



# PRODUCT SPECIFICATION

**Model No.: CSDM-88204T**

Descriptions:
■ 2.3 Inch Dot-Matrix Display
■ 8*8 Array with X-Y Select.
■ Column Cathode, Row Anode
■ Emitting Color: Super Bright Yellow
■ Gray Face
■ White Dot



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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**Model No.: CSDM-88204T**

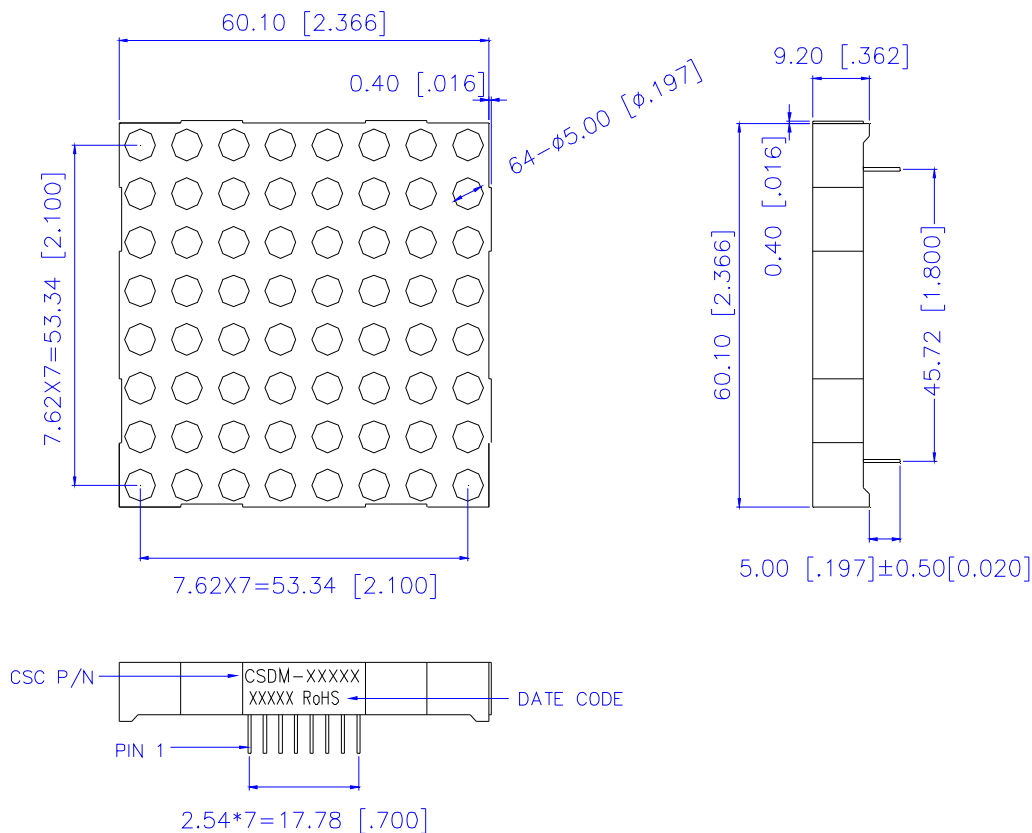
**Features -**

1. 2.3 inch (58.34mm) Matrix height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. Standard: gray face, white dot.
6. Easy mounting on P.C. board or socket.

**Device Selection Guide -**

Model No.	Chip		Description	
	Material	Emitting Color	Column	Row
CSDM-88204T	AlGaInP	Super Bright Yellow	Cathode	Anode

**Mechanical Dimensions -**



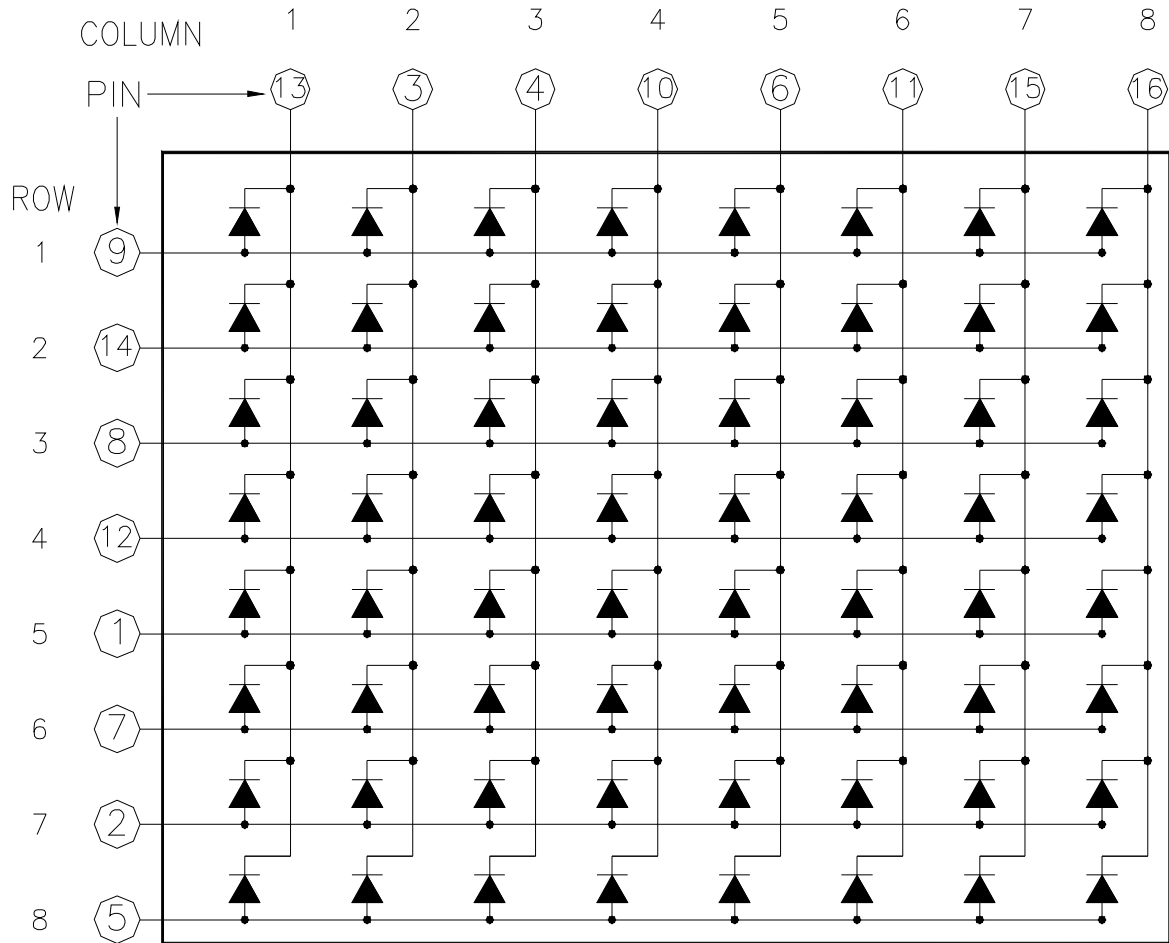
**Notes:**

1. All pins are  $\phi 0.50$  [0.020]
2. Dimension in millimeter [inch], and tolerance is  $\pm 0.25$  [0.010] unless otherwise noted.
3. Bending  $\leq$  Length\*1%.



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Internal Circuit Diagrams -





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■ Absolute Maximum Rating -

(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

■ Electro-optical Characteristics -

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage Per Dot	VF	-	2.1	2.8	V	IF=20mA
Luminous Intensity Per Dot	Iv	42	125	-	mcd	IF=10mA
Peak Emission Wavelength	$\lambda_p$	-	592	-	nm	IF=20mA
Dominant Wavelength	$\lambda_d$	-	590	-	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	-	20	-	nm	IF=20mA
Reverse Current	IR	-	-	100	$\mu$ A	VR=5V
Luminous Intensity Matching Ratio	IV-m	-	-	2:1	-	Ip=80mA 1/16Duty



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■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

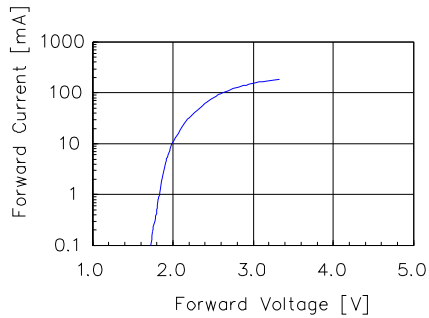


Fig 1. Forward Current vs. Forward Voltage

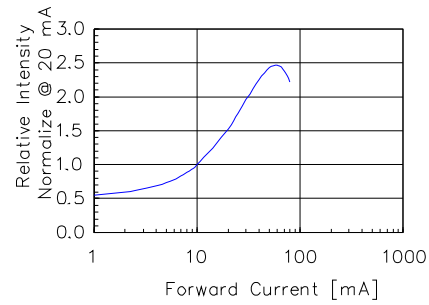


Fig 2. Relative Intensity vs. Forward Current

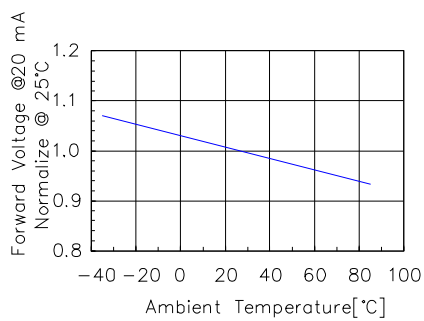


Fig 3. Forward Voltage vs. Temperature

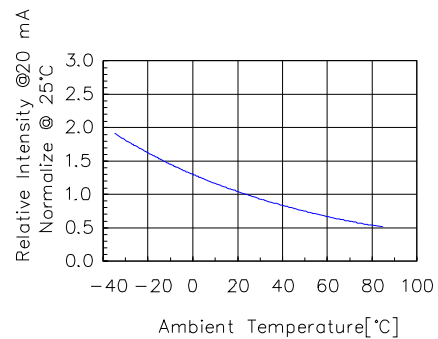


Fig 4. Relative Intensity vs. Temperature

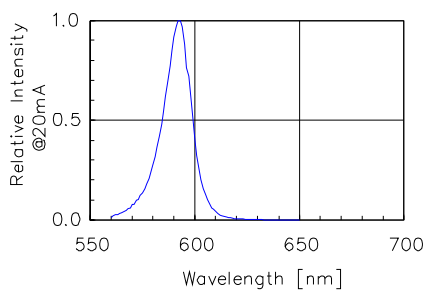


Fig 5. Relative Intensity vs. Wavelength

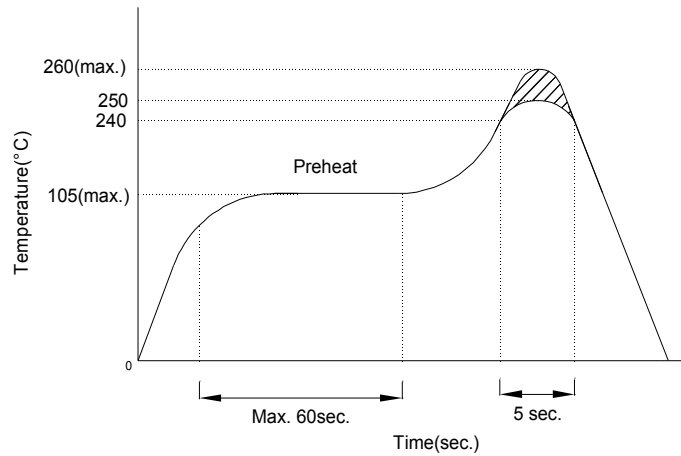


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## ■ Precautions For Use -

### 1. Recommended Soldering conditions

#### Wave Soldering



### 2. Soldering Iron

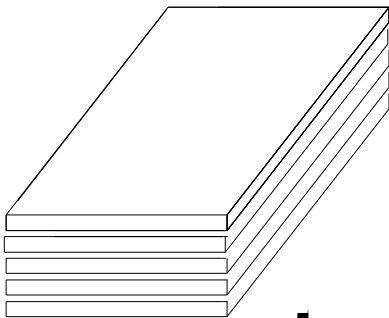
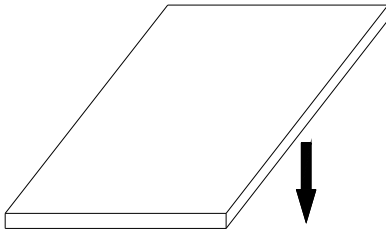
Basic SPEC. is  $\leq 5$ sec. When  $260^{\circ}\text{C}$ . If temperature is higher, time should be shorter ( $+10^{\circ}\text{C} \rightarrow -1$ sec.). Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under  $230^{\circ}\text{C}$ .



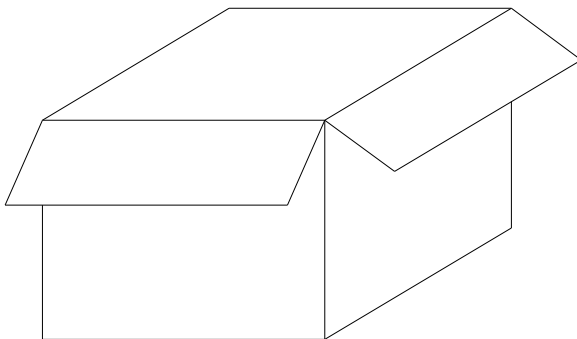
Spec. No.	PS-DM-88204T
Rev.	A

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■ Package Dimensions



8 Pcs Per PE.foam  
PE.foam Size:  
L295xW195xH15mm



9 PE.foam Per Box  
Q'TY: 72 PCS  
Box Size:  
L300\*W205\*H240mm

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