



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-231-032 REV: 1.0

2.3" 8*8 LED Lamp Dot Matrix Displays

MODEL NO : ELLM-2301WB/USOC/S400 ECN : Page: 1/5

■ Features :

- Large Emitting Dot 0.2"Diameter.
- Low Power/High Brightness.

■ Applications:

- Instrument Panels
- Digital read out Display

■ Descriptions :

- The ELLM-2301 series is a large emitting area(5.0mm diameter)LAMP sources configured in a 64 dots 8*8 matrix array.
- These devices are made with Water clear dots and black surface.

PART NO	Chip		C.C. or C.A.
	Material	Emitted Color	
ELLM-2301WB/USOC/S400	AlGaInP	Super Sunset Orange	C.C.

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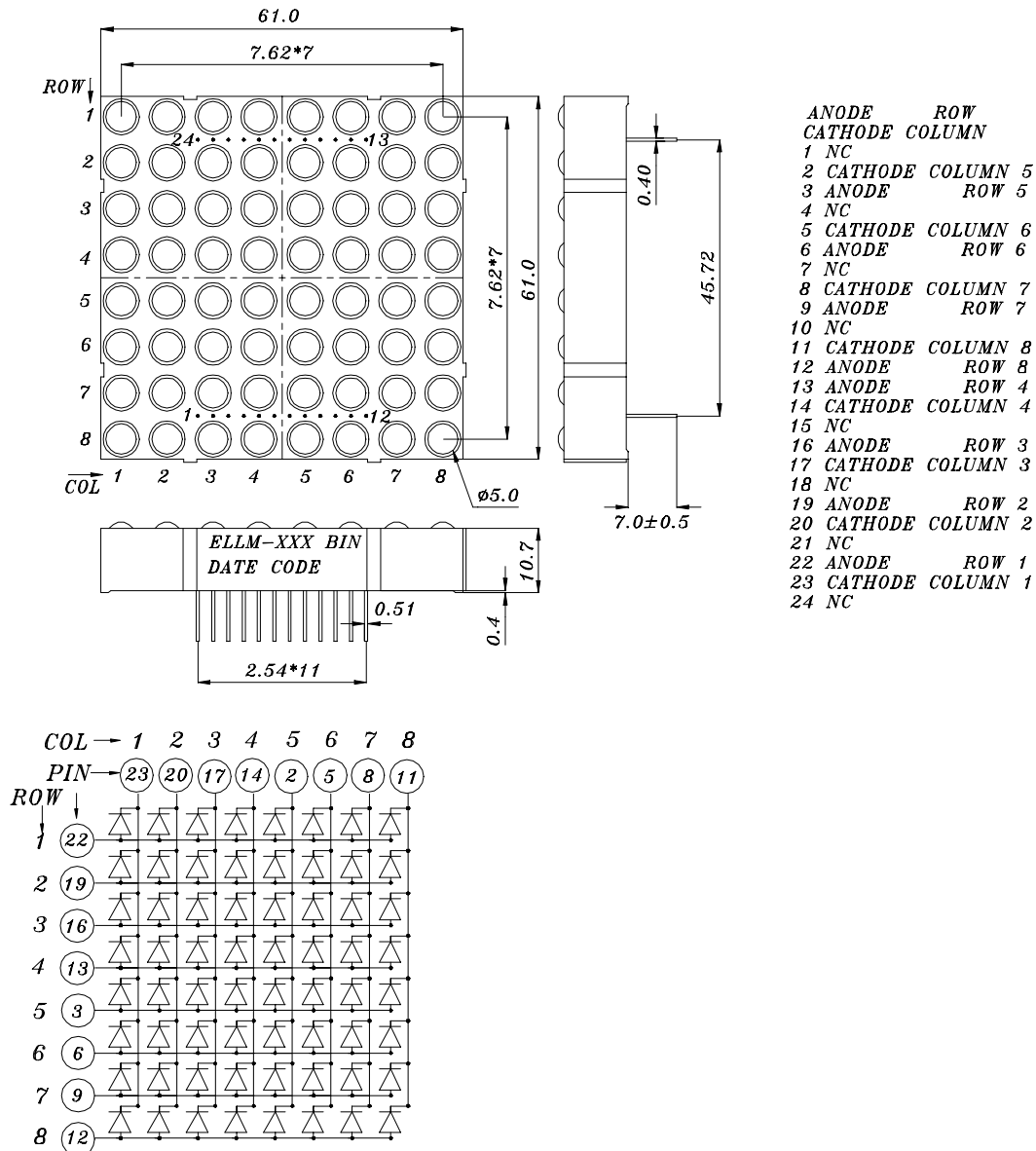
<http://www.everlight.com>



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■ Package Dimensions:



■ 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	50	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40to+100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	120	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	200	mA

■ Electronic optical characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	1000	1500	----	mcd	If=20mA
Peak Wavelength	λ_p	----	621	----	nm	If=20mA
Dominant Wavelength	λ_d	----	615	----	nm	If=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	----	18	----	nm	If=20mA
Forward Voltage	Vf	----	2.0	2.4	V	If=20mA
Reverse Current	Ir	----	----	10	μ V	Vr=5V



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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



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■ Typical Electro-Optical Characteristic Curves:

