



# PRODUCT SPECIFICATION

**Model No : CSM-57312G/CSM-57322G**

Descriptions:
<ul style="list-style-type: none"> <li>• 3.0Inch Dot-Matrix Display</li> <li>• Dot Pitch 11.43mm</li> <li>• 5*7 Array with X-Y Select.</li> <li>• CSM-57312: Column Anode, Row Cathode</li> <li>• CSM-57322: Column Cathode, Row Anode</li> <li>• Emitting Color: Yellow-Green</li> </ul>



CUSTOMER APPROVED	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURES			

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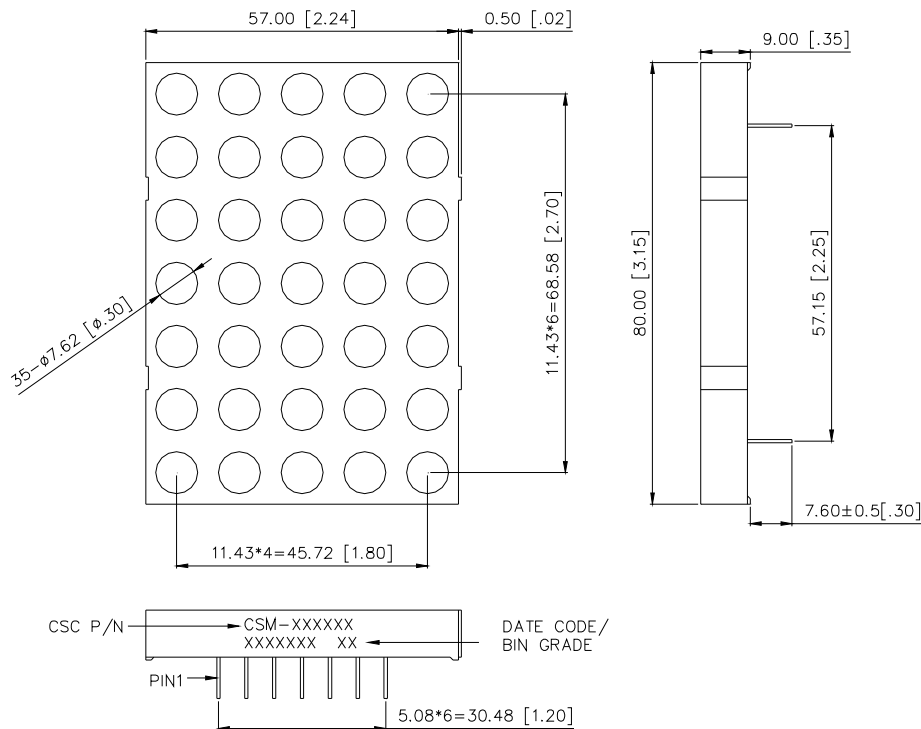
**■ Features -**

1. 3.0 inch (76.2mm) 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-57312G	GaP	Yellow-Green	Anode	Cathode
CSM-57322G			Cathode	Anode

**■ Package Dimensions -**



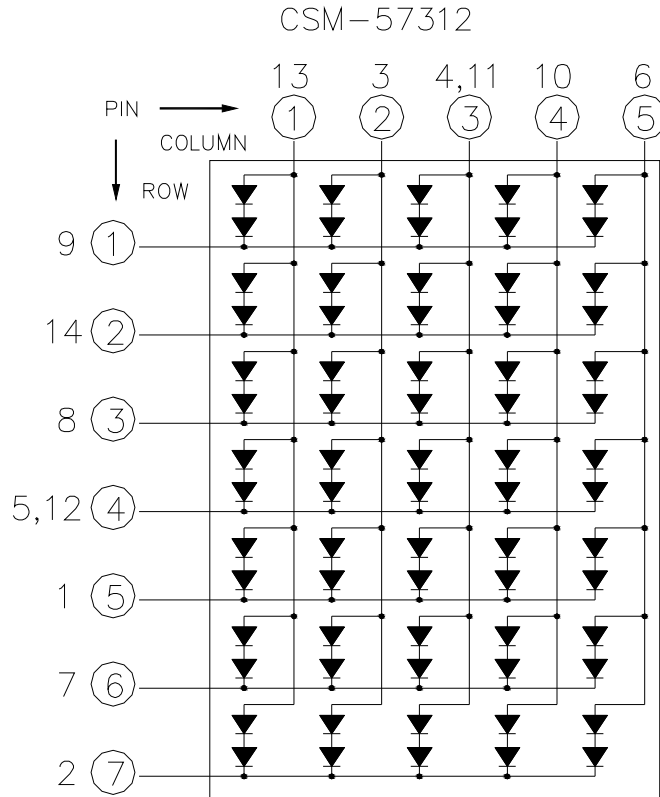
**NOTE:**

- 1 All pins are  $\phi 0.6$  (.02).
- 2 All dimensions are in millimeters (inch), tolerance is  $\pm 0.25$  (.01) unless otherwise noted.



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**Internal Circuit Diagrams -**



CSM-57312		CSM-57322	
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



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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	<b>Pd</b>	70	mW
Continuous Forward Current Per Dice	<b>IAF</b>	25	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	<b>IPF</b>	90	mA
Derating Linear From 25°C Per Dice	-	0.33	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>	-	4.2(2.1)	5.6(2.8)	V	IF=20mA
Luminous Intensity Per Segment	<b>Iv</b>	-	11	-	mcd	IF=10mA
Peak Emission Wavelength	$\lambda_p$	-	568	-	nm	IF=20mA
Dominant Wavelength	$\lambda_d$	-	572	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	30	-	nm	IF=20mA
Reverse Current	<b>IR</b>	-	-	100	$\mu A$	VR=10V
Luminous Intensity Matching Ratio	<b>IV-m</b>	-	-	2:1	-	Ip=80mA 1/16Duty



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

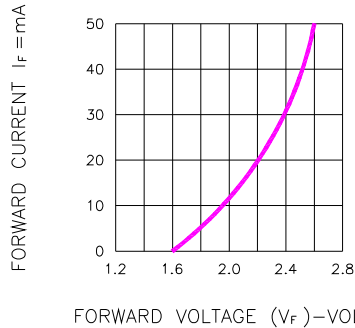


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

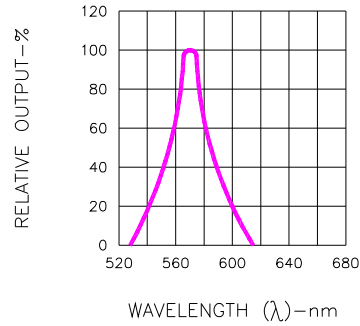


Fig.2 SPECTRAL RESPONSE

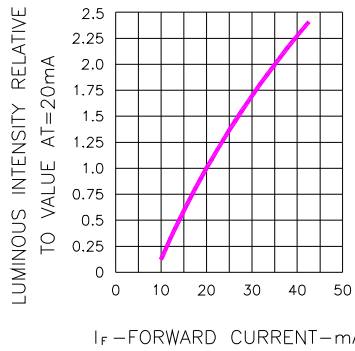


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

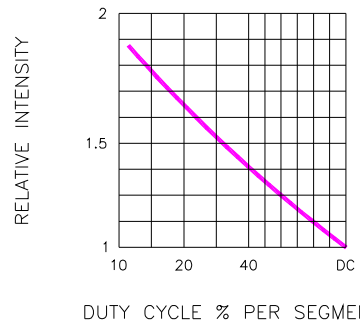


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

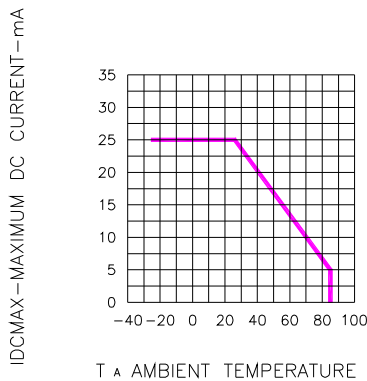


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

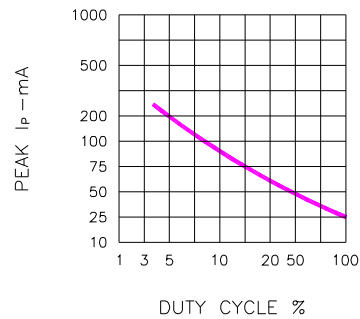


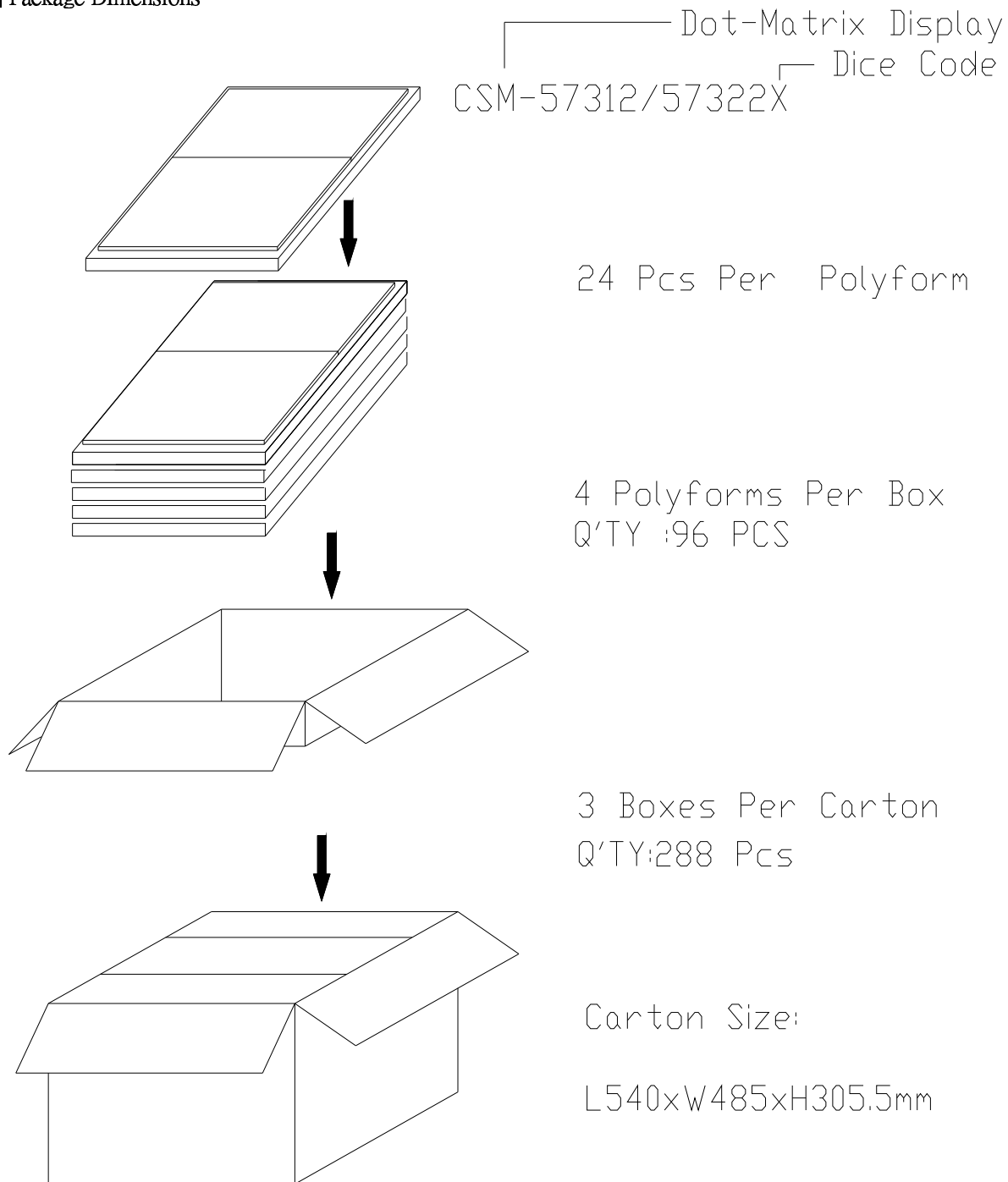
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



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.