



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: KCDC56-110

BLUE

Features

- 0.56INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE:200PCS/ REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT

Description

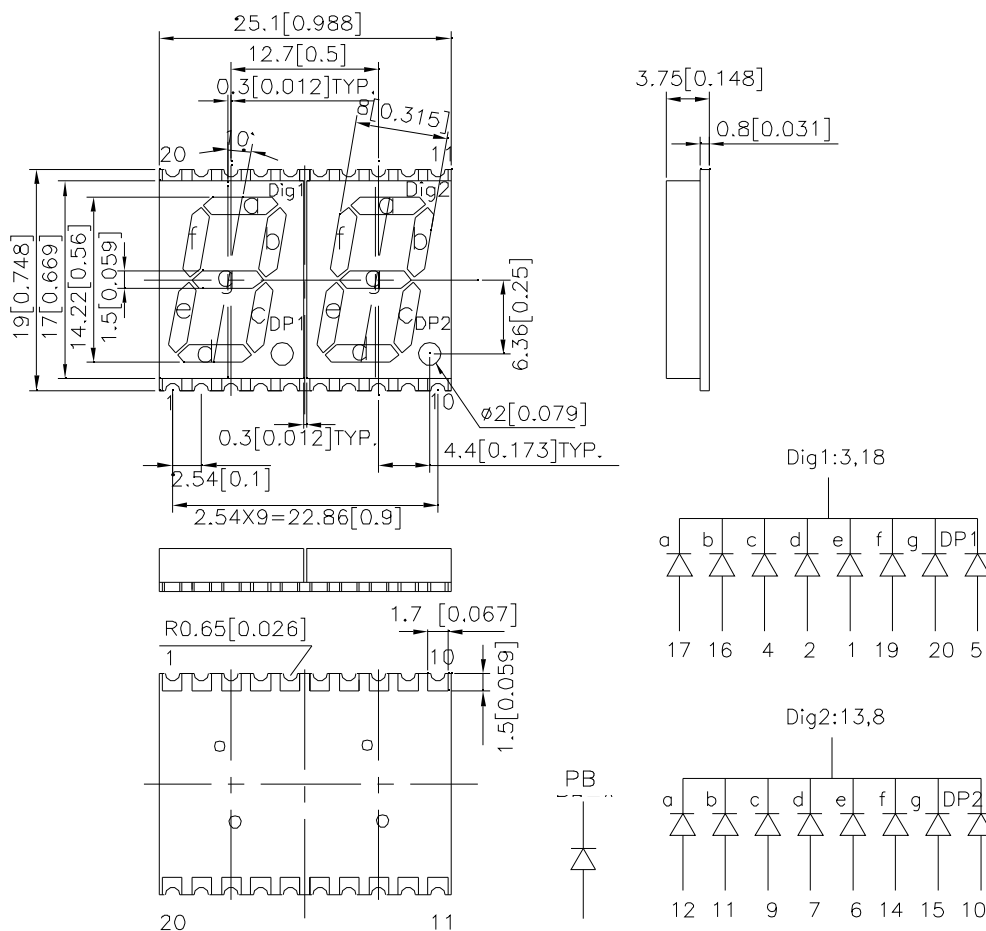
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

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	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
KCDC56-110	BLUE (InGaN)	WHITE DIFFUSED	3000	15800	Common Cathode, Rt. Hand Decimal.

Note:

1. 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	IF=20mA
λ_D [1]	Dominant Wavelength	Blue	470		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	25		nm	IF=20mA
C	Capacitance	Blue	65		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.65	4.2	V	IF=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

Notes:

1.Wavelength: +/-1nm.

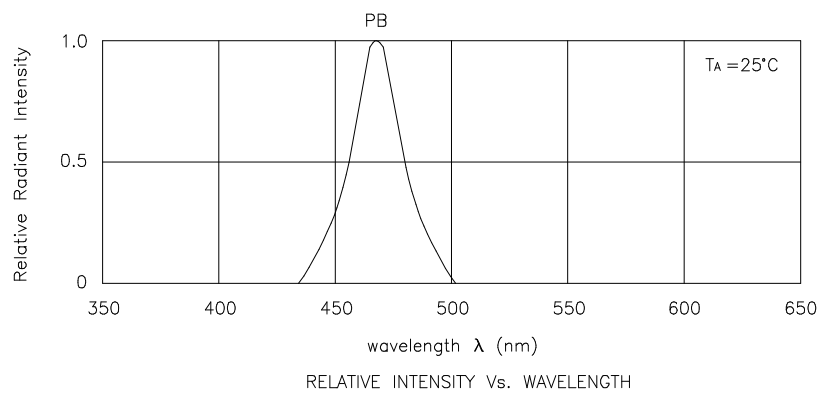
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

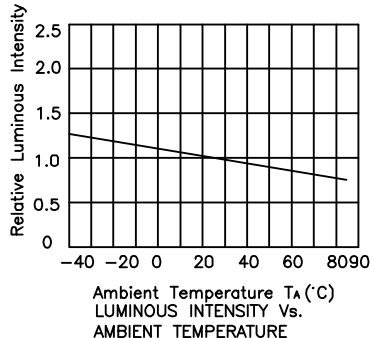
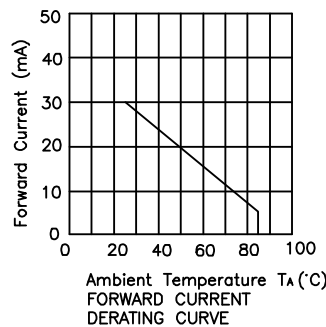
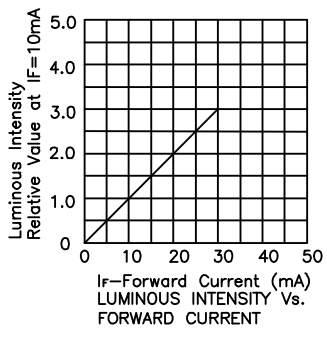
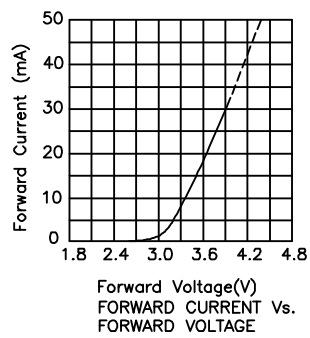
Parameter	Blue	Units
Power dissipation	126	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

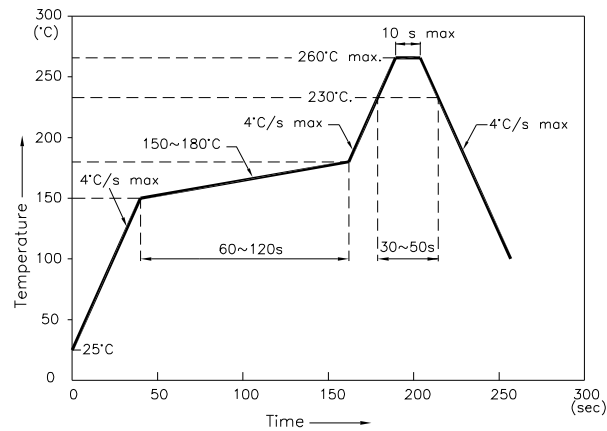


Blue KCDC56-110



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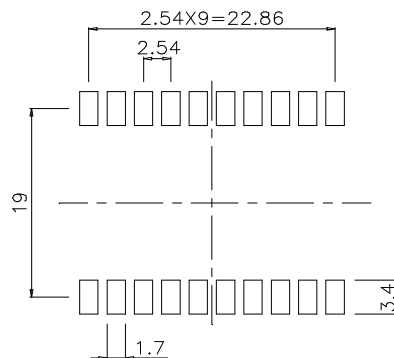
Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. We recommend the reflow temperature $245^{\circ}\text{C} (+/-5^{\circ}\text{C})$. 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)

