type | I _V (ucd) [1] @ 10mA | | Description |
|------------|--------------|----------------|------------------------------------|-------|-----------------------------------|
| | | | Min. | Typ. | |
| KCDC02-110 | BLUE (InGaN) | WHITE DIFFUSED | 1900 | 10800 | Common Cathode, Rt. Hand Decimal. |

Note:

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

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 [1] | Dominant Wavelength | Blue | 470 | | nm | I _F =20mA |
| Δλ _{1/2} | Spectral Line Half-width | Blue | 25 | | nm | I _F =20mA |
| C | Capacitance | Blue | 65 | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | Blue | 3.65 | 4.2 | V | I _F =20mA |
| I _R | Reverse Current | Blue | | 10 | uA | V _R = 5V |

Notes:

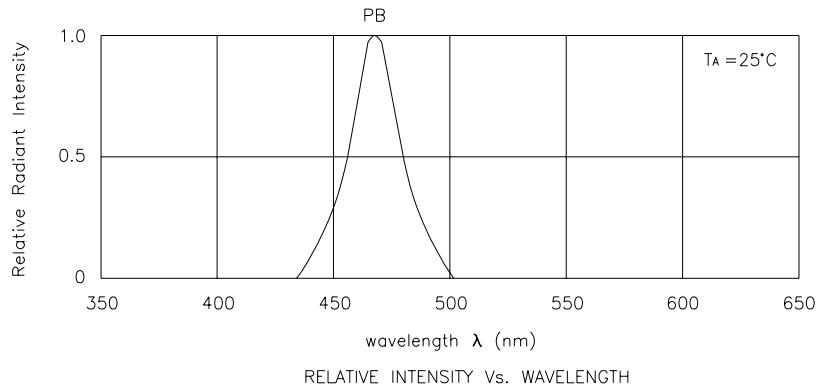
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at T_A=25°C

| Parameter | Blue | Units |
|---------------------------------|----------------|-------|
| Power dissipation | 126 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 160 | mA |
| Reverse Voltage | 5 | V |
| Operating / Storage Temperature | -40°C To +85°C | |

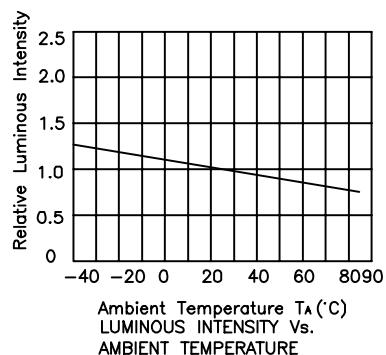
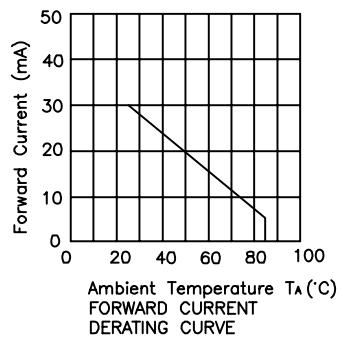
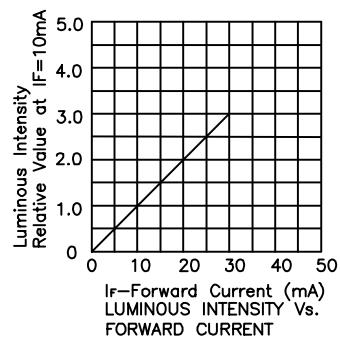
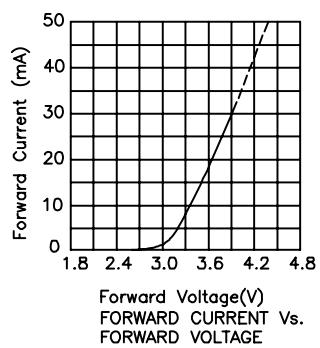
Note:

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



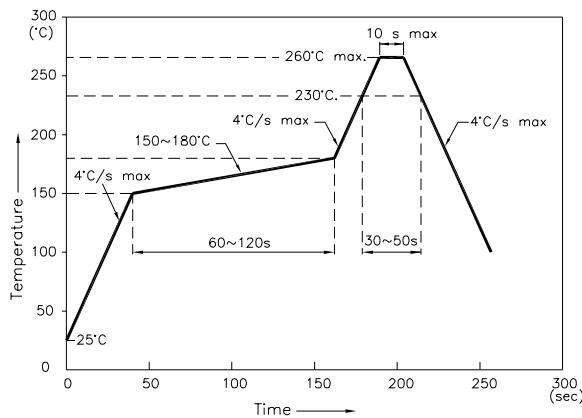
Blue

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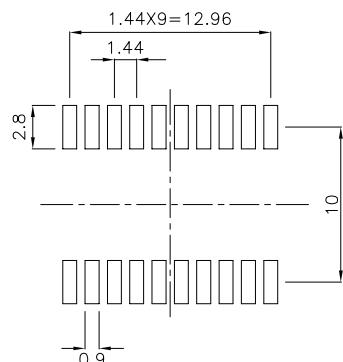
Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



Tape Specifications (Units : mm)

