



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-711-002 REV: 1.2

0.7" 5\*7 Dot Matrix Displays

PART NO. : ELM-711SOWB ECN :          Page: 1/5

■ Features :

- Large emitting dot 0.09" diameter.
- Low power/high brightness.

■ Applications:

- Instrument panels
- Digital read out display

■ Descriptions :

- The ELM-711 series is a large emitting area(2.2mm diameter)LED sources configured in a 35 dots 5\*7 matrix array.
- These devices are made with white dots and gray surface.

PART NO.	Chip	
	Material	Emitted Color
ELM-711SOWB	GaAsP/GaP	Sunest Orange

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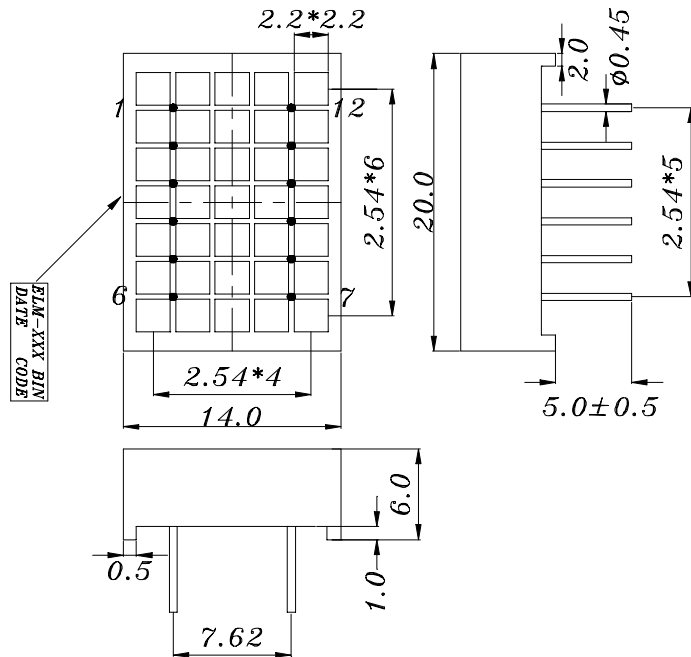
<http://www.everlight.com>



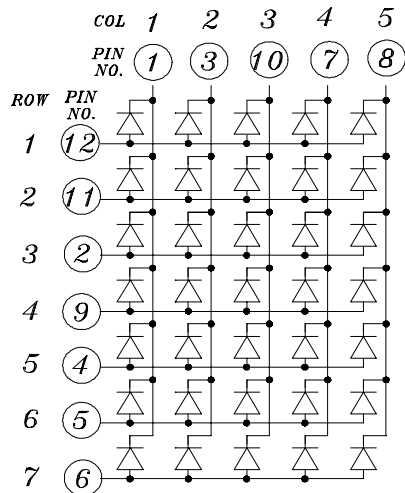
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■ Package Dimensions:



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



■ 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	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	1.4	2.7	----	mcd	IF=10mA
Peak Wavelength	λ p	----	610	----	nm	IF=20mA
Dominant Wavelength	λ d	----	605	----	nm	IF=20mA
Spectrum Radiation Bandwidth	△ λ	----	40	----	nm	IF=20mA
Forward Voltage	VF	1.7	2.0	2.4	V	IF=20mA
Reverse Current	IR	----	----	10	μ A	VR=5V



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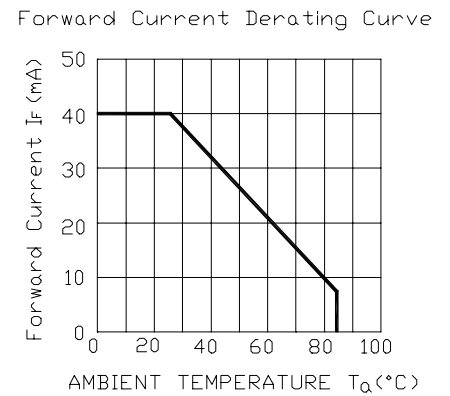
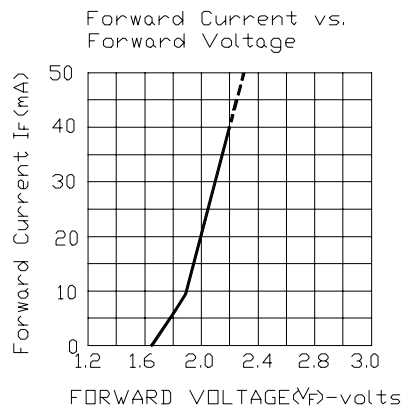
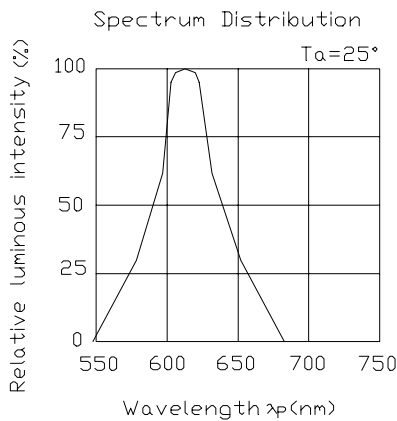
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■ Typical Electro-Optical Characteristic Curves:

CHIP Material:GaAsP/GaP  
Emitted Color:Sunset Orange





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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℃ ± 5 ℃	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85℃ 30min ┆ 5 min L : -55℃ 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100℃ 5min ┆ 10 sec L : -10℃ 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55℃	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℃/85% RH	1000 HRS	76 PCS	0/1