# **Kingbright**



ATTENTION OBSERVE PRECAUTIONS FOR HANDLING **FI FCTROSTATIC** DISCHARGE SENSITIVE DEVICES

## **Features**

- 12 PINS.
- HIGH LUMINOUS INTENSITY.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- EXCELLENT ON/OFF CONTRAST.
- EASY MOUNTING ON P.C. BOARD OR SOCKETS.
- SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

### Description

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

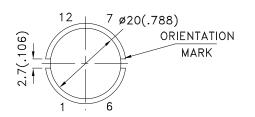
Blue

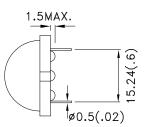
Static electricity and surge damage the LEDS.

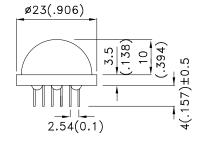
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

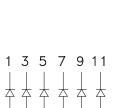
All devices, equipment and machinery must be electrically grounded.

### **Package Dimensions**









2 4 6 8 1012

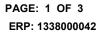


Notes:

1. All dimensions are in millimeters (inches).

- 2. Tolerance is ±0.25(0.01") unless otherwise noted.
- Lead spacing is measured where the leads emerge from the package.
  Specifications are subject to change without notice.

DATE: AUG/22/2007 DRAWN: W.J.Hua



## 20mm BIG LAMP

Part Number: DLC/6MBD

## **Kingbright**

Selection Guide					
Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
DLC/6MBD	Blue (GaN)	BLUE DIFFUSED	7	23.4	120°

Notes:

θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
 Luminous intensity/ luminous Flux: +/-15%.

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

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	430		nm	I⊧=20mA
λD [1]	Dominant Wavelength	Blue	466		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	Blue	60		nm	I⊧=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.8	4.5	V	I⊧=20mA
IR	Reverse Current	Blue		10	uA	VR = 5V

Notes:

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

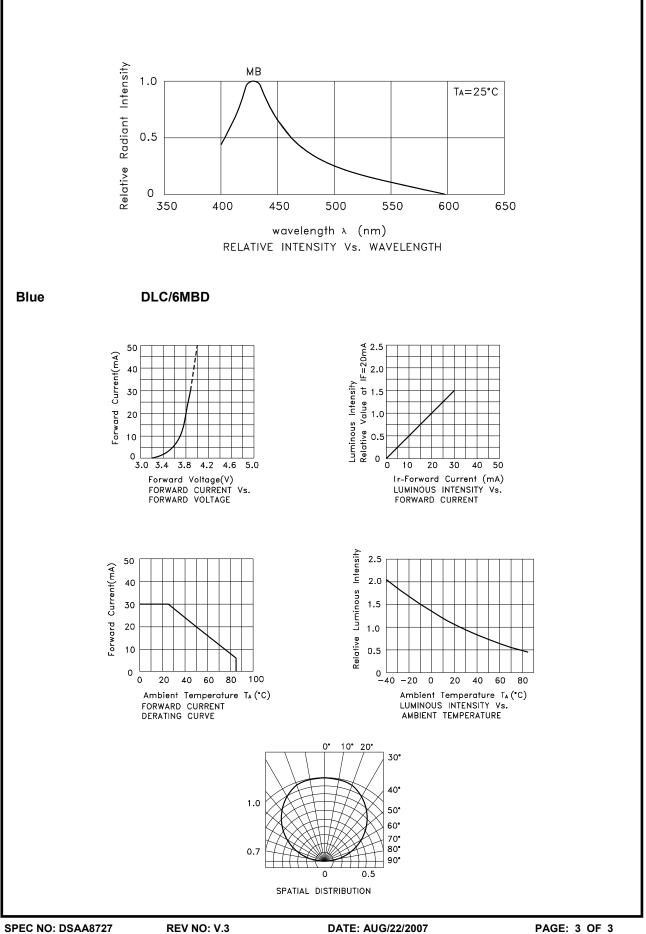
#### Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units		
Power dissipation	135	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	150	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.

## Kingbright



CHECKED: Allen Liu

DATE: AUG/22/2007 DRAWN: W.J.Hua