



# PRODUCT SPECIFICATION

**Model No : CSM-57131E/CSM-57141E**

Descriptions:
<ul style="list-style-type: none"> <li>• 1.2Inch Dot-Matrix Display</li> <li>• 5*7 Array with X-Y Select.</li> <li>• CSM-57131: Column Anode, Row Cathode</li> <li>• CSM-57141: Column Cathode, Row Anode</li> <li>• Emitting Color: Orange</li> </ul>



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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**Model No : CSM-57131E/CSM-57141E**

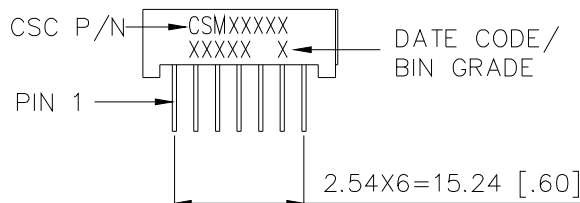
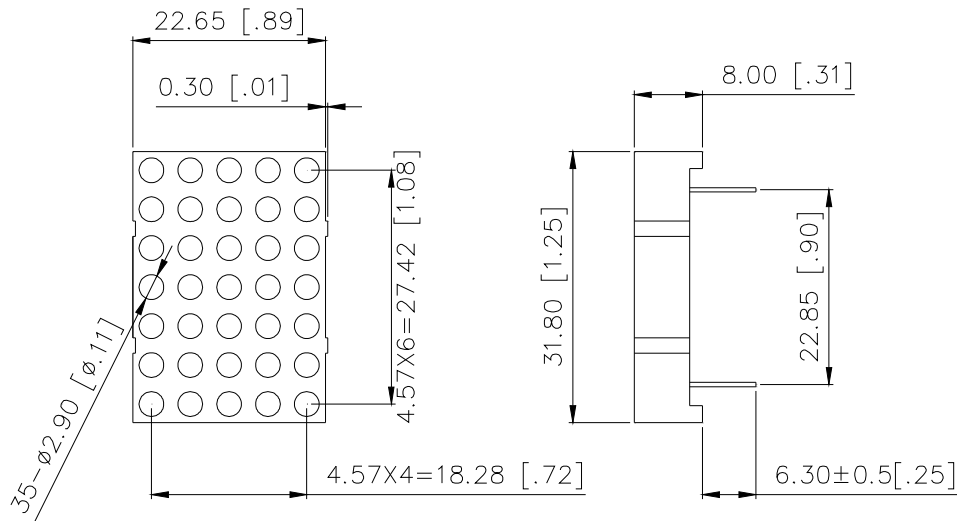
**Features -**

1. 1.2 inch (30.3mm) 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		Description	
	Material	Emitted Color	Column	Row
CSM-57131E	GaAsP	Orange	Anode	Cathode
CSM-57141E			Cathode	Anode

**Package Dimensions -**



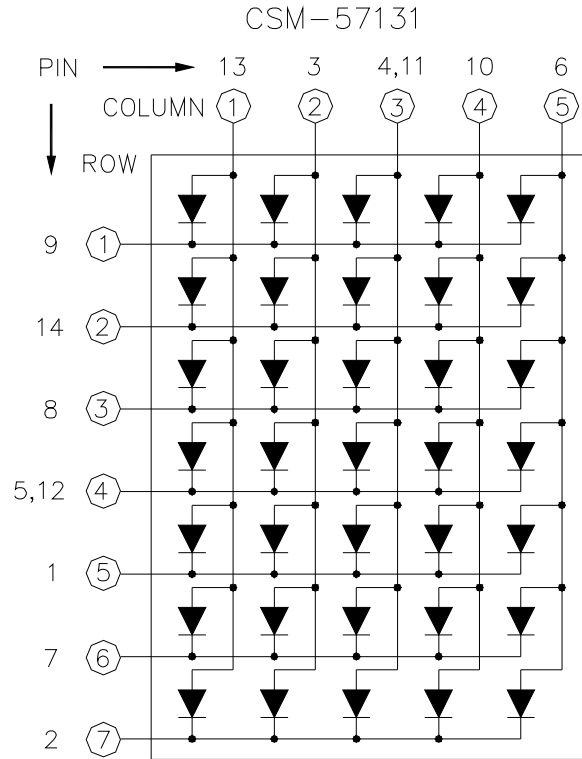
**NOTE:**

- 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-57131			
PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	Cathode Row 5	8	Cathode Row 3
2	Cathode Row 7	9	Cathode Row 1
3	Anode Column 2	10	Anode Column 4
4	Anode Column 3	11	Anode Column 3
5	Cathode Row 4	12	Cathode Row 4
6	Anode Column 5	13	Anode Column 1
7	Cathode Row 6	14	Cathode Row 2

CSM-57141			
PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	Anode Row 5	8	Anode Row 3
2	Anode Row 7	9	Anode Row 1
3	Cathode Column 2	10	Cathode Column 4
4	Cathode Column 3	11	Cathode Column 3
5	Anode Row 4	12	Anode Row 4
6	Cathode Column 5	13	Cathode Column 1
7	Anode Row 6	14	Anode Row 2



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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	PAD	70	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	IPF	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-35 ~ +85	°C
Storage Temp.	Tstg	-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	VF	-	2.1	2.8	V	IF=20mA
Luminous Intensity Per Segment	Iv	-	4200	-	ucd	IF=10mA
Peak Emission Wavelength	$\lambda_p$	-	632	-	nm	IF=20mA
Dominant Wavelength	$\lambda_d$	-	624	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	35	-	nm	IF=20mA
Reverse Current	IR	-	-	100	$\mu A$	VR=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	Ip=80mA 1/16Duty



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**Typical Electrical / Optical Characteristics Curves -**

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

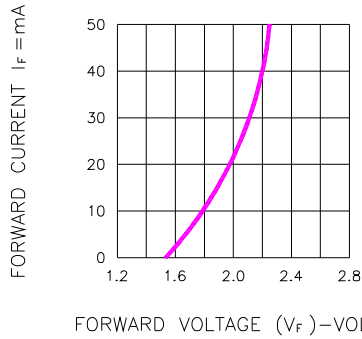


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

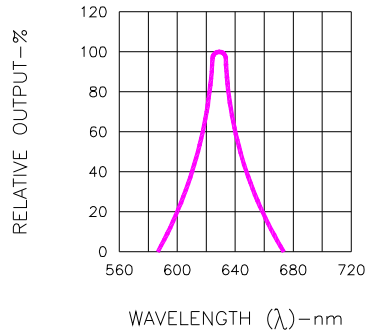


Fig.2 SPECTRAL RESPONSE

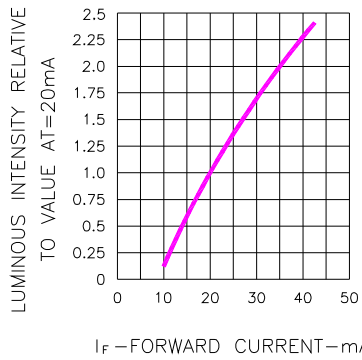


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

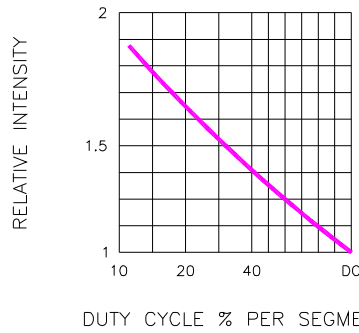


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

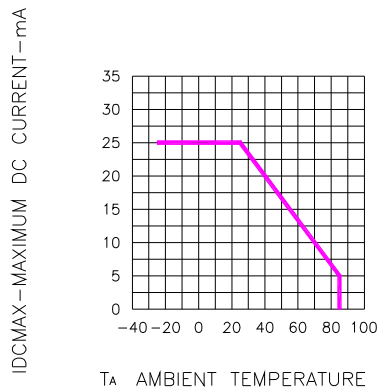


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

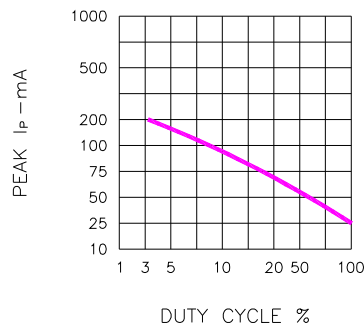


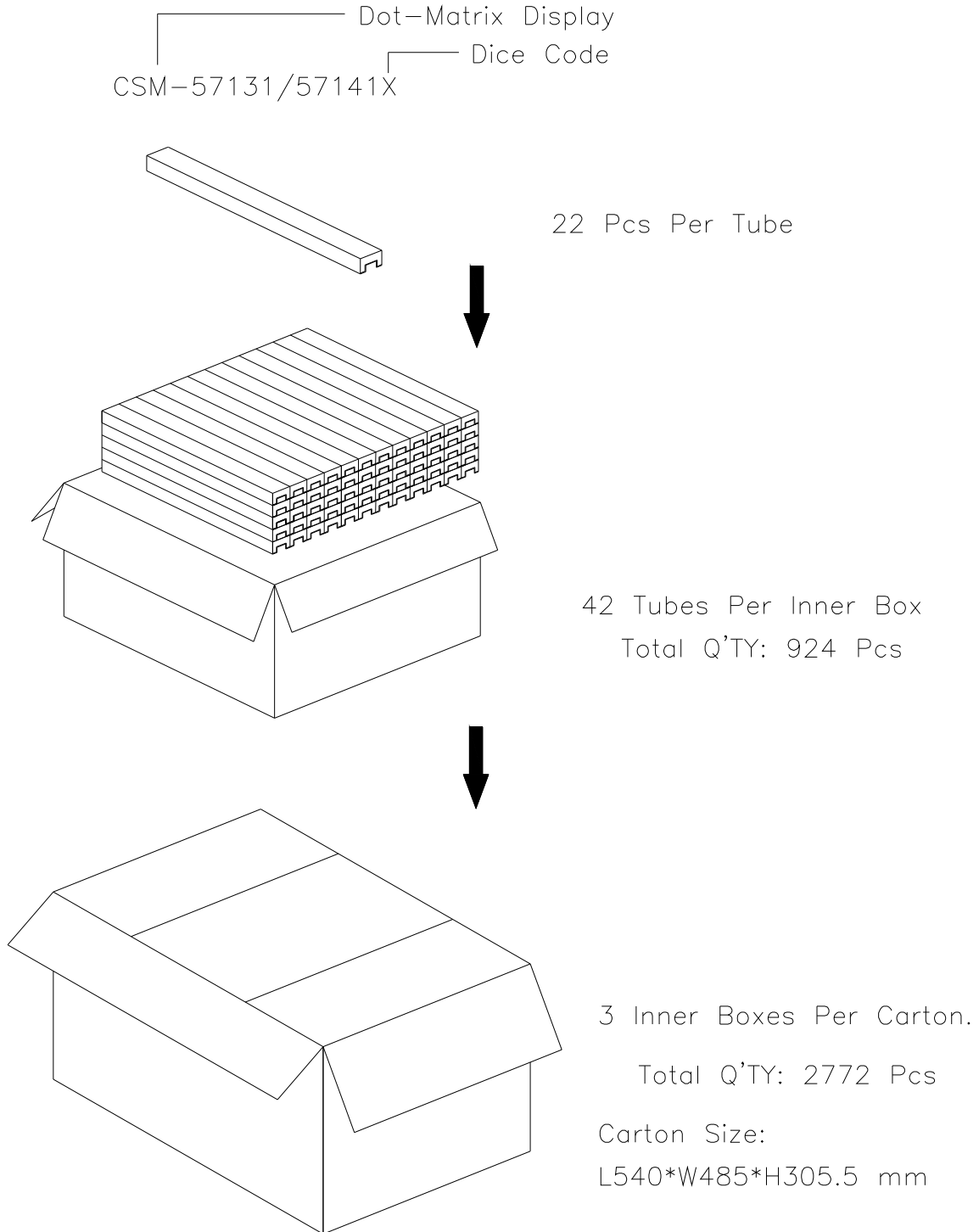
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



Spec. No.	PS-ND-0710
Rev.	A

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■ Package Dimensions



Note: The specifications are subject to change without notice. Please contact us for updated information