



PRODUCT SPECIFICATION

Model No : CSM-57362SG

Descriptions:

- 3.0Inch Dot-Matrix Display
- Dot Pitch 11.43mm
- 5*7 Array with X-Y Select.
- CSM-57362: Column Cathode, Row Anode
- Emitting Color: Super-Bright Red & Yellow Green



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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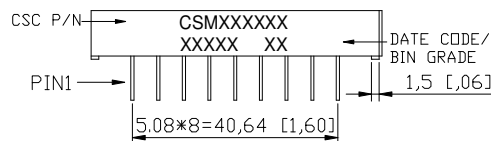
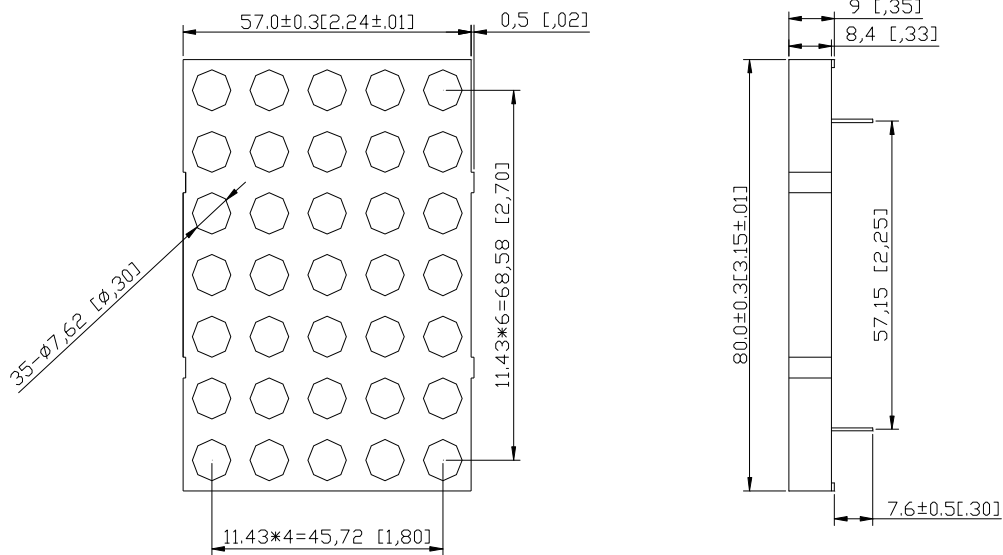
Features -

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		Column	Row
	Material	Emitted Color		
CSM-57362SG	AlGaAs	Super-Bright Red	Cathode	Anode
	GaP	Yellow-Green		

Package Dimensions -



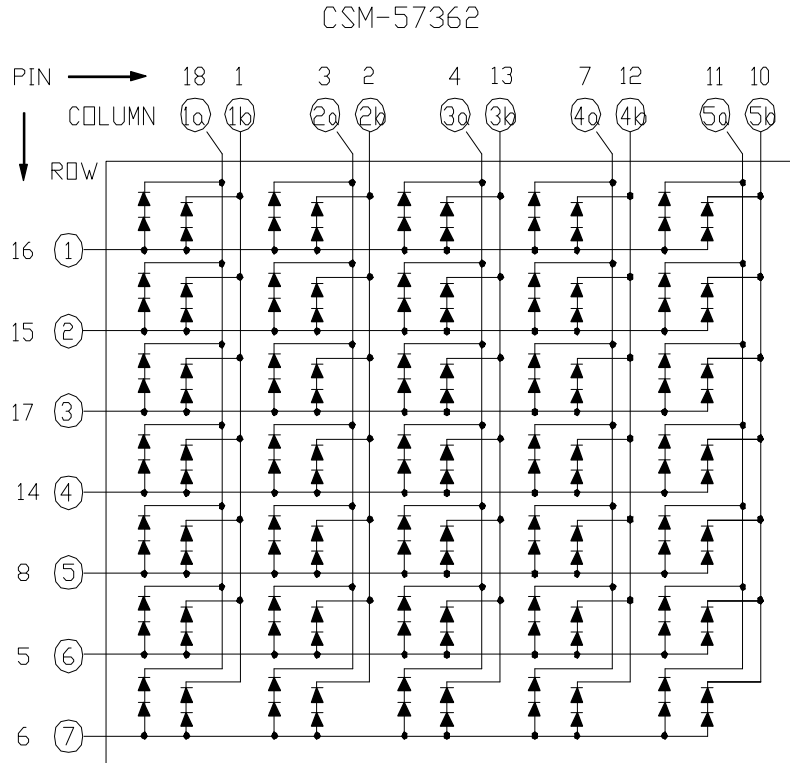
NOTE:

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



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Internal Circuit Diagrams -



CSM-57362			
PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	Cathode Column 1b	10	Cathode Column 5b
2	Cathode Column 2b	11	Cathode Column 5a
3	Cathode Column 2a	12	Cathode Column 4b
4	Cathode Column 3a	13	Cathode Column 3b
5	Anode Row 6	14	Anode Row 4
6	Anode Row 7	15	Anode Row 2
7	Cathode Column 4a	16	Anode Row 1
8	Anode Row 5	17	Anode Row 3
9	No Connect	18	Cathode Column 1a

NOTE: "a" for Super Bright Red color chip
 "b" for Yellow Green color chip



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■ Absolute Maximum Rating -

Super Bright Red		(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			

Yellow Green		(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			



Model No : CSM-57362SG

■ Electro-optical Characteristics -

Super Bright Red							(Ta=25°C)
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition	
Forward Voltage Per Segment	V _F	-	3.6(1.8)	5.0(2.5)	V	I _F =20mA	
Luminous Intensity Per Segment	I _v	-	14	-	mcd	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	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	

Yellow Green							(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	-	11	-	mcd	I _F =10mA	
Peak Emission Wavelength	λ _p	-	568	-	nm	I _F =20mA	
Dominant Wavelength	λ _d	-	572	-	nm	I _F =20mA	
Spectrum Radiation Bandwidth	Δ λ	-	30	-	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 -Super-Bright Red
(Ta = 25°C Unless Otherwise Noted)

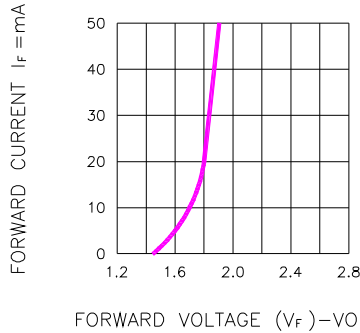


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

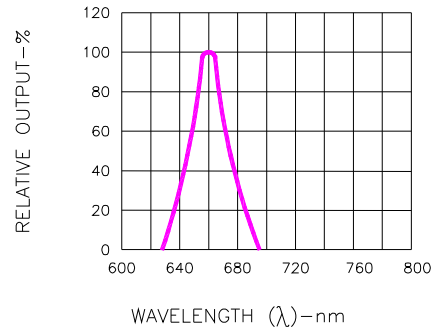


Fig.2 SPECTRAL RESPONSE

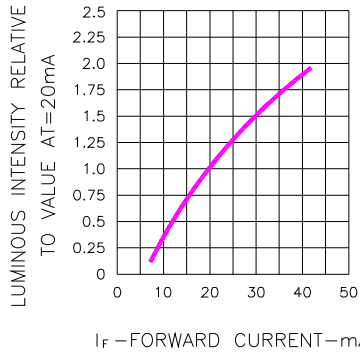


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

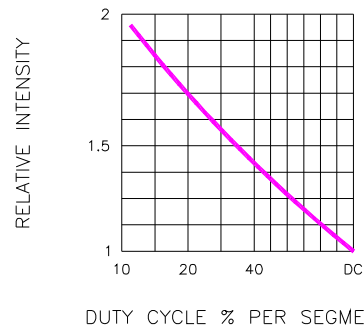


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

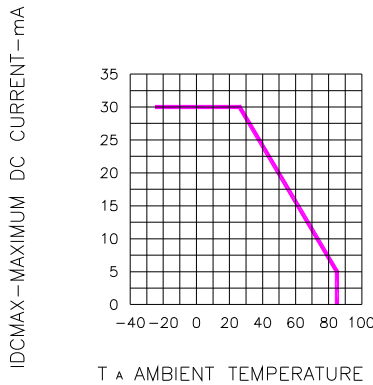


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

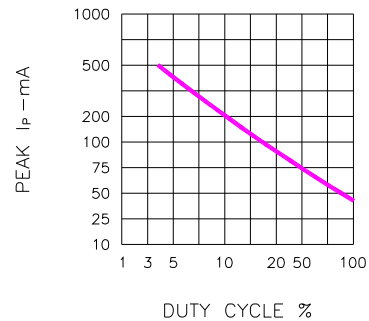


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



Model No : CSM-57362SG

Yellow Green

(Ta = 25°C Unless Otherwise Noted)

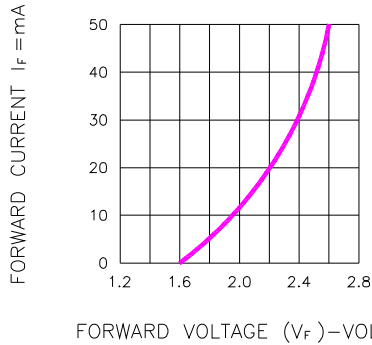


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

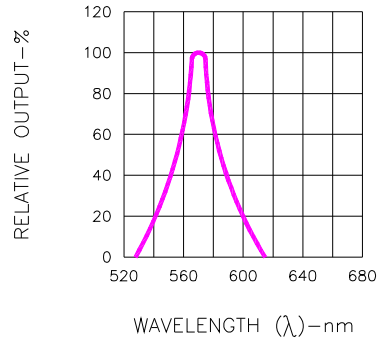


Fig.2 SPECTRAL RESPONSE

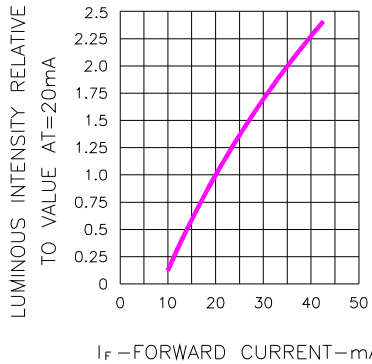


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

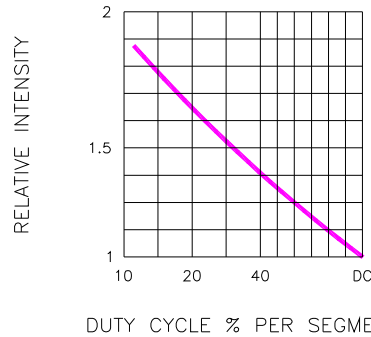


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

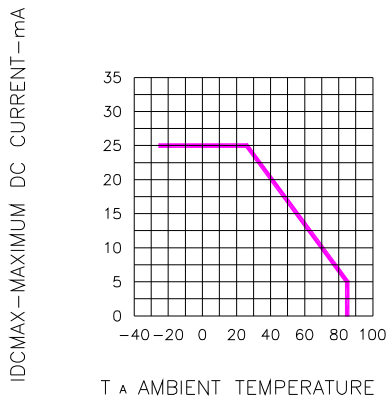


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

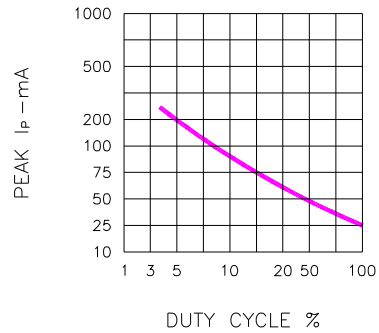


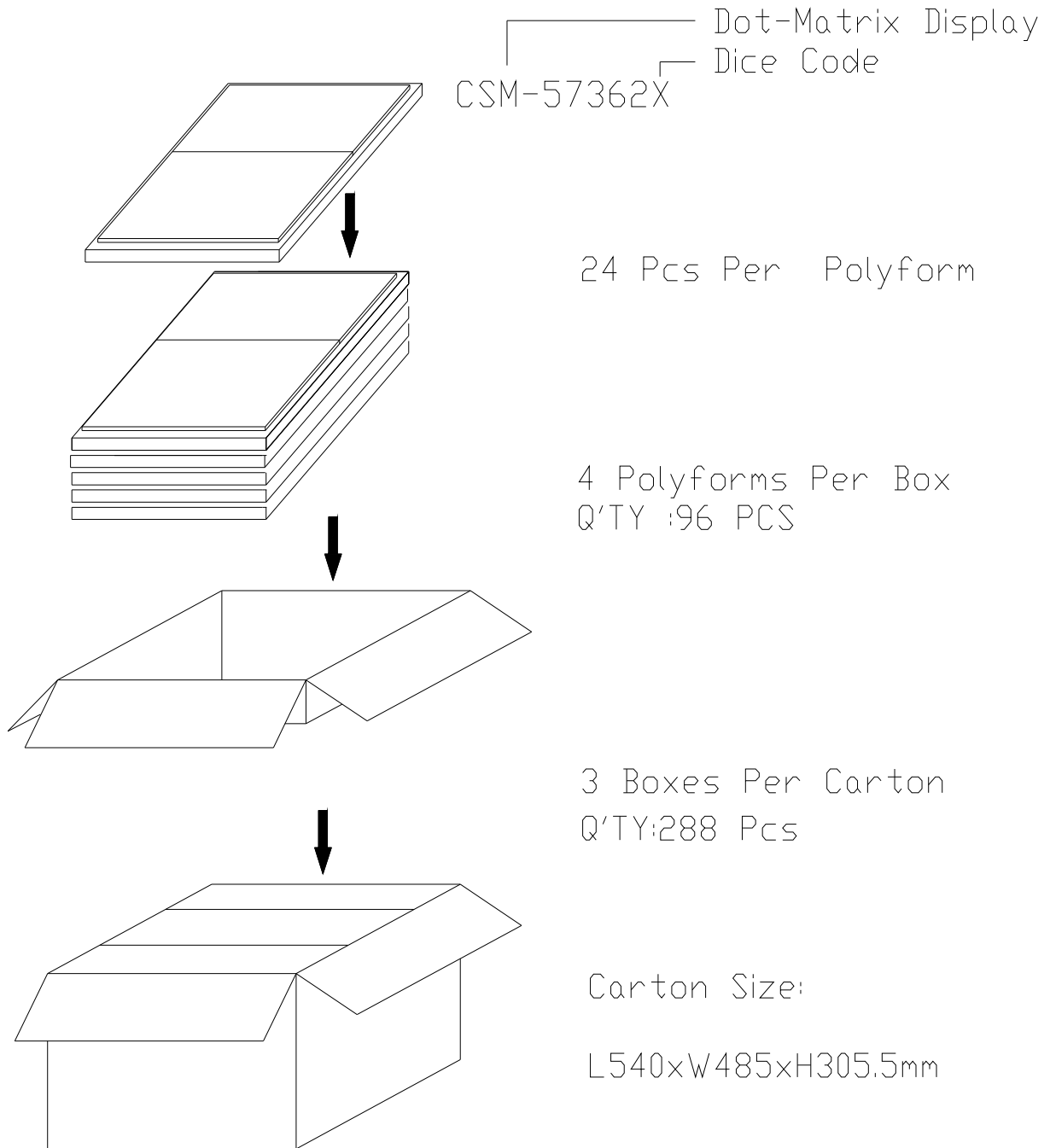
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f = 1 KHz)



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.