

### Super Bright Blue HLMP-2B85

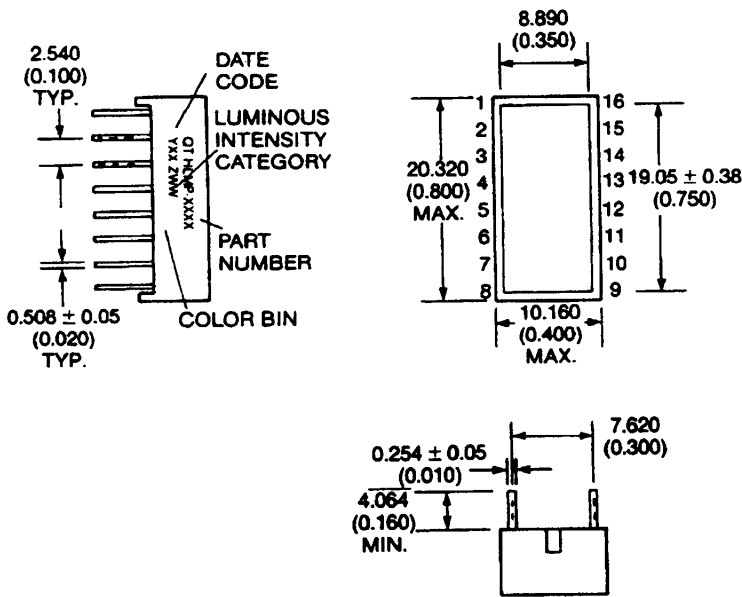
#### PACKAGE DIMENSIONS

#### 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 0.6 (0.02).

#### MODEL NUMBER

<u>Part Number</u>	<u>Colour</u>	<u>Description</u>
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 (Duty cycle 1/10, 1KHz)	100	mA
Continuous 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 range.....	-25°C to +85°C	
Soldering time at 260°C..... (1/16" below seating plane)	3 sec	
Electrostatic Discharge Threshold (HBM).....	200 Volts	

ESD is measured by simulating ESD using a rapid avalanche energy test (RAET). The RAET procedures are designed to approximate the ESD threshold shown. See Special Handling below.

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

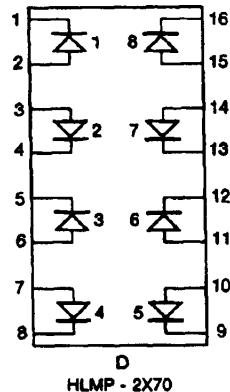
	Blue	Test Condition
Luminous Intensity/Dot Digit average (Typical)	3600ucd	I <sub>F</sub> = 20mA
Forward voltage (V <sub>F</sub> ) typical	5.0V	I <sub>F</sub> = 20 mA
maximum	5.5V	I <sub>F</sub> = 20 mA
Peak wavelength (nm)	430nm	I <sub>F</sub> = 20 mA
Spectral line half width (nm)	65nm	I <sub>F</sub>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

### SPECIAL HANDLING INSTRUCTIONS:

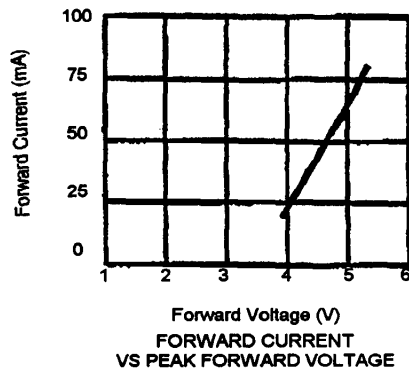
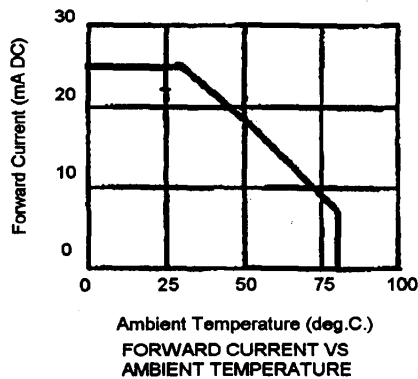
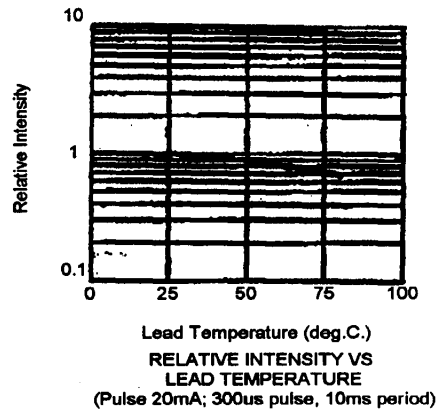
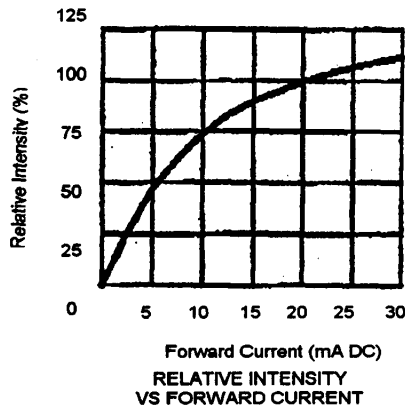
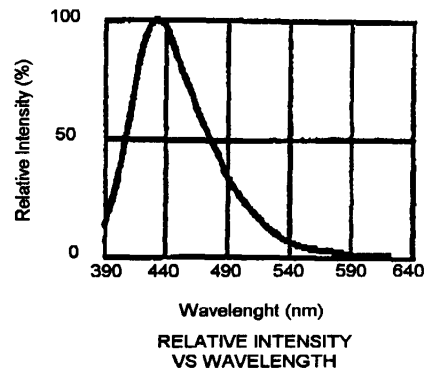
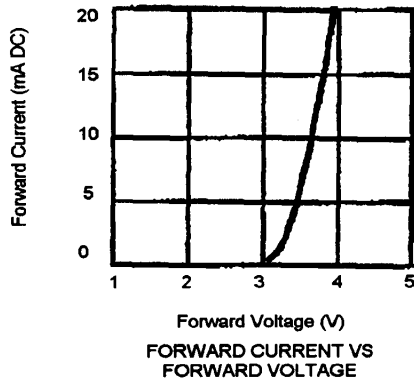
**PLEASE NOTE - THIS DEVICE IS SENSITIVE TO STATIC DISCHARGE - TAKE ESD PRECAUTIONS WHEN HANDLING THIS COMPONENT TO PREVENT FAILURE.**

**PIN CONNECTION: HLMP-2B85**

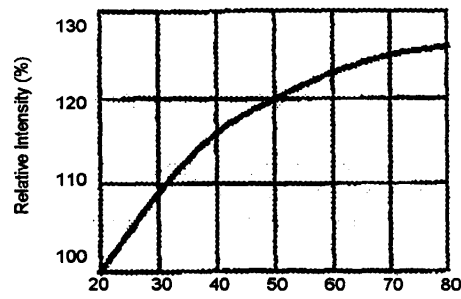
Pin	Connection
1	Cathode LED 1
2	Anode LED 1
3	Anode LED 2
4	Cathode LED 2
5	Cathode LED 3
6	Anode LED 3
7	Anode LED 4
8	Cathode LED 4
9	Cathode LED 5
10	Anode LED 5
11	Anode LED 6
12	Cathode LED 6
13	Cathode LED 7
14	Anode LED 7
15	Anode LED 8
16	Cathode LED 8

**SCHEMATIC: : HLMP-2B85**

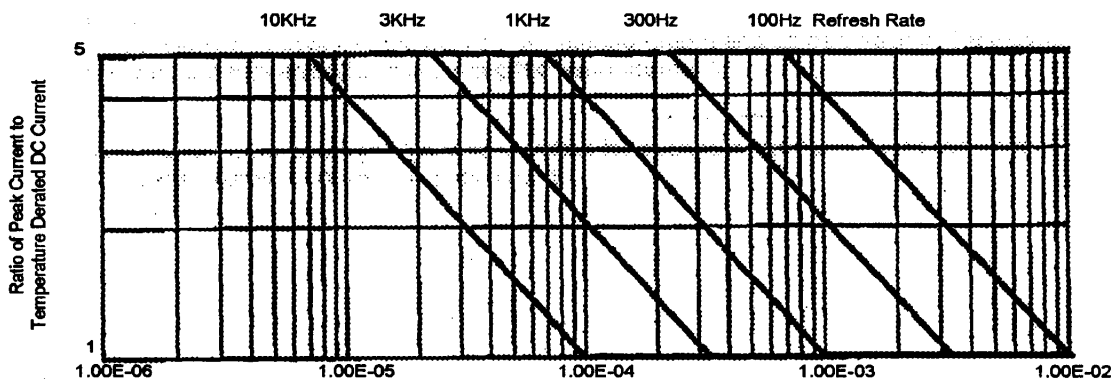
### GRAPHICAL DETAIL: Blue ( $T_A = 25^\circ\text{C}$ unless otherwise specified)



**GRAPHICAL DETAIL: Blue continued** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)



RELATIVE INTENSITY  
VS PEAK FORWARD CURRENT  
(300ms pulse width; 10ms period)



PULSE DERATING CURVE

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2. 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.