

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



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

L-53MBDL-12V

**BLUE** 

# PRELIMINARY SPEC

#### **Features**

- •LOW POWER CONSUMPTION.
- ●POPULAR T-13/4 DIAMETER PACKAGE.
- •GENERAL PURPOSE LEADS.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •AVAILABLE ON TAPE AND REEL.
- •12V INTERNAL RESISTOR.

## **Description**

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

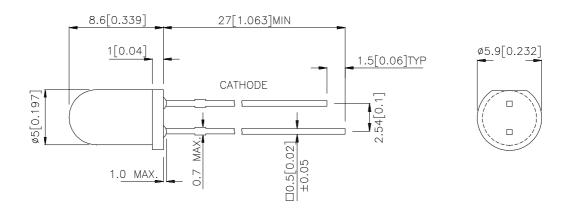
Static electricity and surge damage the LEDS.

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

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

SPEC NO: DSAD6787 REV NO: V.1 DATE: NOV/26/2003 PAGE: 1 OF 3
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# **Kingbright**

### **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) V=12V		Viewing Angle
			Min.	Тур.	2 θ 1/2
L-53MBDL-12V	BLUE (GaN)	BLUE DIFFUSED	12	40	60°

#### Note:

# Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	430		nm	VF=12V
λD	Dominate Wavelength	Blue	466		nm	VF=12V
Δλ1/2	Spectral Line Half-width	Blue	60		nm	VF=12V
I <sub>F</sub>	Forward Current	Blue	7.5	10	mA	VF=12V
I <sub>R</sub>	Reverse Current	Blue		10	uA	VR= 5V

# Absolute Maximum Ratings at Ta=25°C

Parameter	Blue	Units		
Power dissipation	120	mW		
Forward Voltage	14	V		
Reverse Voltage	5	V		
Operating Temperature	-40°C To +70°C			
Storage Temperature	torage Temperature -40°C To +85°C			
Lead Solder Temperature[1] 260°C For 5 Seconds				

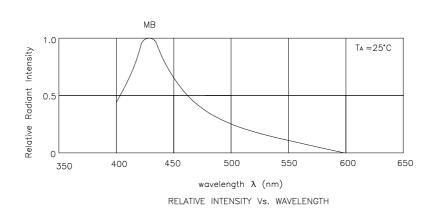
#### Note:

SPEC NO: DSAD6787 REV NO: V.1 DATE: NOV/26/2003 PAGE: 2 OF 3
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Z.Y.YANG

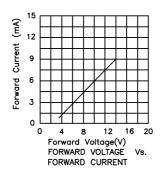
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

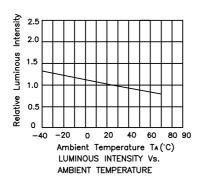
<sup>1. 2</sup>mm below package base.

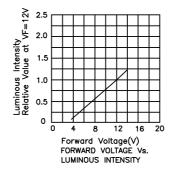
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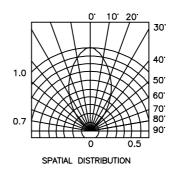


Blue L-53MBDL-12V









SPEC NO: DSAD6787 REV NO: V.1 DATE: NOV/26/2003 PAGE: 3 OF 3
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