



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-288-012 REV: 1.1

2.3" 8*8 Dot Matrix Display

MODEL NO : ELM-2881EGWA ECN : Page: 1/5

■ Features :

- Large emitting dot0.2"diameter.
- Low power/high brightness.

■ Applications:

- Instrument panels
- Digital read out display

■ Descriptions :

- 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-2881EGWA	E	GaAsP/GaP	Orange	C.C.
	G	GaP	Green	

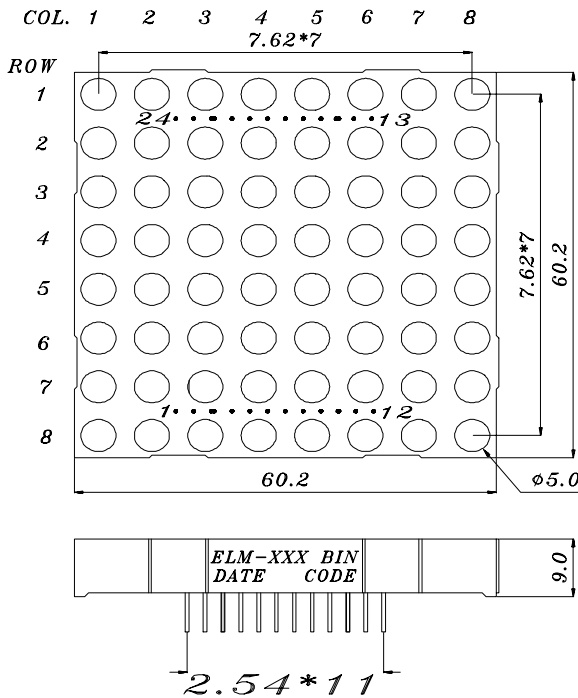
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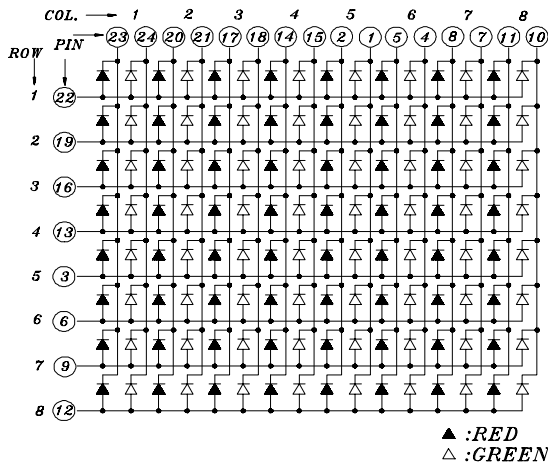
2.3" 8*8 Dot Matrix Display

MODEL NO : ELM-2881EGWA ECN : _____ Page: 2/5

■ Package Dimensions:



- COLUMN CATHODE**
ROW ANODE
- 1 COLUMN CATHODE 5(G)
 - 2 COLUMN CATHODE 5(E)
 - 3 ROW ANODE 5
 - 4 COLUMN CATHODE 6(G)
 - 5 COLUMN CATHODE 6(E)
 - 6 ROW ANODE 6
 - 7 COLUMN CATHODE 7(G)
 - 8 COLUMN CATHODE 7(E)
 - 9 ROW ANODE 7
 - 10 COLUMN CATHODE 8(G)
 - 11 COLUMN CATHODE 8(E)
 - 12 ROW ANODE 8
 - 13 ROW ANODE 4
 - 14 COLUMN CATHODE 4(E)
 - 15 COLUMN CATHODE 4(G)
 - 16 ROW ANODE 3
 - 17 COLUMN CATHODE 3(E)
 - 18 COLUMN CATHODE 3(G)
 - 19 ROW ANODE 2
 - 20 COLUMN CATHODE 2(E)
 - 21 COLUMN CATHODE 2(G)
 - 22 ROW ANODE 1
 - 23 COLUMN CATHODE 1(E)
 - 24 COLUMN CATHODE 1(G)
- E=RED G=GREEN



■ NOTES:

- 1.All dimensions are in 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	E	4.0	6.4	----	mcd	If=10mA
		G	4.0	6.4	----		
Peak Wavelength	λ p	E	----	635	----	nm	If=20mA
		G	----	565	----		
Dominant Wavelength	λ d	E	----	625	----	nm	If=20mA
		G	----	570	----		
Spectrum Radiation Bandwidth	△ λ	E	----	45	----	nm	If=20mA
		G	----	30	----		
Forward Voltage	Vf	E	1.7	2.0	2.4	V	If=20mA
		G	1.7	2.1	2.4		
Reverse Current	Ir	----	----	10	μ A	Vr=5V	



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MODEL NO : ELM-2881EGWA ECN : _____ Page: 4/5

■ 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 = 10 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1

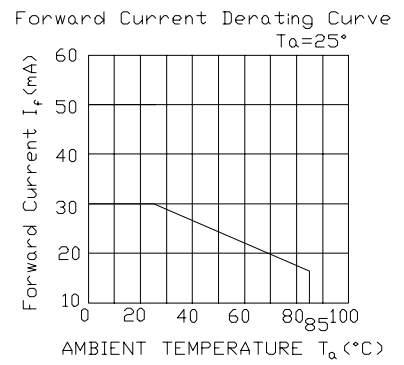
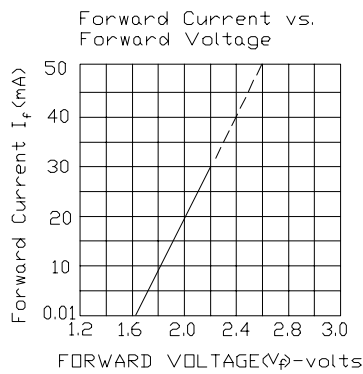
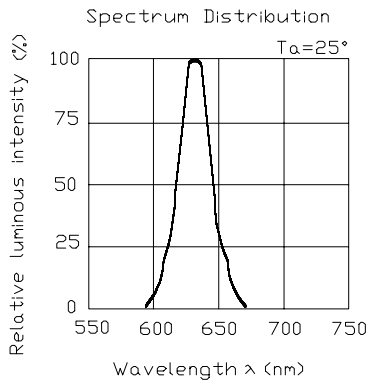
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Typical Electro-Optical Characteristic Curves:

E



G

