



PRODUCT SPECIFICATION

Model No : CSM-57031E/CSM-57041E

Descriptions:
<ul style="list-style-type: none"> • 0.7Inch Dot-Matrix Display • 5*7 Array with X-Y Select. • CSM-57031: Column Anode, Row Cathode • CSM-57041: Column Cathode, Row Anode • Emitting Color: Orange



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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Model No : CSM-57031E/CSM-57041E

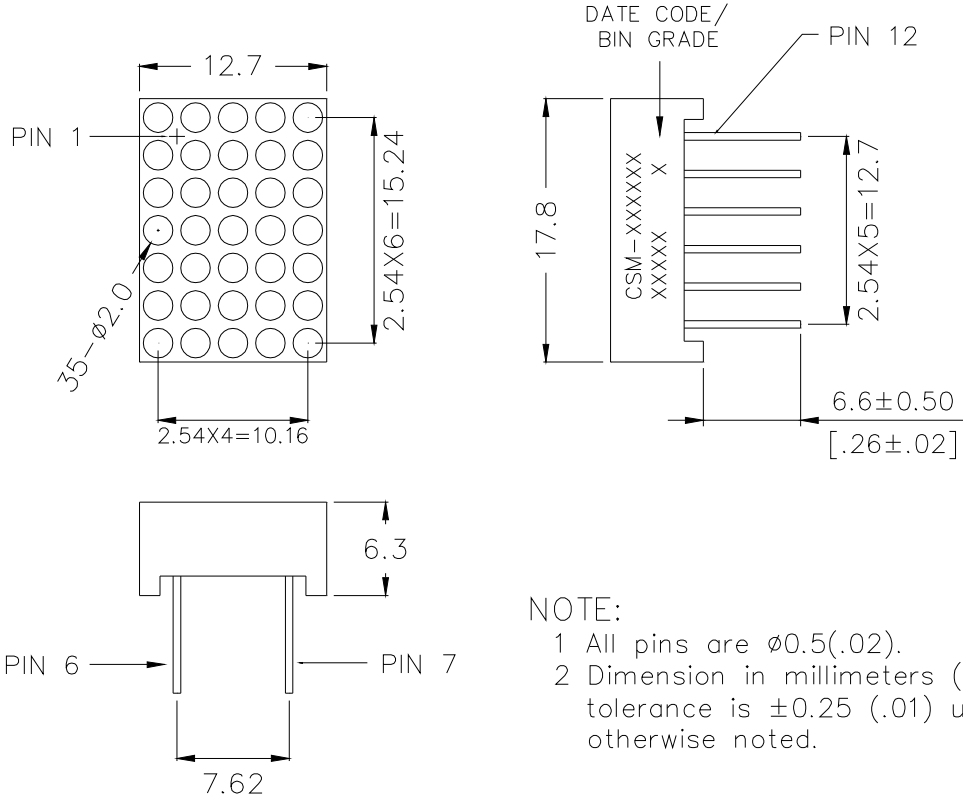
■ Features -

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-57031E	GaAsP	Orange	Anode	Cathode
CSM-57041E			Cathode	Anode

■ Package Dimensions -



NOTE:

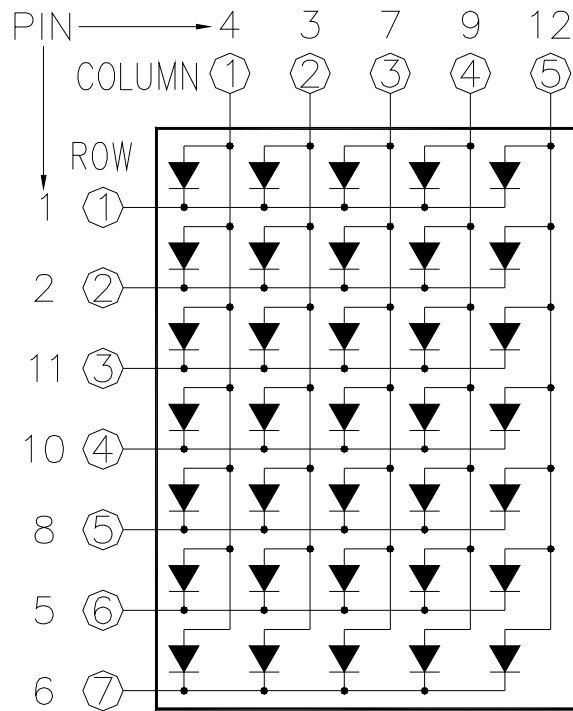
- 1 All pins are $\phi 0.5(.02)$.
- 2 Dimension in millimeters (inch), tolerance is $\pm 0.25 (.01)$ unless otherwise noted.



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Internal Circuit Diagrams -

CSM-57031



CSM-57031				CSM-57041			
PIN NO.	FUNCTION	PIN NO.	FUNCTION	PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	Cathode Row 1	7	Anode Column 3	1	Anode Row 1	7	Cathode Column 3
2	Cathode Row 2	8	Cathode Row 5	2	Anode Row 2	8	Anode Row 5
3	Anode Column 2	9	Anode Column 4	3	Cathode Column 2	9	Cathode Column 4
4	Anode Column 1	10	Cathode Row 4	4	Cathode Column 1	10	Anode Row 4
5	Cathode Row 6	11	Cathode Row 3	5	Anode Row 6	11	Anode Row 3
6	Cathode Row 7	12	Anode Column 5	6	Anode Row 7	12	Cathode Column 5



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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	-	2.1	2.8	V	I _F =20mA
Luminous Intensity Per Segment	I _v	-	3800	-	ucd	I _F =10mA
Peak Emission Wavelength	λ _p	-	632	-	nm	I _F =20mA
Dominant Wavelength	λ _d	-	624	-	nm	I _F =20mA
Spectrum Radiation Bandwidth	Δλ	-	35	-	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	

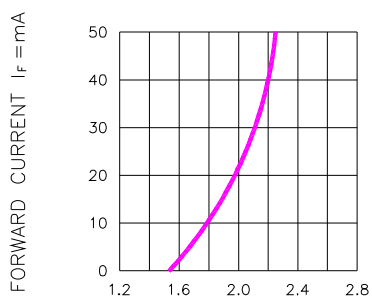


Spec. No.	PS-ND-0710
Rev.	A

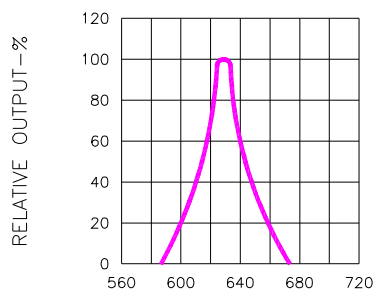
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■ Typical Electrical / Optical Characteristics Curves -

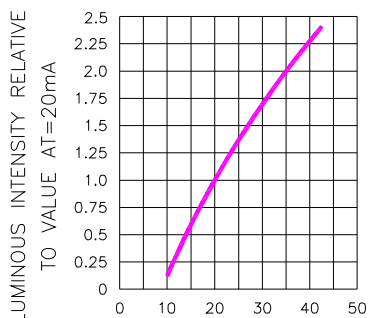
(Ta = 25°C Unless Otherwise Noted)



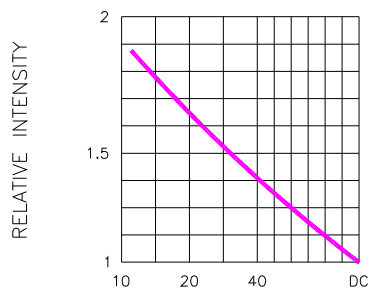
FORWARD VOLTAGE (V_F)—VOLTS
Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE



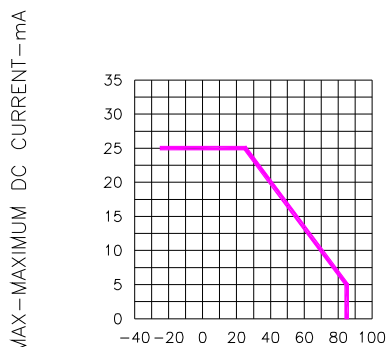
WAVELENGTH (λ)—nm
Fig.2 SPECTRAL RESPONSE



I_F—FORWARD CURRENT—mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



DUTY CYCLE % PER SEGMENT
(AVERAGE I_F=10mA)
Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE



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

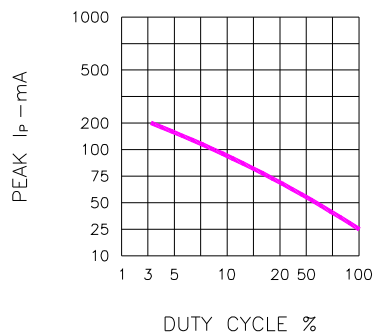


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)

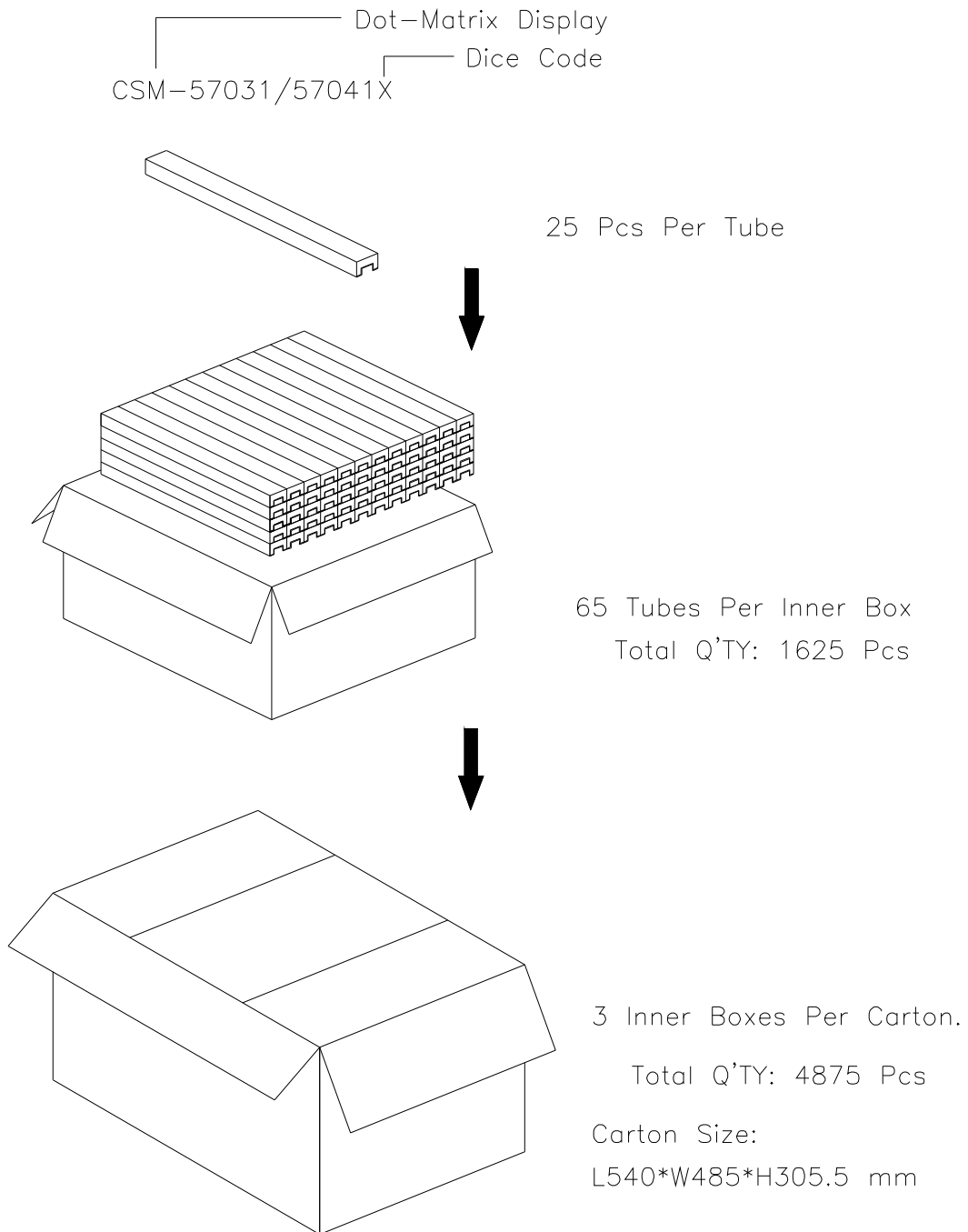


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Note: The specifications are subject to change without notice. Please contact us for updated information.