

## **Super Bright Blue HLMP-2B85**

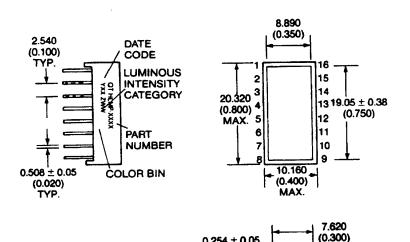
#### PACKAGE DIMENSIONS

#### DESCRIPTION

The HLMP-2B85 is, large area light bar utilizing GaN on SiC LED chip.

#### **FEATURES**

19mm by 9mm light emitting area Low power requirement.
Wide 100° viewing angle.
High brightness and contrast
X-Y stack able.
Easy mounting on P.C. board.



NOTE:

Dimensions are in mm (inch). Tolerances are  $\pm$  0.25 (0.1) unless otherwise noted. All pins are 0.5 (.02).

#### MODEL NUMBER

Part Number

<u>Colour</u>

**Description** 

HLMP-2B85

Blue

Individual LED addressable.

(For other color options, contact your local area Sales Office)



## **ABSOLUTE MAXIMUM RATING** (T<sub>A</sub> = 25°C unless otherwise specified)

		Blue	Units
Peak forward current per segment		100	mA
(Duty cycle 1/10, 1KHz)			
Continous IF per segment		30	mA
Power dissipation per segment		150*	mW
*Derate linearly from 25°C		2.5	mW/°C
Reverse voltage VR per segments	Minimum 5V	Typically 10V	Volts
Operating and storage temperature ra	nge		25°C to +85°C
Soldering time at 260°C			3 sec
(1/16" below seating plane)			
<b>Electrostatic Discharge Threshold (HE</b>	3M)		200 Volts
ESD is measured by simulating ESD using a redesigned to approximate the ESD threshold sh	apid avalanche energ	y test (RAET). The RAE	

# **ELECTRO - OPTICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise specified)

	Blue	Test Condition
Luminous Intensity/Dot		
Digit average (Typical)	3600ucd	$I_F = 20mA$
Forward voltage (V <sub>F</sub> )		
typical	5.0V	$I_F = 20 \text{ mA}$
maximum	5.5V	$I_F = 20 \text{ mA}$
Peak wavelength (nm)	430nm	$I_F = 20 \text{ mA}$
Spectral line half width (nm)	65nm	I <sub>F</sub> = 20mA
Reverse breakdown voltage V <sub>R</sub>	10V (typically)	I <sub>R</sub> = 100uA

## **SPECIAL HANDLING INSTRUCTIONS:**

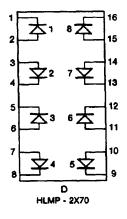
PLEASE NOTE - THIS DEVICE IS SENSITIVE TO STATIC DISCHARGE - TAKE ESD PRECAUTIONS WHEN HANDLING THIS COMPONENT TO PREVENT FAILURE.



### **PIN CONNECTION: HLMP-2B85**

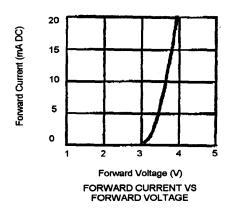
Pin	Connection
1	Cathode LED 1
2	Anode LED 1
3	Anode LED 2
4	Cathode LED 2
5	Cathode LED 3
6	Anode LED 3
7	Anode LED 4
8	Cathode LED 4
9	Cathode LED 5
10	Anode LED 5
11	Anode LED 6
12	Cathode LED 6
13	Cathode LED 7
14	Anode LED 7
15	<b>Anode LED 8</b>
16	Cathode LED 8

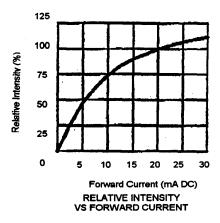
**SCHEMATIC: : HLMP-2B85** 

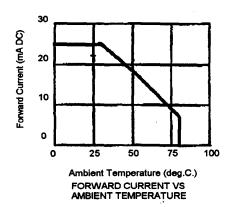


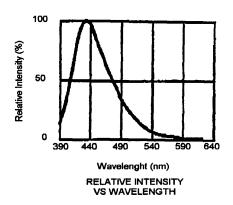


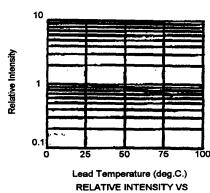
# **GRAPHICAL DETAIL: Blue** (T<sub>A</sub> = 25°C unless otherwise specified)



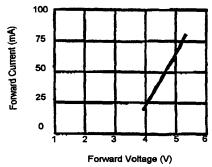








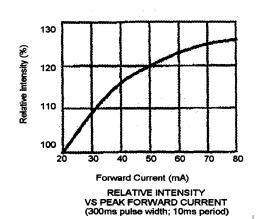
RELATIVE INTENSITY VS LEAD TEMPERATURE (Pulse 20mA; 300us pulse, 10ms period)

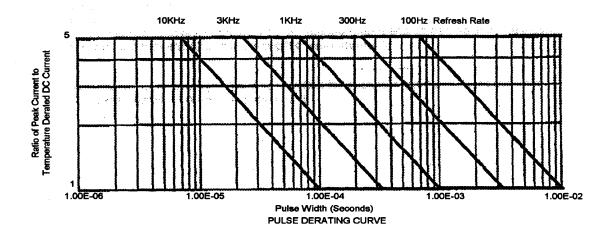


Forward Voltage (V)
FORWARD CURRENT
VS PEAK FORWARD VOLTAGE



**GRAPHICAL DETAIL: Blue continued** (T<sub>A</sub> = 25°C unless otherwise specified)







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- A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.