

## **DATA SHEET**

### 5mm LEDs

1	Order code	Manufacturer code	Description
	55-1480	L-7113MBD	5MM HI.INTENSITY DIFF.BLUE LED (RC)

Emm I CDa	Page 1 of <sub>4</sub>
The enclosed information is believed to be correct, information may change 'without notice' due to	Revision A <sup>4</sup>
product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	12/12/2006

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### T-1 3/4 (5mm) SOLID STATE LAMP



**ATTENTION** 

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

Part Number: L-7113MBD

**BLUE** 

#### **Features**

- •LOW POWER CONSUMPTION.
- ●POPULAR T-1 3/4 DIAMETER PACKAGE.
- •GENERAL PURPOSE LEADS.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •AVAILABLE ON TAPE AND REEL.
- ●RoHS COMPLIANT.

#### **Description**

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

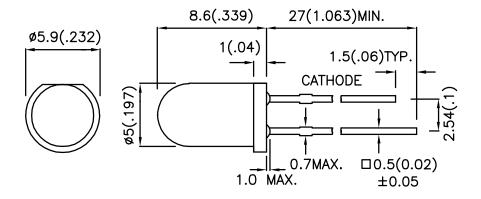
Static electricity and surge damage the LEDS.

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**



#### Notes:

- All dimensions are in millimeters (inches).
   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.

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#### Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20 mA		Viewing Angle [1]
			Min. Typ.		201/2
L-7113MBD	BLUE (GaN)	BLUE DIFFUSED	36	60	20°

- 1. 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
  2. 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 <sub>F</sub> =20mA	
λD [1]	Dominant Wavelength	Blue	466		nm	I <sub>F</sub> =20mA	
Δλ1/2	Spectral Line Half-width	Blue	60		nm	I <sub>F</sub> =20mA	
С	Capacitance	Blue	100		pF	V <sub>F</sub> =0V;f=1MHz	
V <sub>F</sub> [2]	Forward Voltage	Blue	3.8	4.5	V	I <sub>F</sub> =20mA	
I <sub>R</sub>	Reverse Current	Blue		10	uA	V <sub>R</sub> = 5V	

#### Notes:

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

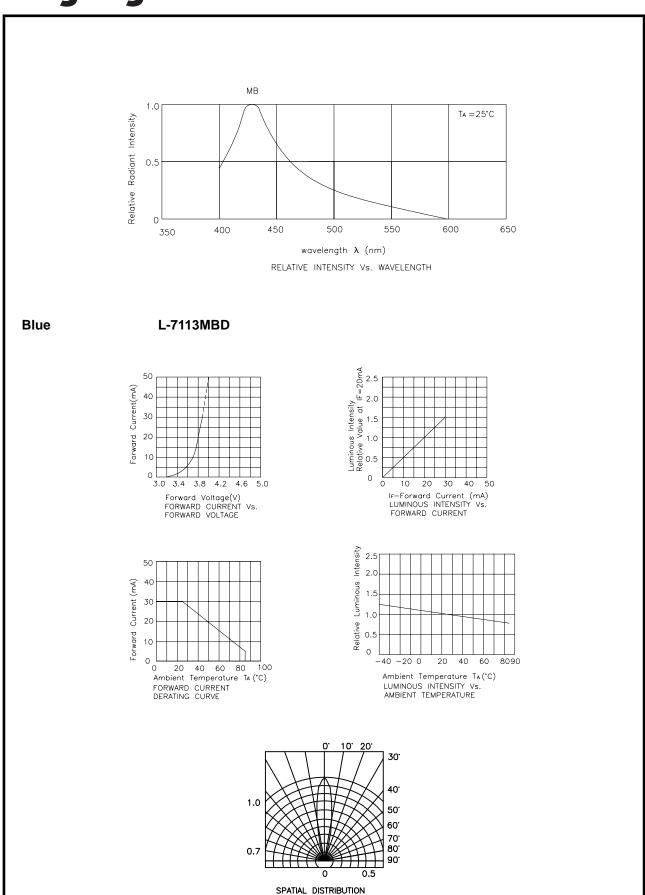
### Absolute Maximum Ratings at Ta=25°C

Parameter	Blue	Units
Power dissipation	105	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 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

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