



PRODUCT SPECIFICATION

Model No : CSM-57261VM9

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 Orange & Super-Bright Green



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

CHINA SEMICONDUCTOR CORPORATION

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Model No : CSM-57261VM9

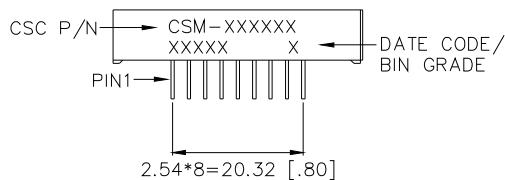
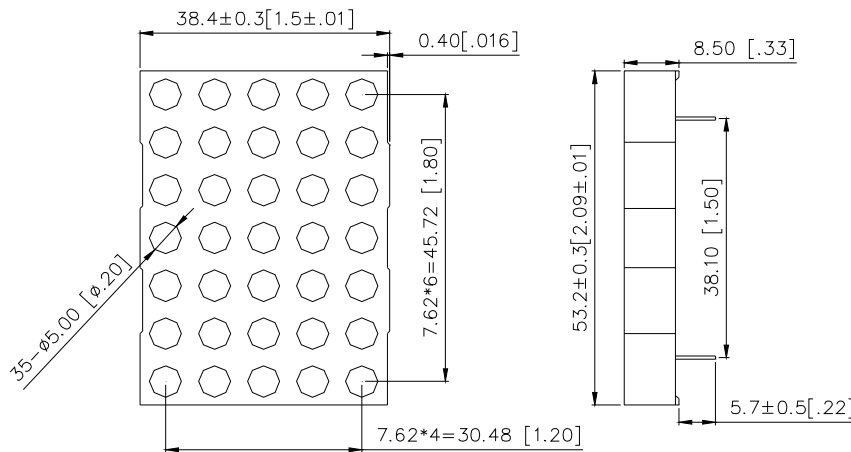
Features -

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-57261VM9	AlGaInP	Super-Bright Orange	Cathode	Anode
	AlGaInP	Super-Bright Green		

Package Dimensions -



NOTE:

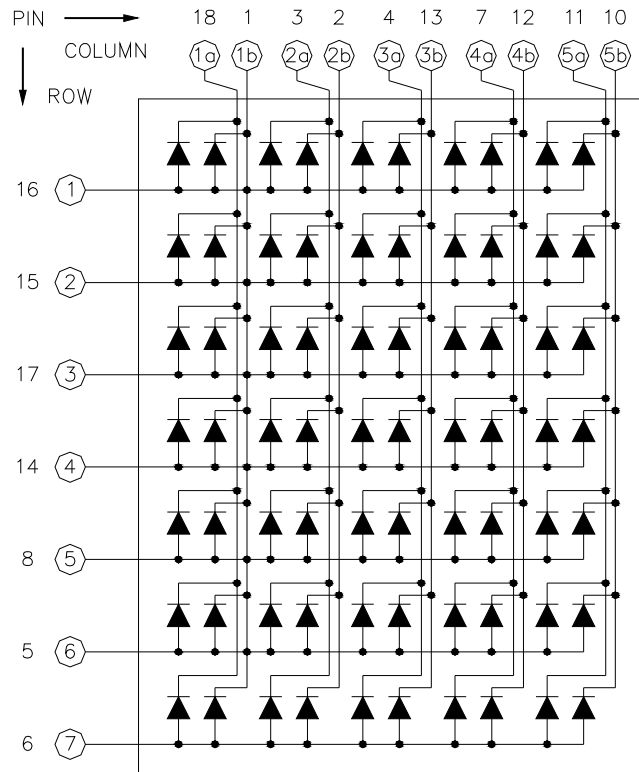
- 1 All pins are $\phi 0.5$ (.02).
- 2 All dimensions are in millimeters (inch), tolerance is ± 0.25 (.01) unless otherwise noted.



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Internal Circuit Diagrams -

CSM-57261



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 Super-Bright Orange color chip
"b" for Super-Bright Green color chip



Model No : CSM-57261VM9

■ Absolute Maximum Rating -

Super Bright Orange		(Ta=25°C)	
Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	PAD	70	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	IPF	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-35 ~ +85	°C
Storage Temp.	Tstg	-35 ~ +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			

Super Bright Green		(Ta=25°C)	
Parameter	Symbol	Rating	Unit
Power Dissipation Per Dice	PAD	70	mW
Continuous Forward Current Per Dice	IAF	25	mA
Peak Current Per Dice(duty cycle 1/10, 1kHz)	IPF	90	mA
Derating Linear From 25°C Per Dice	-	0.33	mA/°C
Reverse Voltage Per Dice	VR	5	V
Operating Temp.	Topr	-35 ~ +85	°C
Storage Temp.	Tstg	-35 ~ +85	°C
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			



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■ Electro-optical Characteristics -

Super Bright Orange		(Ta=25°C)				
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Dot	V _F	-	2.0	2.8	V	I _F =20mA
Luminous Intensity Per Dot	I _v	-	45	-	mcd	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	-	20	-	nm	I _F =20mA
Reverse Current	I _R	-	-	100	μA	V _R =5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1		I _p =80mA 1/16Duty

Super Bright Green		(Ta=25°C)				
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Dot	V _F	-	2.1	2.8	V	I _F =20mA
Luminous Intensity Per Dot	I _v	-	18	-	mcd	I _F =10mA
Peak Emission Wavelength	λ _p	-	572	-	nm	I _F =20mA
Dominant Wavelength	λ _d	-	570	-	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	IV-m	-	-	2:1	-	I _p =80mA 1/16Duty



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■ Typical Electrical / Optical Characteristics Curves -Super-Bright Orange
(Ta = 25°C Unless Otherwise Noted)

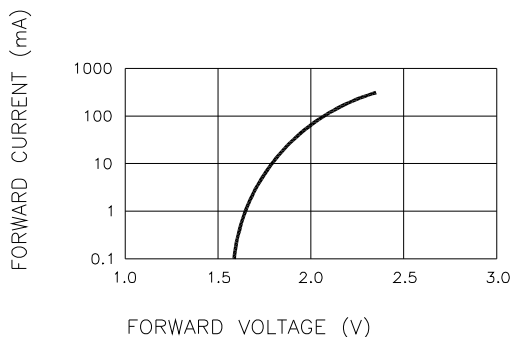


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

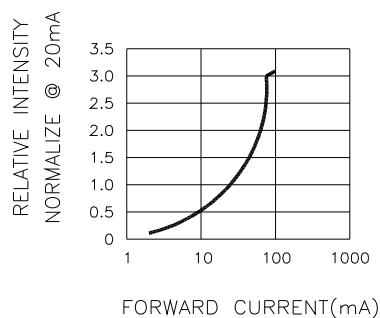


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

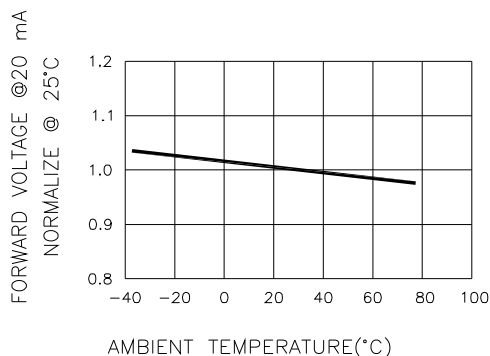


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

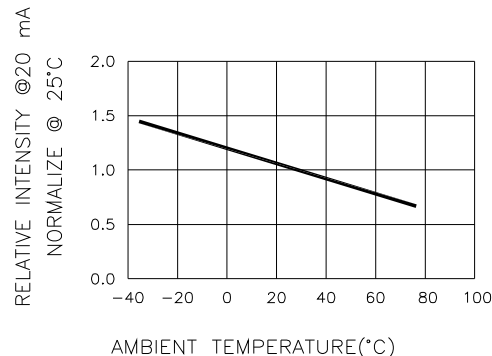


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

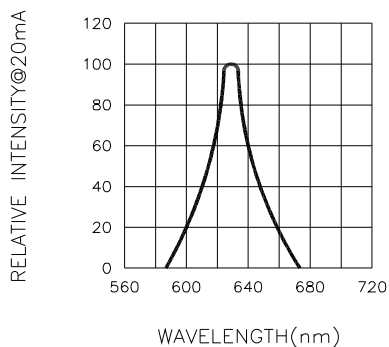


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH



Model No : CSM-57261VM9

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

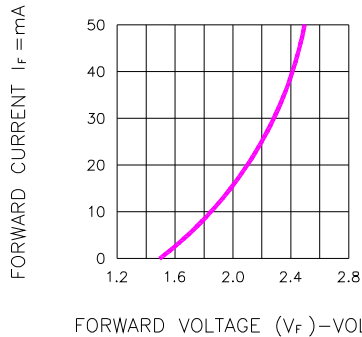


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

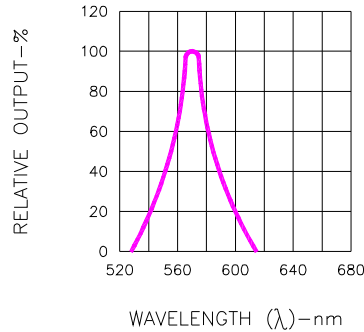


Fig.2 SPECTRAL RESPONSE

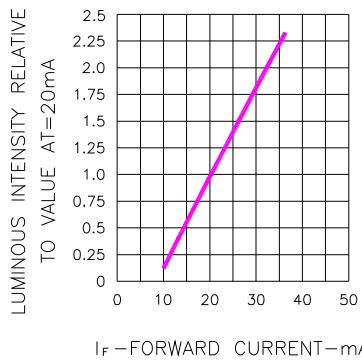


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

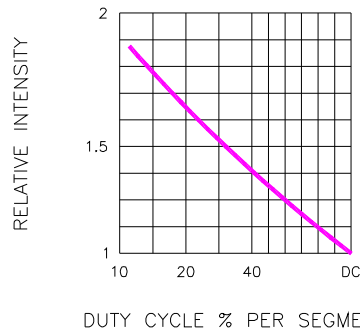


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

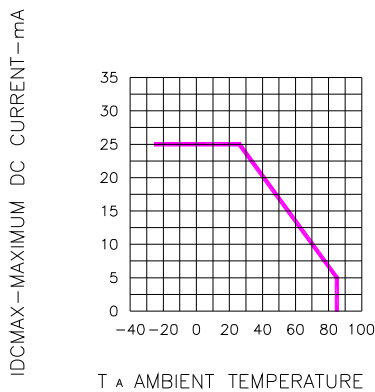


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE

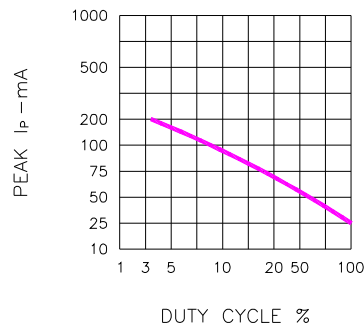
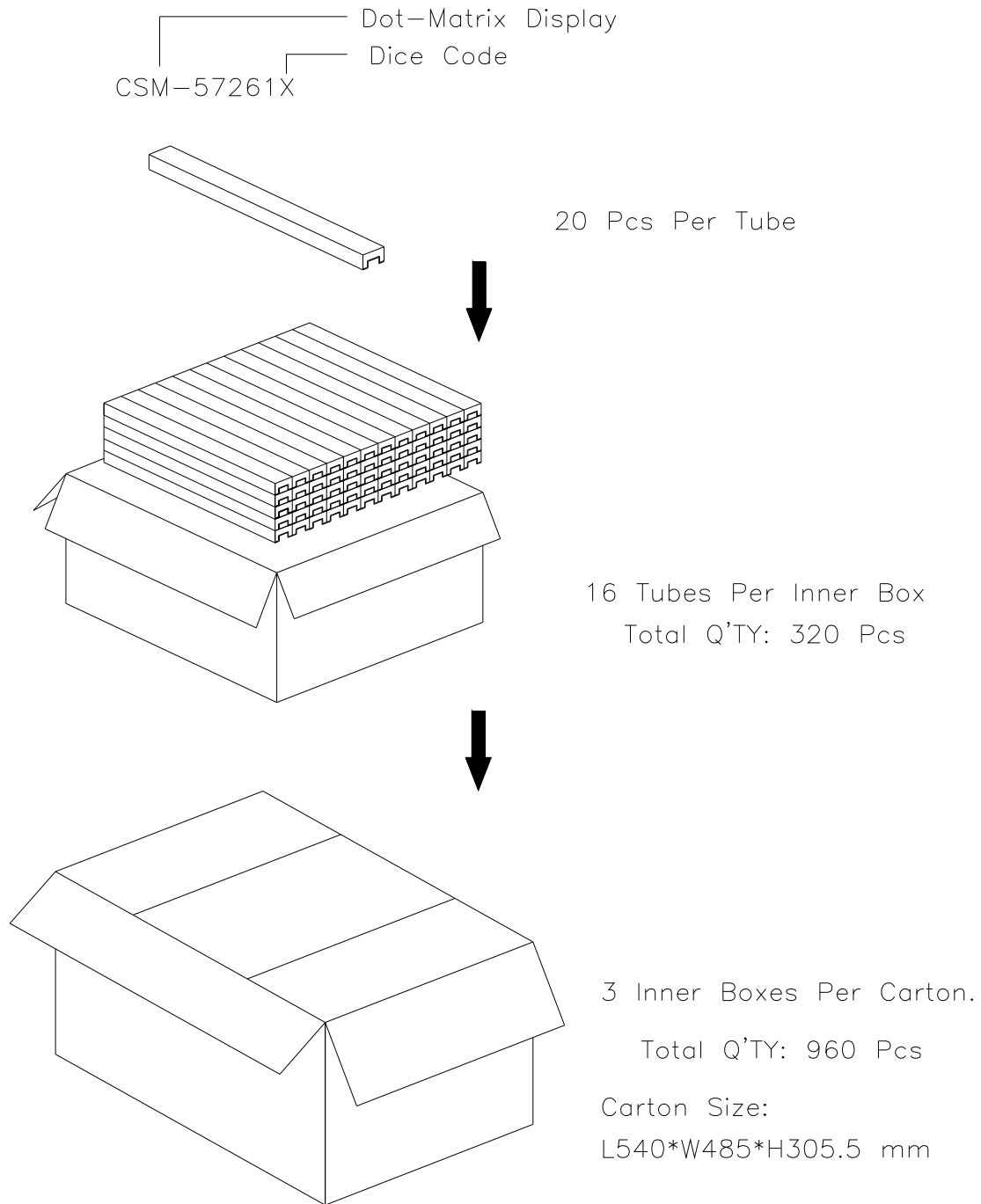


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE $f = 1\text{ kHz}$)



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■ Package Dimensions



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