



Spec. No	PS-ND-0710
Rev.	A

PRODUCT SPECIFICATION

Model No : CSM-57071S/CSM-57081S

Descriptions:

- 0.7Inch Dot-Matrix Display
- 5*7 Array with X-Y Select.
- CSM-57071: Column Anode, Row Cathode
- CSM-57081: Column Cathode, Row Anode
- Emitting Color: Super-Bright Red



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No : CSM-57071S/CSM-57081S

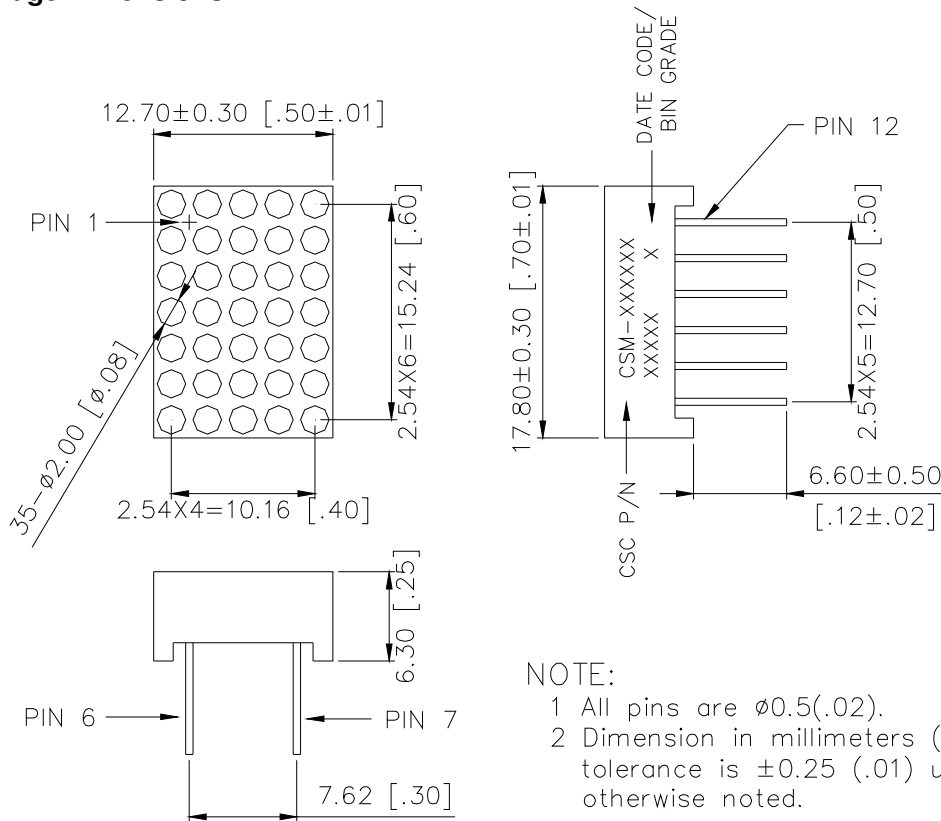
Features -

1. 0.7 inch (17.2mm) 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-57071S	AlGaAs	Super-Bright Red	Anode	Cathode
CSM-57081S			Cathode	Anode

Package Dimensions -



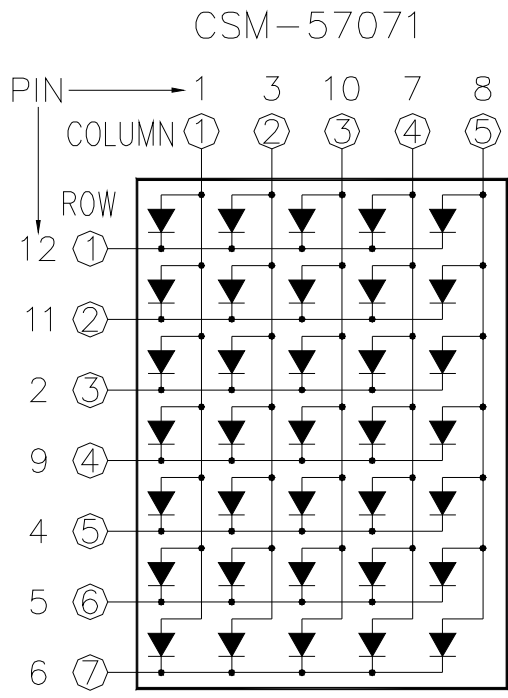
NOTE:

- 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-57071				CSM-57081			
PIN NO.	FUNCTION	PIN NO.	FUNCTION	PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	Anode Column 1	7	Anode Column 4	1	Cathode Column 1	7	Cathode Column 4
2	Cathode Row 3	8	Anode Column 5	2	Anode Row 3	8	Cathode Column 5
3	Anode Column 2	9	Cahtode Row 4	3	Cathode Column 2	9	Anode Row 4
4	Cathode Row 5	10	Anode Column 3	4	Anode Row 5	10	Cathode Column 3
5	Cathode Row 6	11	Cathode Row 2	5	Anode Row 6	11	Anode Row 2
6	Cathode Row 7	12	Cathode Row 1	6	Anode Row 7	12	Anode Row 1



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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	P _{AD}	75	mW
Continuous Forward Current Per Dice	I _{AF}	30	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	I _{PF}	120	mA
Derating Linear From 25°C Per Dice	-	0.42	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)

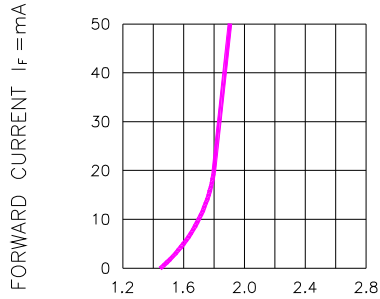
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Segment	V _F	-	1.8	2.5	V	I _F =20mA
Luminous Intensity Per Segment	I _v	-	7000	-	ucd	I _F =10mA
Peak Emission Wavelength	λ _p	-	660	-	nm	I _F =20mA
Dominant Wavelength	λ _d	-	644	-	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δλ	-	20	-	nm	I _F =20mA
Reverse Current	I _R	-	-	100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _V -m	-	-	2:1	-	I _p =80mA 1/16Duty



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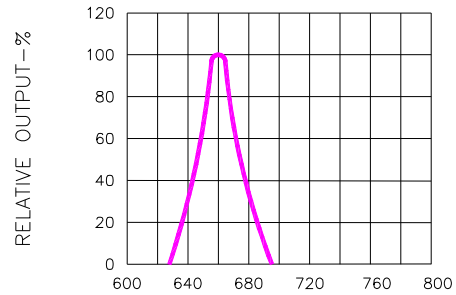
Typical Electrical / Optical Characteristics Curves -

($T_a = 25^\circ\text{C}$ Unless Otherwise Noted)



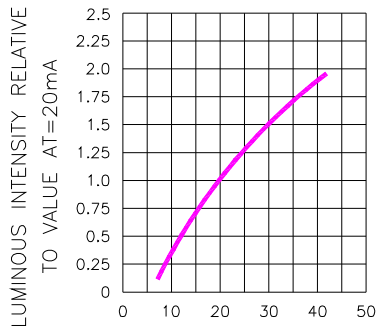
FORWARD VOLTAGE (V_f)—VOLTS

Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE



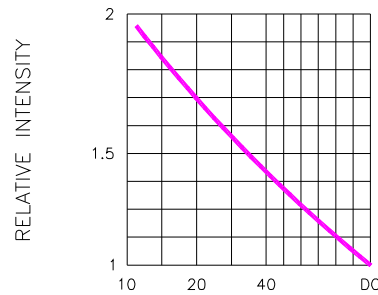
WAVELENGTH (λ)—nm

Fig.2 SPECTRAL RESPONSE



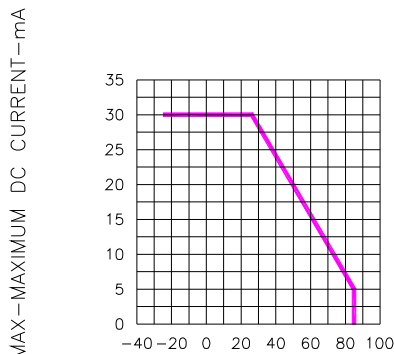
I_f —FORWARD CURRENT—mA

Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



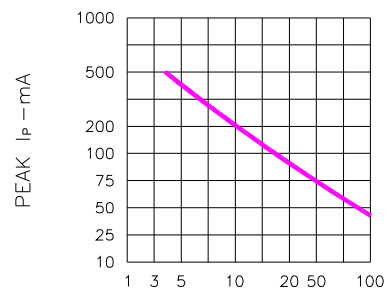
DUTY CYCLE % PER SEGMENT
(AVERAGE $I_f = 10\text{mA}$)

Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



T_a AMBIENT TEMPERATURE $^\circ\text{C}$

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



DUTY CYCLE %

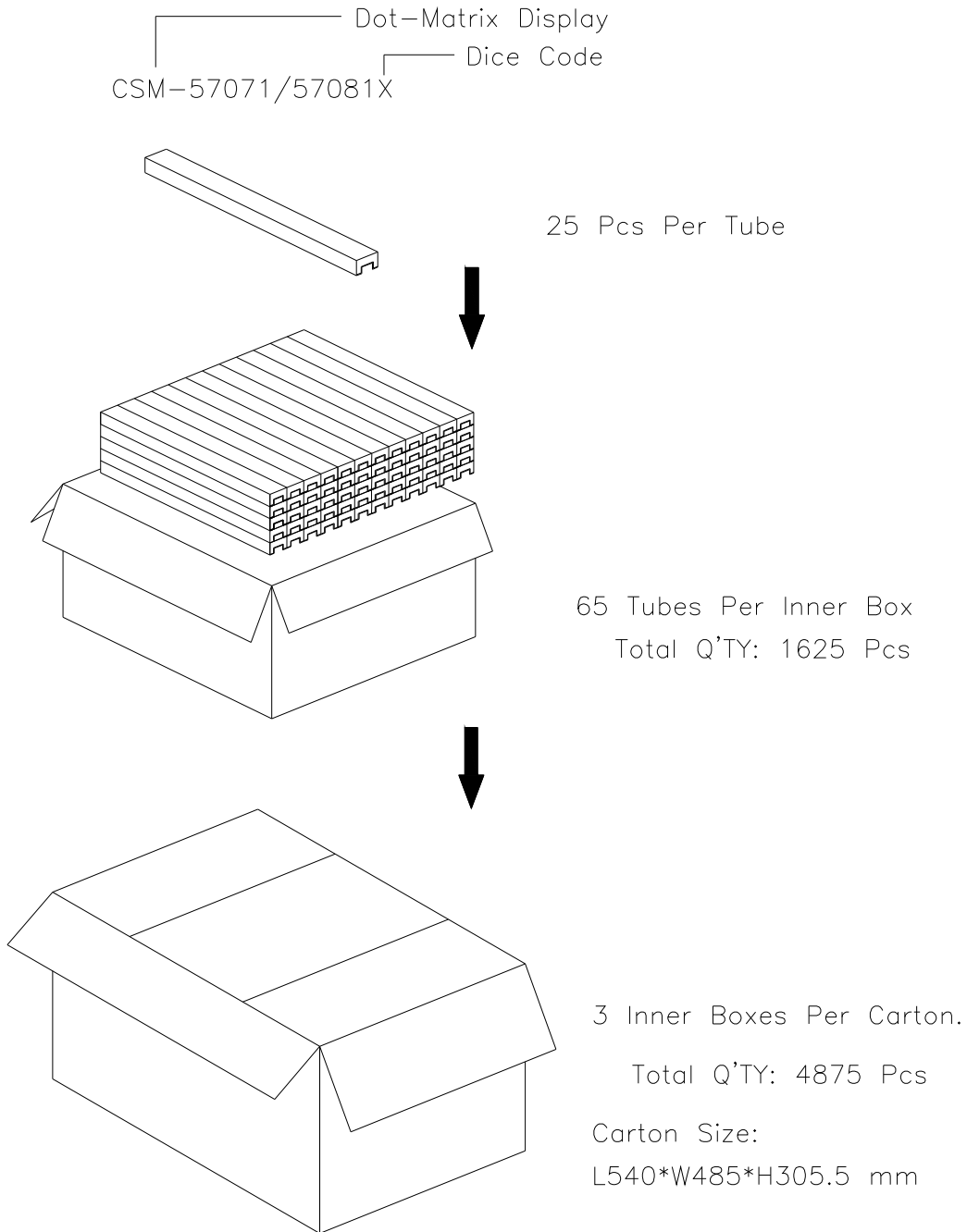
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE $f = 1\text{ KHz}$)



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■ Package Dimensions



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