



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDM-108-003 REV: 1

1.2" 5*8 Dot Matrix Displays

PART NO. : ELM-1082SRWA ECN : Page: 1/5

■ Features :

- Large emitting dot 0.12" diameter.
- Low power/high brightness.

■ Applications:

- Instrument panels
- Digital read out display

■ Descriptions :

- The ELM-1082 series is a large emitting area(3.0mm diameter)LED sources configured in a 40 dots 5*8 matrix array.
- These devices are made with white dots and gray surface.

PART NO.	Chip	
	Material	Emitted Color
ELM-1082SRWA	GaAlAs	Super Red

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<http://www.everlight.com>

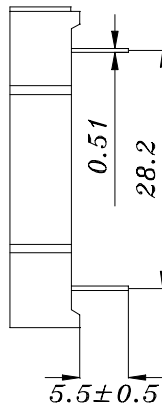
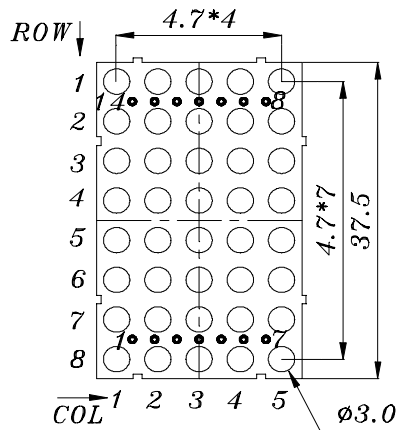
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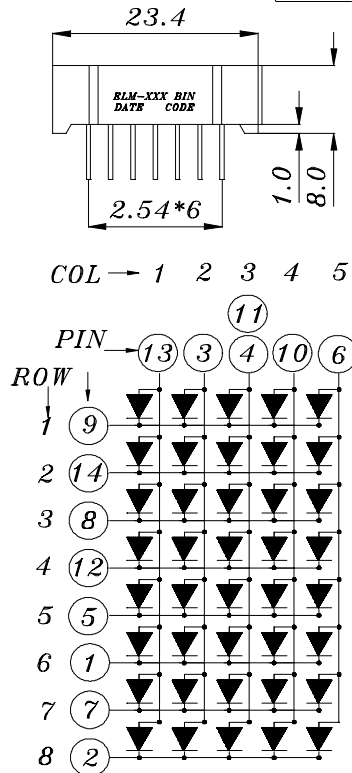
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■ Package Dimensions:



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



■ 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℃ :

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	40	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	110	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	IF(Peak)	180	mA

■ Electronic optical characteristics :

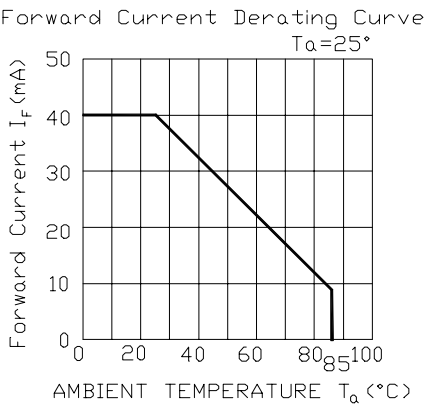
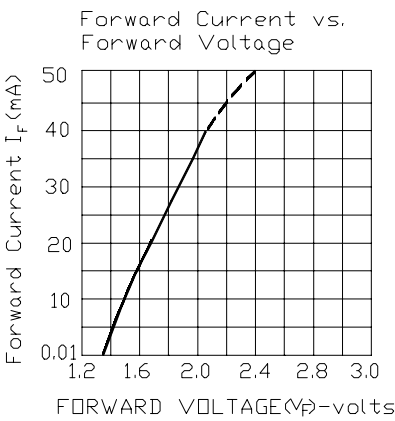
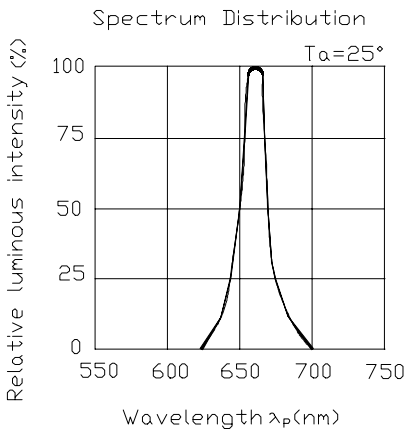
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	4.0	8.9	----	mcd	IF=10mA
Peak Wavelength	λ p	----	660	----	nm	IF=20mA
Dominant Wavelength	λ d	----	643	----	nm	IF=20mA
Spectrum Radiation Bandwidth	△ λ	----	20	----	nm	IF=20mA
Forward Voltage	VF	1.5	1.7	2.4	V	IF=20mA
Reverse Current	IR	----	----	10	μ A	VR=5V



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Typical Electro-Optical Characteristic Curves:

SR





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■ Reliability test items and conditions:

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