

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

PRELIMINARY SPEC



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

Part Number: L-7113MBDL-5V

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.
- 5V INTERNAL RESISTOR.
- RoHS COMPLIANT.

### Description

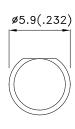
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

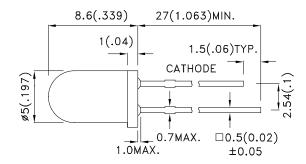
Static electricity and surge damage the LEDS.

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**





- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.4. Specifications are subject to change without notice.





PAGE: 1 OF 3 SPEC NO: DSAH9662 **REV NO: V.1 DATE: DEC/08/2007** APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Ting.Li ERP: 1101009622

# Kingbright

### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) [2] V= 5V		Viewing Angle [1]
			Min.	Тур.	201/2
L-7113MBDL-5V	Blue (GaN)	BLUE DIFFUSED	18	45	20°

- Notes: 1.  $\theta$ 1/2 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	V <sub>F</sub> =5V
λD [1]	Dominant Wavelength	Blue	466		nm	V <sub>F</sub> =5V
Δλ1/2	Spectral Line Half-width	Blue	60		nm	V <sub>F</sub> =5V
lF	Forward Current	Blue	7.5	10	mA	V <sub>F</sub> =5V
lR	Reverse Current	Blue		10	uA	VR = 5V

1.Wavelength: +/-1nm.

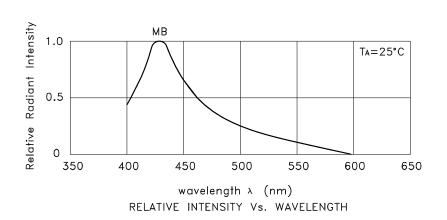
# Absolute Maximum Ratings at TA=25°C

Parameter	Blue	Units
Power dissipation	85	mW
Forward Voltage	6	V
Reverse Voltage	5	V
Operating Temperature	-40°C To +70°C	•
Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [1]	260°C For 3 Seconds	
Lead Solder Temperature [2]	260°C For 5 Seconds	

- 1. 2mm below package base.
- 2. 5mm below package base.

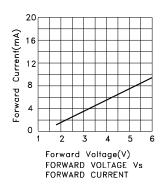
SPEC NO: DSAH9662 **REV NO: V.1** DATE: DEC/08/2007 PAGE: 2 OF 3 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Ting.Li ERP: 1101009622

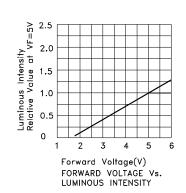
# **Kingbright**

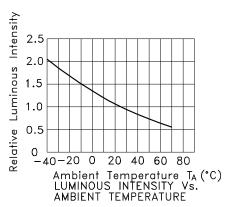


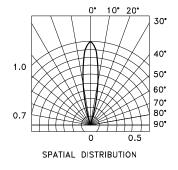
Blue

### L-7113MBDL-5V









SPEC NO: DSAH9662 APPROVED: WYNEC REV NO: V.1 CHECKED: Allen Liu DATE: DEC/08/2007 DRAWN: Ting.Li PAGE: 3 OF 3

ERP: 1101009622