



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-288-024 REV: 1.0

2.3" 8*8 Dot Matrix Display

MODEL NO : ELM-2881EWA/S153 ECN : _____ Page: 1/5

■ Features :

- Large emitting dot 0.2"diameter.
- Low power/high brightness.

■ Applications:

- Instrument panels
- Digital readout display

■ Description :

- The ELM-2881 series are a large emitting area(5.0mm diameter) LED sources configured in a 64 dots 8*8 matrix array.
- These device is made with white dots and gray surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELM-2881EWA/S153	GaAsP/GaP	Orange	C.C.

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TS99090 B992120



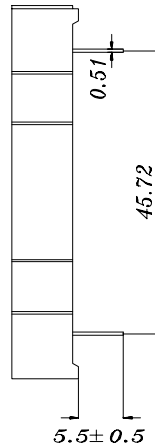
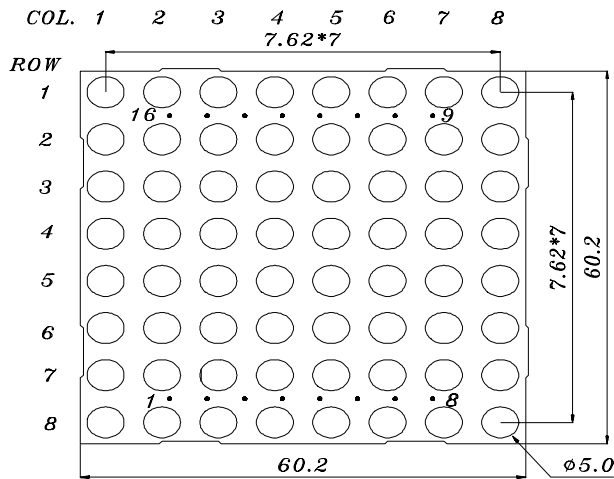
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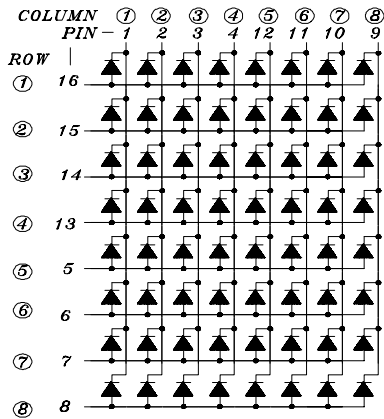
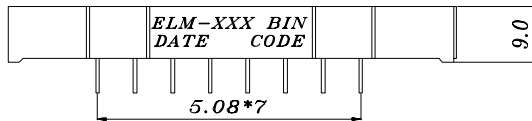
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Package Dimension:



- COLUMN CATHODE
- ROW ANODE
- 1 COLUMN CATHODE 1
- 2 COLUMN CATHODE 2
- 3 COLUMN CATHODE 3
- 4 COLUMN CATHODE 4
- 5 ROW ANODE 5
- 6 ROW ANODE 6
- 7 ROW ANODE 7
- 8 ROW ANODE 8
- 9 COLUMN CATHODE 8
- 10 COLUMN CATHODE 7
- 11 COLUMN CATHODE 6
- 12 COLUMN CATHODE 5
- 13 ROW ANODE 4
- 14 ROW ANODE 3
- 15 ROW ANODE 2
- 16 ROW ANODE 1



NOTES:

1. All dimensions are millimeters, tolerance is 0.25mm unless otherwise noted.
 2. Above specification may be changed without notice.
- Supplier will reserve authority on material change for above specification.



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■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	160	mA

■ Electronic optical characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	2.8	5.3	----	mcd	If=10mA
Peak Wavelength	λp	----	635	----	nm	If=20mA
Dominant Wavelength	λd	----	625	----	nm	If=20mA
Spectrum Radiation Bandwidth	Δλ	----	45	----	nm	If=20mA
Forward Voltage	Vf	1.7	2.0	2.6	V	If=20mA
Reverse Current	Ir	----	----	10	V	Vr=5V



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■ Reliability test item and condition:					
NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	If = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1



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■ Typical Electro-Optical Characteristic Curves:

