



PRODUCT SPECIFICATION

Model No : CSM-57312T9/CSM-57322T9

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



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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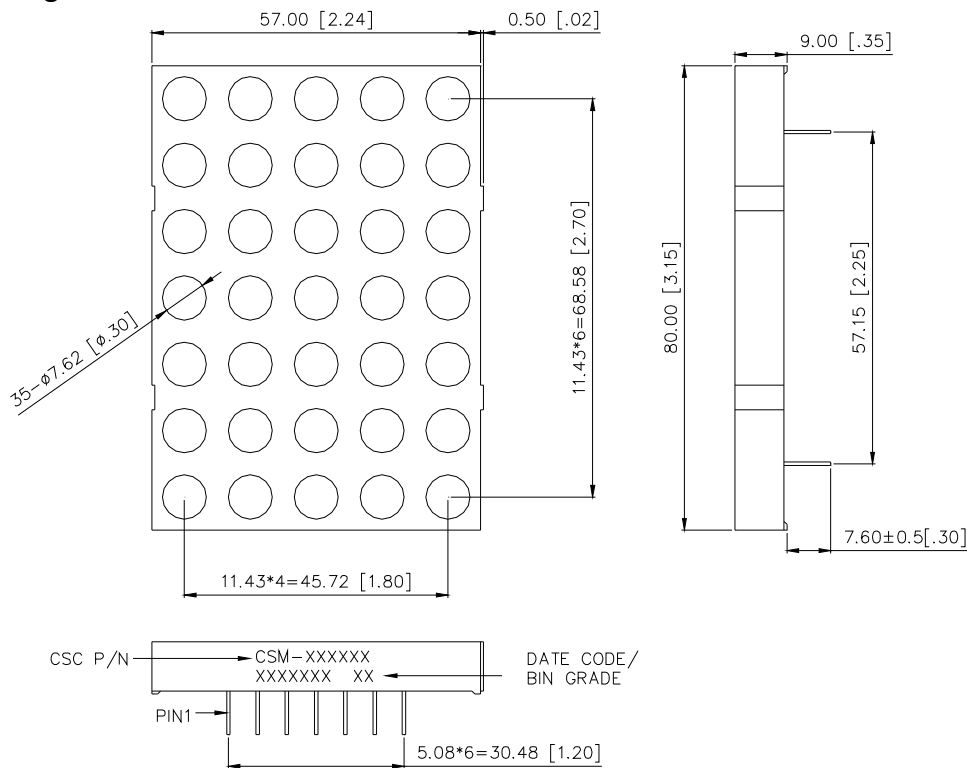
■ Features -

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-57312T9	AlGaInp	Super-Bright Yellow	Anode	Cathode
CSM-57322T9			Cathode	Anode

■ Package Dimensions -



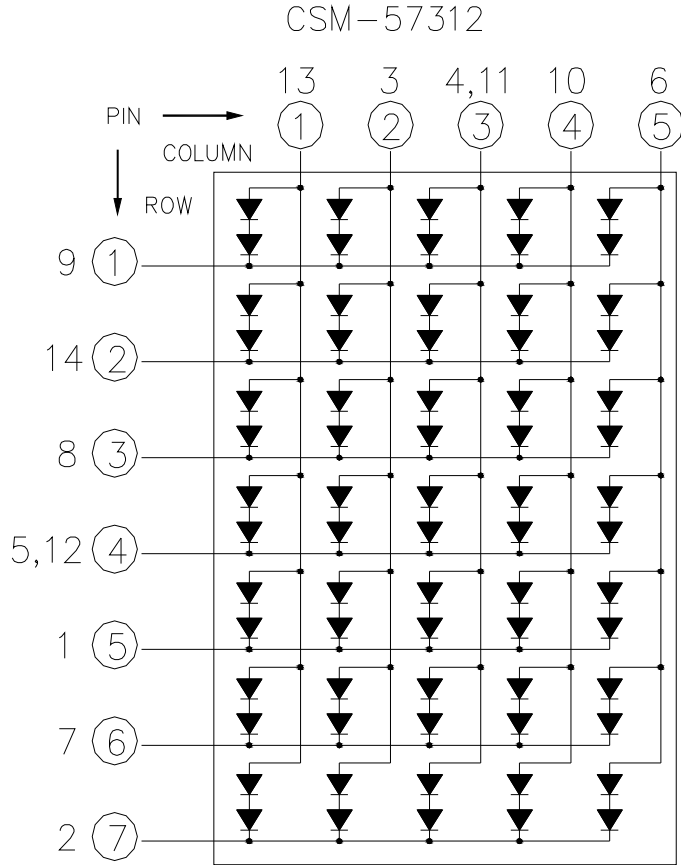
NOTE:

- 1 All pins are Ø0.6(.02).
- 2 All dimensions are in millimeters (inch), tolerance is ±0.25 (.01) unless otherwise noted.



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Internal Circuit Diagrams -



CSM-57312			CSM-57322		
PIN NO.	FUNCTION	PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	Cathode Row 5	8	Cathode Row 3	1	Anode Row 5
2	Cathode Row 7	9	Cathode Row 1	2	Anode Row 7
3	Anode Column 2	10	Anode Column 4	3	Cathode Column 2
4	Anode Column 3	11	Anode Column 3	4	Cathode Column 3
5	Cathode Row 4	12	Cathode Row 4	5	Anode Row 4
6	Anode Column 5	13	Anode Column 1	6	Cathode Column 5
7	Cathode Row 6	14	Cathode Row 2	7	Anode Row 6
				8	Anode Row 3
				9	Anode Row 1
				10	Cathode Column 4
				11	Cathode Column 3
				12	Anode Row 4
				13	Cathode Column 1
				14	Anode Row 2



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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	P_{AD}	70	mW
Continuous Forward Current Per Dice	I_{AF}	25	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	I_{PF}	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	V_R	5	V
Operating Temp.	T_{opr}	-35 ~ +85	°C
Storage Temp.	T_{stg}	-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	V_F	-	4.2(2.1)	5.6(2.8)	V	I _F =20mA
Luminous Intensity Per Segment	I_v	-	60	-	mcd	I _F =10mA
Peak Emission Wavelength	λ_p	-	592	-	nm	I _F =20mA
Dominant Wavelength	λ_d	-	590	-	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δ λ	-	20	-	nm	I _F =20mA
Reverse Current	I_R	-	-	100	μA	V _R =10V
Luminous Intensity Matching Ratio	I_{V-m}	-	-	2:1	-	I _p =80mA 1/16Duty



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Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

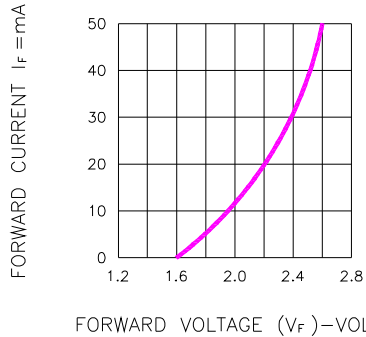


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

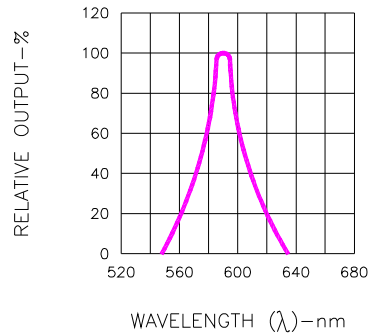


Fig.2 SPECTRAL RESPONSE

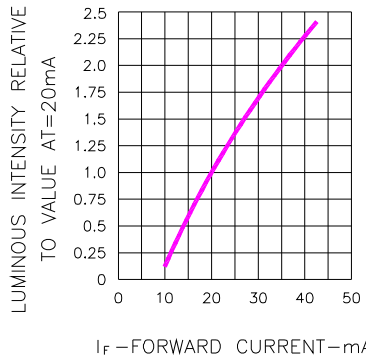


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

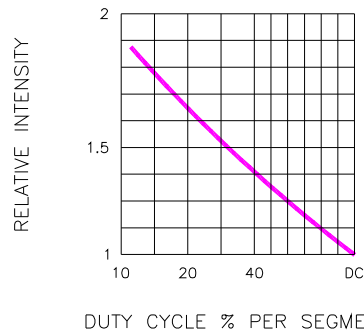


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

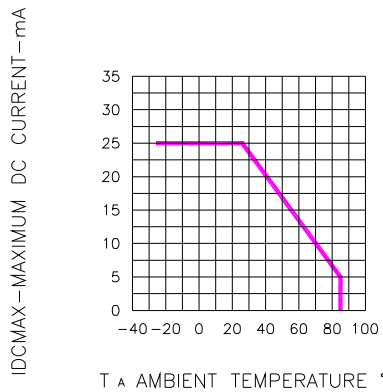


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

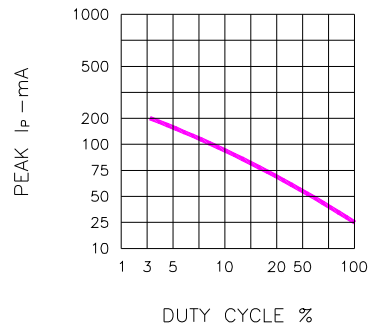


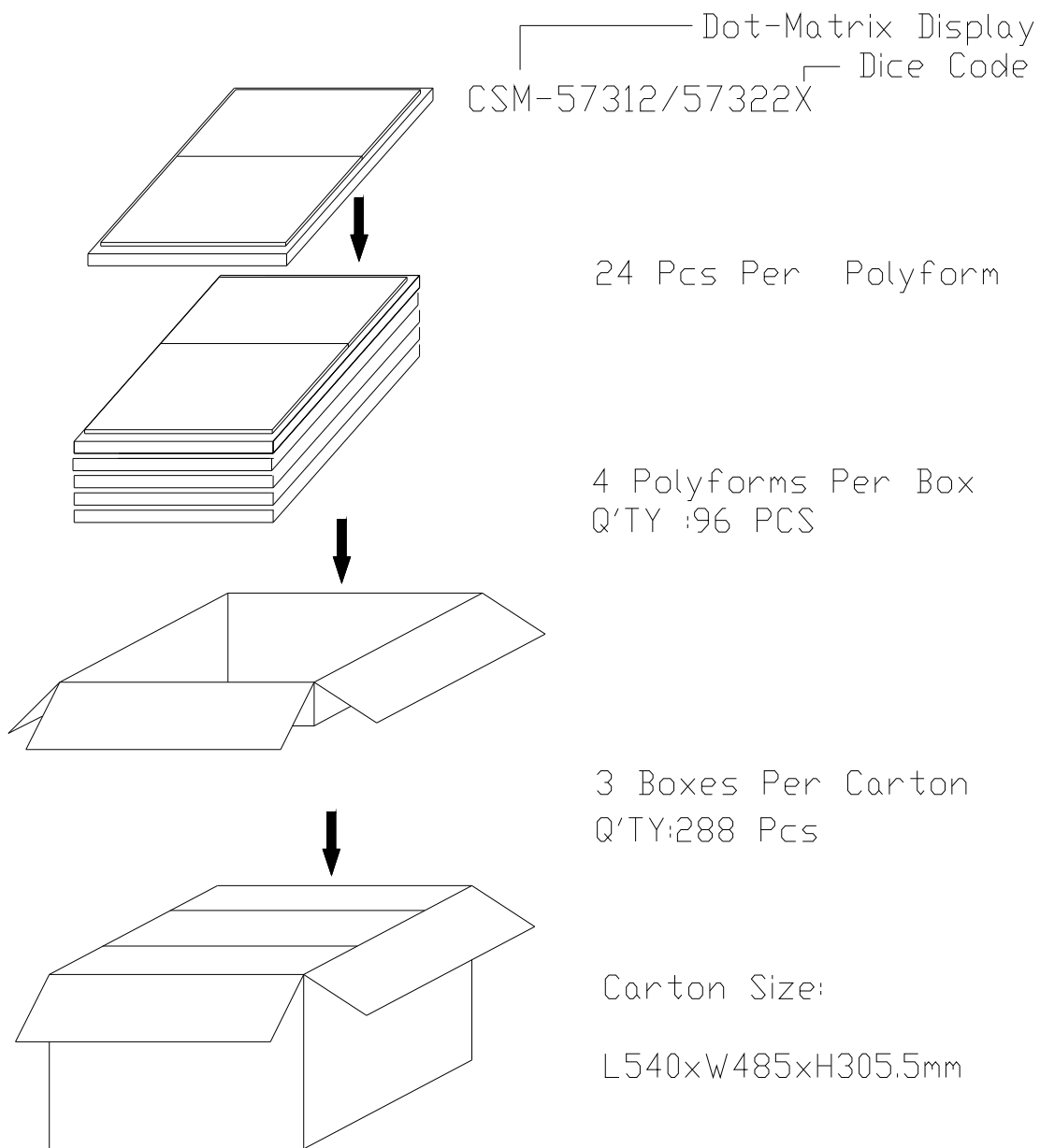
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



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