



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-201-003 REV: 1.0

2.0" 5*7 LED Lamp Dot Matrix Displays

MODEL NO : ELLM-2001WB/SURC/S400 ECN : Page: 1/5

■ Features :

- Large emitting dot 0.264" diameter.
- Low power/high brightness.

■ Applications:

- Instrument panels
- Digital read out display

■ Description :

- The LM-2001 series are a large emitting area(5.0mm diameter)Lamp sources configured in a 35 dots 5*7 matrix array.
- These device is made with water clear dots and black surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELLM-2001WB/SURC/S400	AlGaInP	Hyper Red	C.C.

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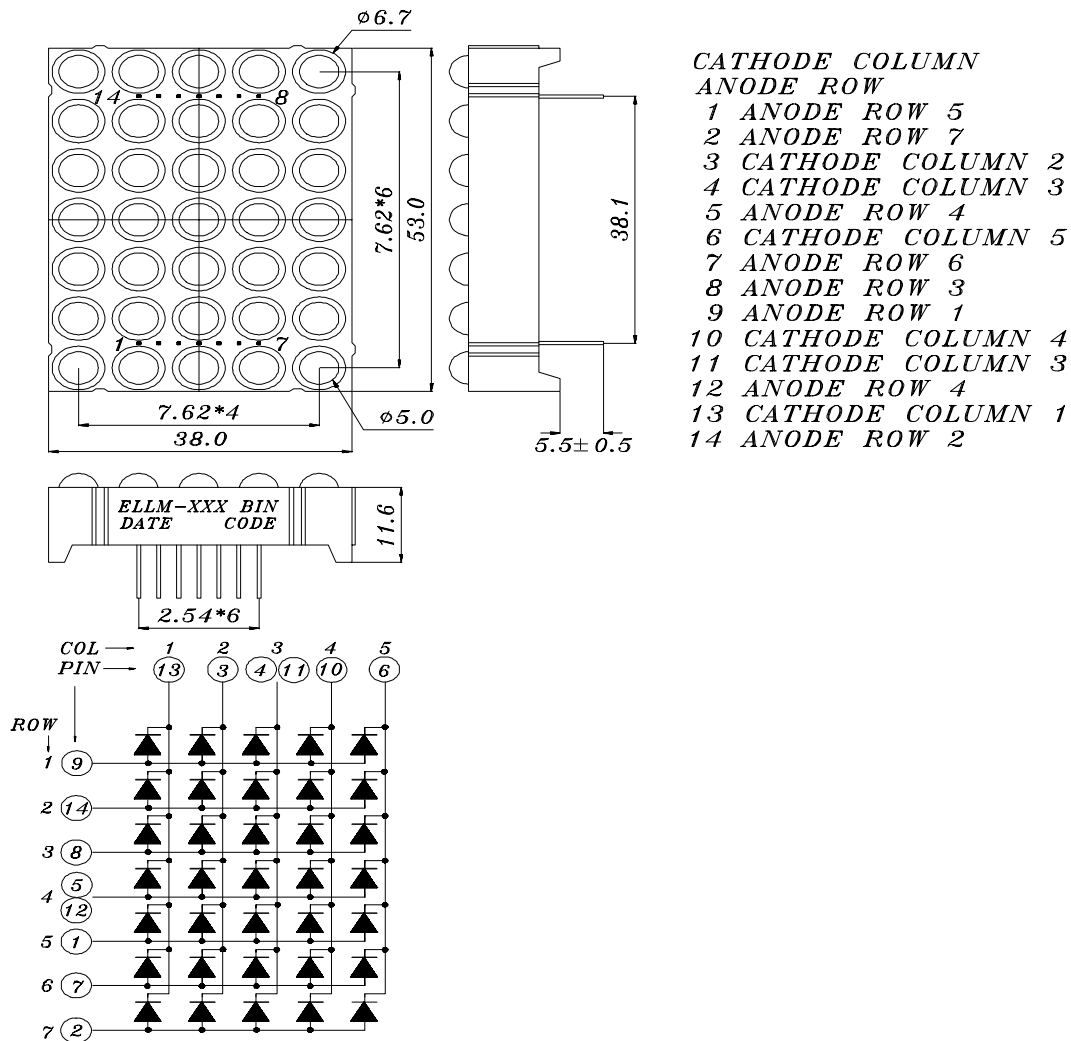
<http://www.everlight.com>



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■ Package Dimension:



■ 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	V _r	5	V
Forward Current	I _f	50	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40to+100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	P _d	120	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _f (Peak)	200	mA

■ Electronic optical characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	I _v	----	118.8	----	mcd	If=2mA
		1240	1980			If=10mA
Peak Wavelength	λ _p	----	632	----	nm	If=20mA
Dominant Wavelength	λ _d	----	624	----	nm	If=20mA
Spectrum Radiation Bandwidth	△λ	----	20	----	nm	If=20mA
Forward Voltage	V _f	----	2.0	2.4	V	If=20mA
Reverse Current	I _r	----	----	10	μA	V _r =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℃ ± 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 = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85℃/85% RH	1000 HRS	76 PCS	0/1



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Typical Electro-Optical Characteristic Curves:

