CHINA
SEMICONDUCTOR
CORPORATION

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

PRODUCT SPECIFICATION

Model No：CSM-57261SG

Descriptions:
• 2.0Inch Dot-Matrix Display
• Dot Pitch 7.62mm
• 5*7 Array with X-Y Select.
• CSM-57261: Column Cathode, Row Anode
• Emitting Color：Super-Bright Red & Yellow Green

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

CHINA SEMICONDUCTOR CORPORATION
Address:2FL. NO.909,Chung-Cheng Road,
Chung-Ho City Taipei Hsien,Taiwan.

Tel:886-2-2223-9696
Fax:886-2-2223-9377

OPTO PLUS TECHNOLOGIES CO.,LTD
Address:696 Shun jiang Rd.,Ji Shan St.Shaoxing,
ZheJiang,China

Tel:86-0575-88623888
Fax:86-0575-88623112

http://www.csctw.com.tw

Model No：CSM-57261SG

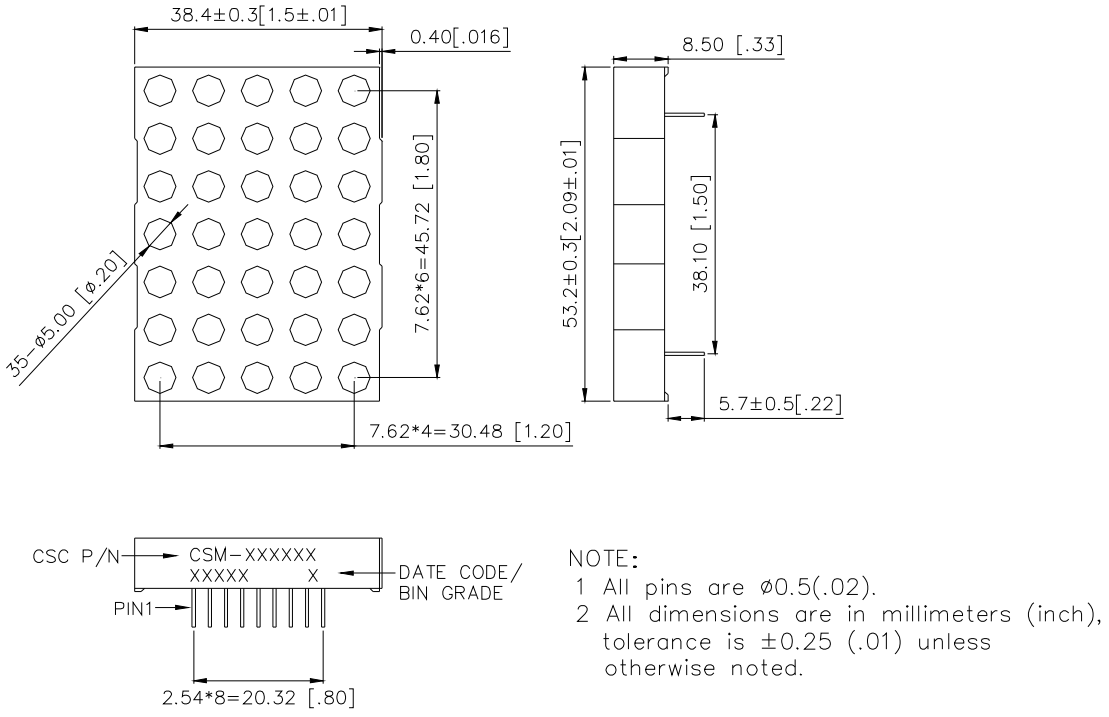
■ Features -

1. 2.0 inch (50.7mm) 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-57261SG	AlGaAs	Super-Bright Red	Cathode	Anode
	GaP	Yellow-Green		

■ Package Dimensions -



NOTE:
1 All pins are ø0.5(.02).
2 All dimensions are in millimeters (inch), tolerance is ±0.25 (.01) unless otherwise noted.

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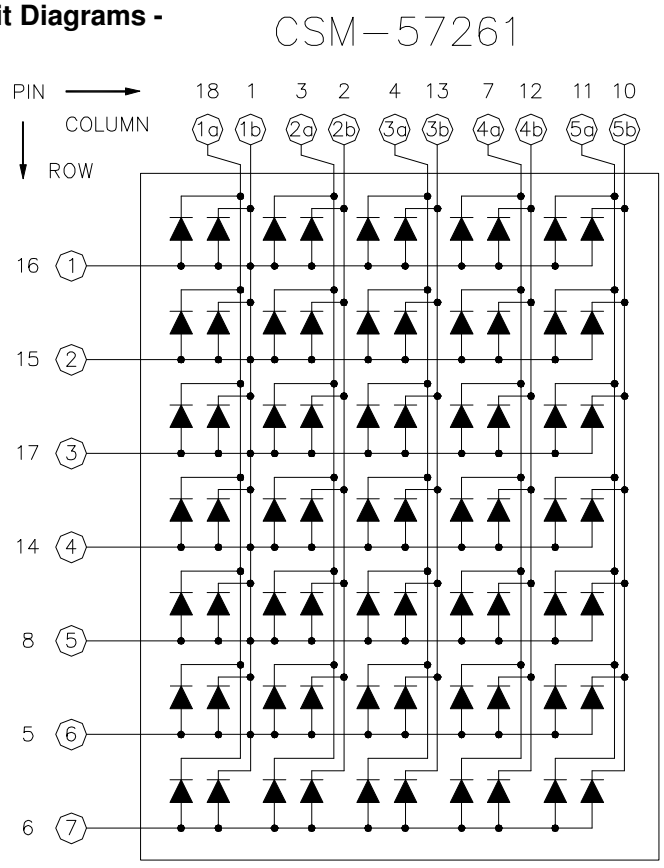
■ Internal Circuit Diagrams -



CSM-57261

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 2b	13	Cathode Column 3a
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 Orange-Red color chip
"b" for Yellow-Green color chip

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■ Absolute Maximum Rating -

Super Bright Red (Ta=25℃)

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℃ Per Dice	-	0.42	mA/℃
Reverse Voltage Per Dice	V_R	5	V
Operating Temp.	Topr	-35 ~ +85	℃
Storage Temp.	Tstg	-35 ~ +85	℃
Solder temperature 1/16 inch below seating plane for 3 seconds at 260℃			

Yellow Green (Ta=25℃)

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℃ Per Dice	-	0.33	mA/℃
Reverse Voltage Per Dice	V_R	5	V
Operating Temp.	Topr	-35 ~ +85	℃
Storage Temp.	Tstg	-35 ~ +85	℃
Solder temperature 1/16 inch below seating plane for 3 seconds at 260℃			

Model No：CSM-57261SG

■ Electro-optical Characteristics -

Super Bright Red (Ta=25℃)

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	Iv	-	10	-	mcd	I_F=10mA
Peak Emission Wavelength	λp	-	660	-	nm	I_F=20mA
Dominant Wavelength	λd	-	644	-	nm	I_F=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	I_F=20mA
Reverse Current	IR	-	-	100	μA	V_R=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1		Ip=80mA 1/16Duty

Yellow Green (Ta=25℃)

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	Iv	-	8	-	mcd	I_F=10mA
Peak Emission Wavelength	λp	-	568	-	nm	I_F=20mA
Dominant Wavelength	λd	-	572	-	nm	I_F=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	30	-	nm	I_F=20mA
Reverse Current	IR	-	-	100	μA	V_R=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	Ip=80mA 1/16Duty

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■ Typical Electrical / Optical Charateristics Curves -Super-Bright Red

(Ta = 25℃ Unless Otherwise Noted)

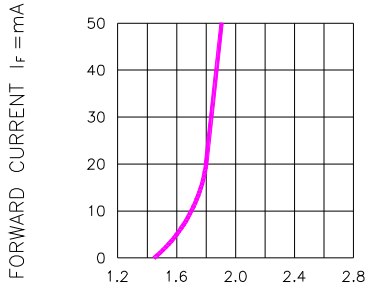


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

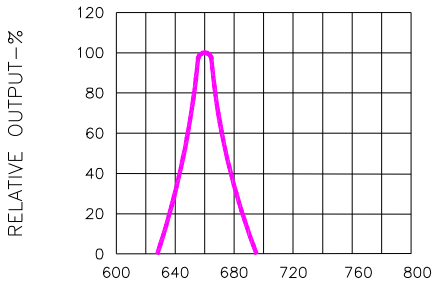


Fig.2 SPECTRAL RESPONSE

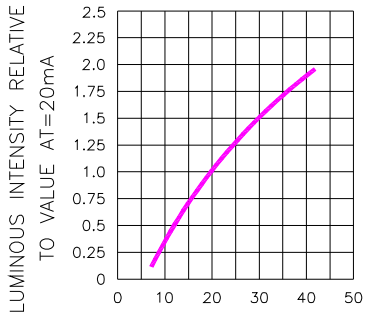


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

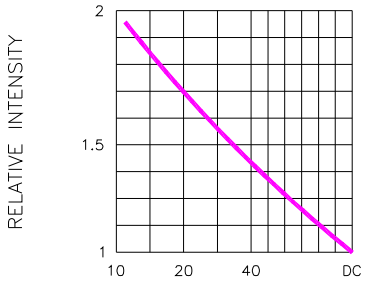


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

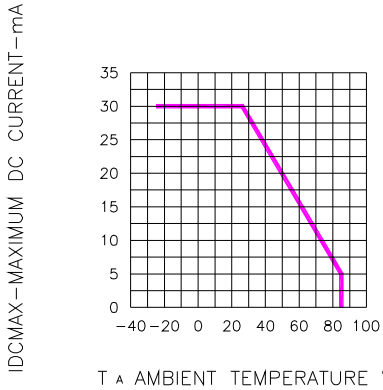


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

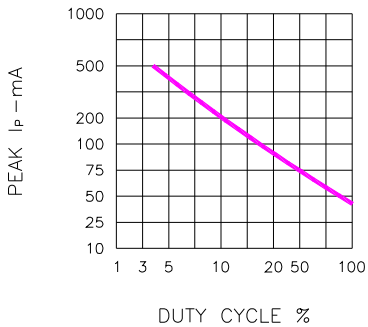


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %
(REFRESH RATE f=1 KHz)

Model No : CSM-57261SG

■ Yellow Green

(Ta = 25℃ Unless Otherwise Noted)

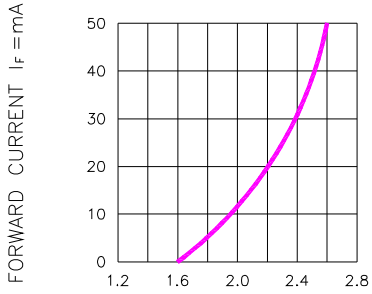


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

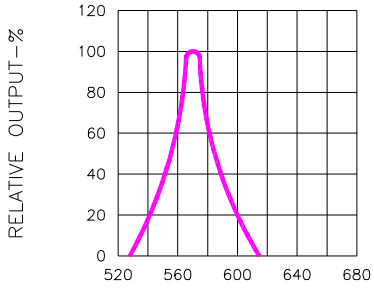


Fig.2 SPECTRAL RESPONSE

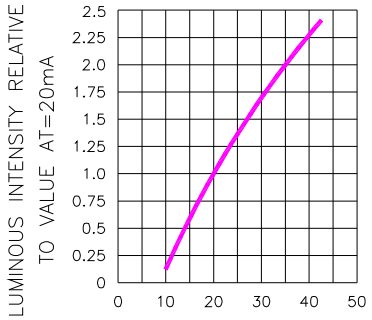


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

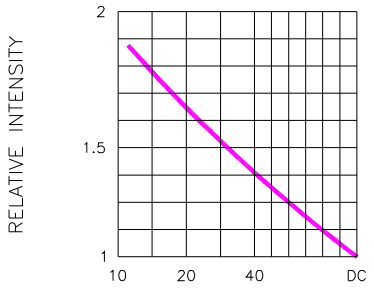


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

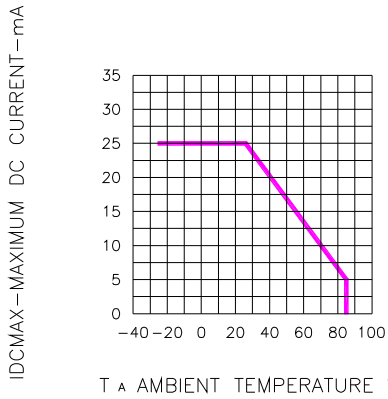


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

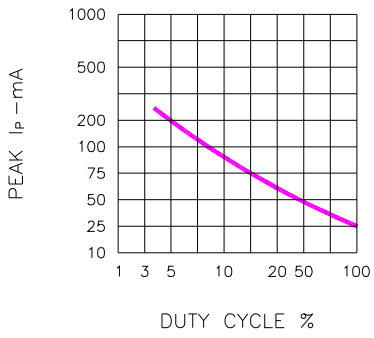
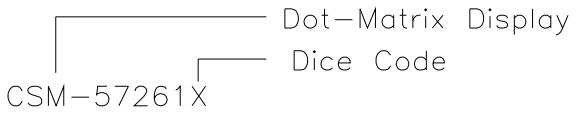
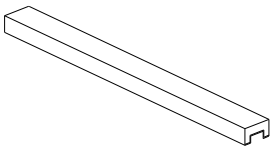


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)

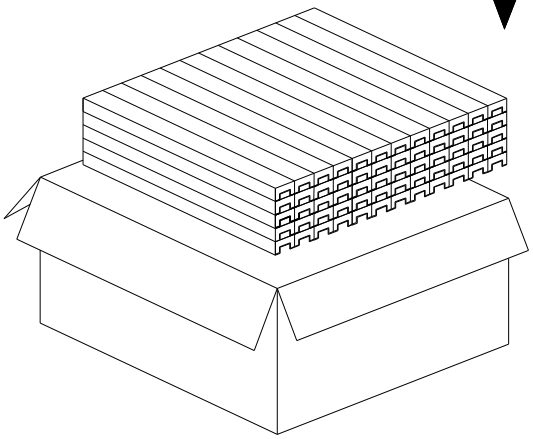
Model No：CSM-57261SG

■ Package Dimensions

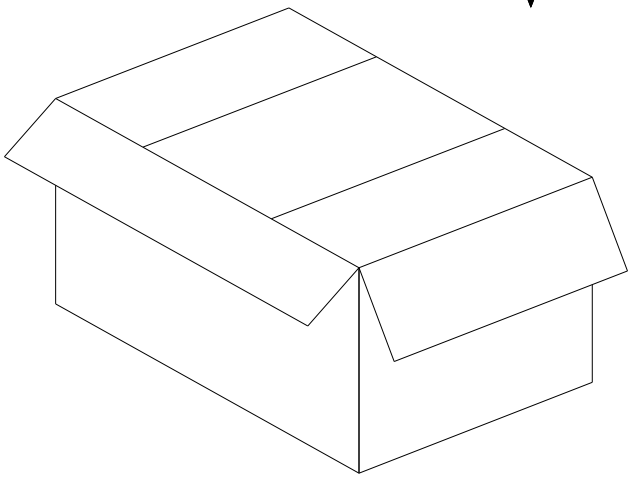




20 Pcs Per Tube



16 Tubes Per Inner Box
Total Q'TY: 320 Pcs



3 Inner Boxes Per Carton.

Total Q'TY: 960 Pcs

Carton Size:
L540*W485*H305.5 mm

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