



# PRODUCT SPECIFICATION

**Model No: CSM-58111B7/58121B7**

## Descriptions:

- 1.4 Inch 5X8 Dot-Matrix Display
- Dot Pitch 4.7mm
- CSM-58111: Column Anode, Row Cathode
- CSM-58121: Column Cathode, Row Anode
- Emitting Color: Super Bright Blue



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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**Model No: CSM-58111/58121B7**

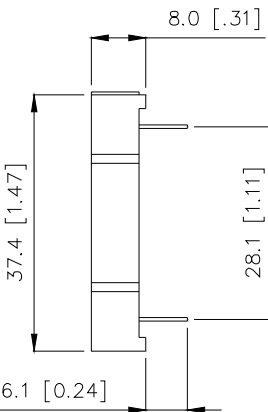
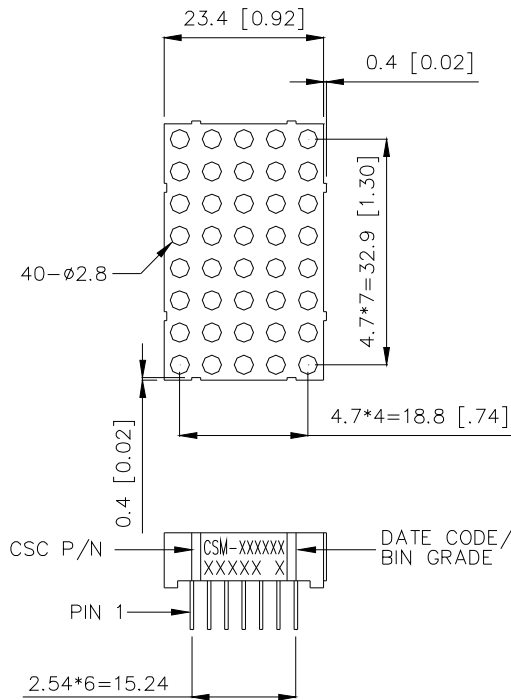
**Features -**

1. 1.4 inch (35.7mm) Matrix height.
2. Case mold type.
3. RoHs compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

Part No.	Chip		Column	Row
	Material	Emitted Color		
<b>CSM-58111B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Anode</b>	<b>Cathode</b>
<b>CSM-58121B7</b>	<b>InGaN</b>	<b>Super Bright Blue</b>	<b>Cathode</b>	<b>Anode</b>

**Package Dimensions -**



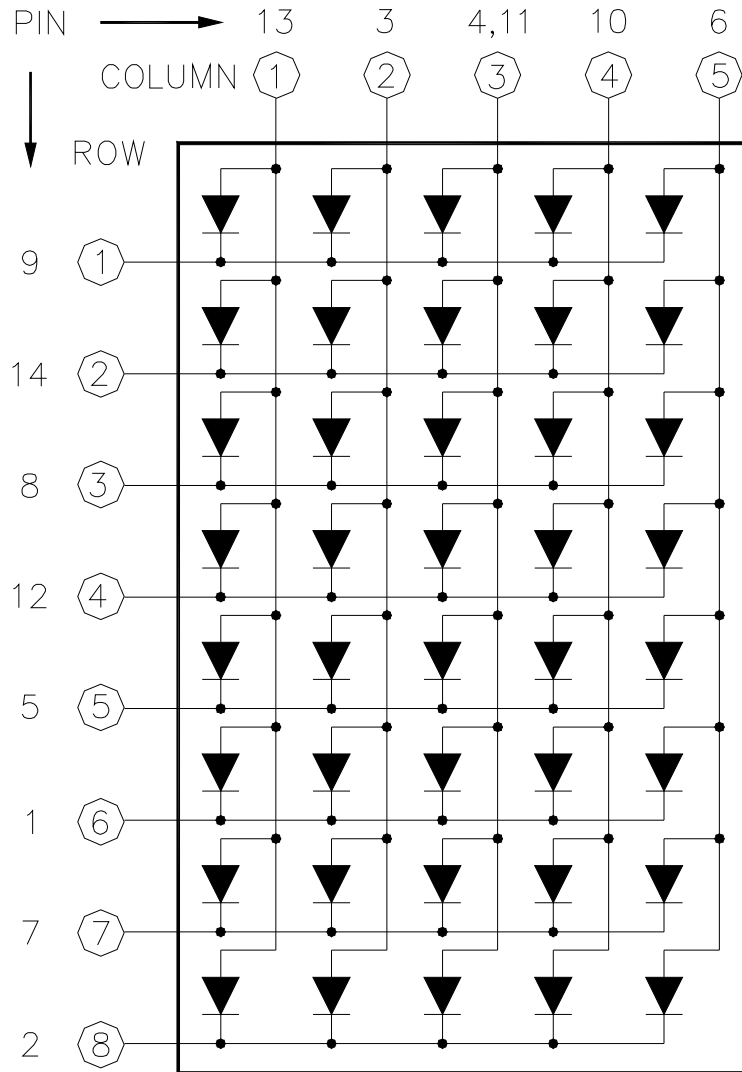
**NOTE:**

- 1 All pins are  $\phi$ 0.5(.02).
- 2 Dimension in millimeters (inch), tolerance is  $\pm$ 0.25 (.01) unless otherwise noted.



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Internal Circuit Diagrams -



CSM-58111 Column Anode, Row Cathode.  
(CSM-58121 Column Cathode, Row Anode.)



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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	<b>Pd</b>	120	mW
Continuous Forward Current Per Dice	<b>IAF</b>	30	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	<b>IPF</b>	100	mA
Derating Linear From 25°C Per Dice	-	0.4	mA/°C
Reverse Voltage Per Dice	<b>VR</b>	5	V
Operating Temp.	<b>Topr</b>	-35 ~ +85	°C
Storage Temp.	<b>Tstg</b>	-35 ~ +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			

■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	<b>VF</b>	-	3.3	4	V	IF=20mA
Luminous Intensity Per Segment	<b>Iv</b>	-	25	-	mcd	IF=10mA
Dominant Wavelength	<b>λd</b>	-	470	-	nm	IF=20mA
Spectrum Radiation Bandwidth	<b>Δλ</b>	-	30	-	nm	IF=20mA
Reverse Current	<b>IR</b>	-	-	50	μA	VR=5V
Luminous Intensity Matching Ratio	<b>IV-m</b>	-	-	2:1	-	IF=10mA



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**Typical Electrical / Optical Characteristics Curves -**

**(Ta = 25°C Unless Otherwise Noted)**

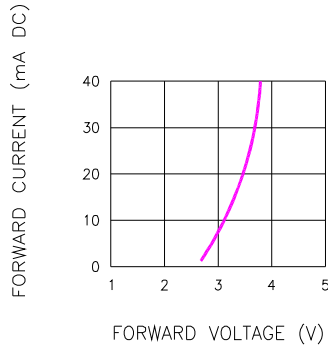


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

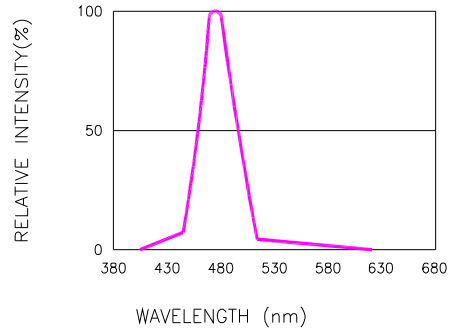


Fig.2 RELATIVE INTENSITY VS. WAVELENGTH

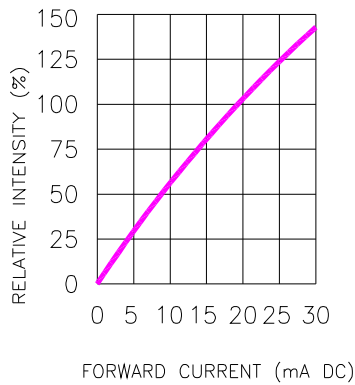


Fig.3 RELATIVE INTENSITY VS. FORWARD CURRENT

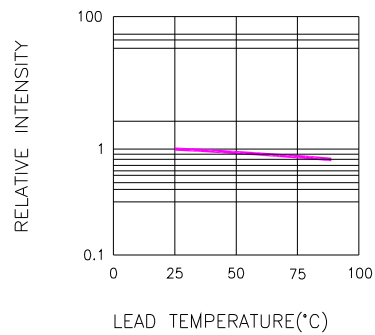


Fig.4 RELATIVE INTENSITY VS. LEAD TEMPERATURE  
(PULSED 20 mA; 300us PULSE, 10ms PERIOD)

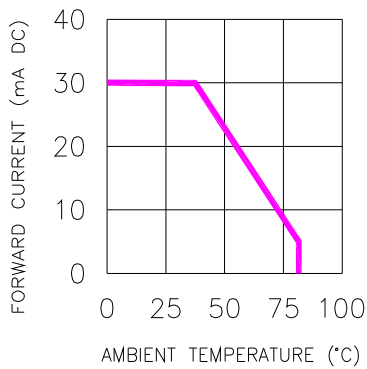


Fig.5 FORWARD CURRENT VS. AMBIENT TEMPERATURE

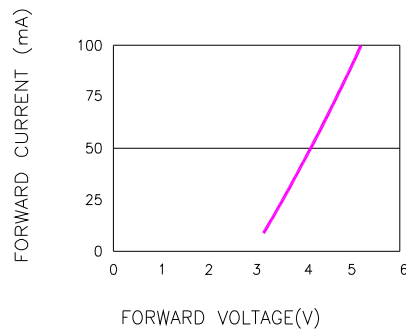


Fig.6 PEAK FORWARD VOLTAGE VS. FORWARD (100us TEST PULSE, 1% DUTY CYCLE)