



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-181-020 REV: 1.0

## 1.4" 5\*8 Dot Matrix Displays

MODEL NO : ELM-1081SURWA/S530-A2 ECN : \_\_\_\_\_ Page: 1/5

### ■ Features :

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

### ■ Applications:

- Instrument panels
- Digital read out display

### ■ Description :

- The ELM-1081 series are a large emitting area(3.0mm diameter)LED sources configured in a 40 dots 5\*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-1081SURWA/S530-A2	AlGaInP	Hyper Red	C.C.

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL : 886-2-2267-2000,2267-9936

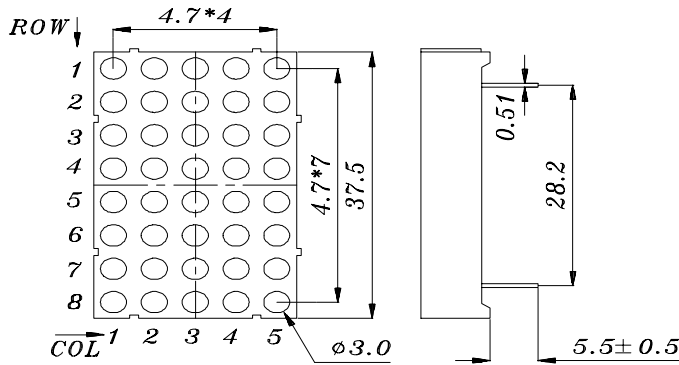
FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>

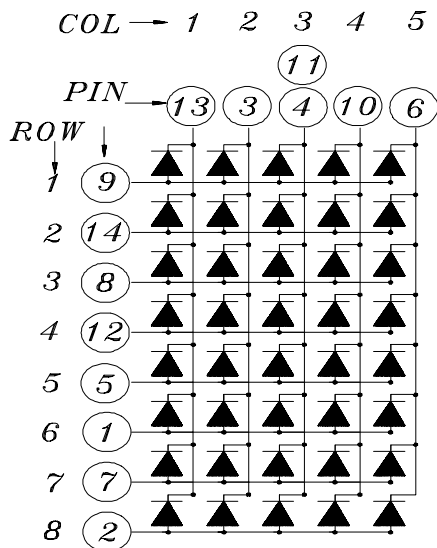
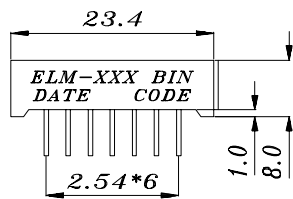


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Package Dimension:



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



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	25	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	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	1.05	2.8	----	mcd	If=2mA
		5.6	18.5			If=10mA
Peak Wavelength	$\lambda_p$	----	632	----	nm	If=20mA
Dominant Wavelength	$\lambda_d$	----	624	----	nm	If=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	----	20	----	nm	If=20mA
Forward Voltage	Vf	----	2.0	2.4	V	If=20mA
Reverse Current	Ir	----	----	10	$\mu A$	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 = 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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