



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-231-020 REV: 1.0

2.3" 8*8 LED Lamp Dot Matrix Displays

MODEL NO : ELLM-2301WB/SURC/S649 ECN : Page: 1/5

■ Features :

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

■ Applications:

- Instrument panels
- Digital readout display

■ Description :

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

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELLM-2301WB/SURC/S649	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

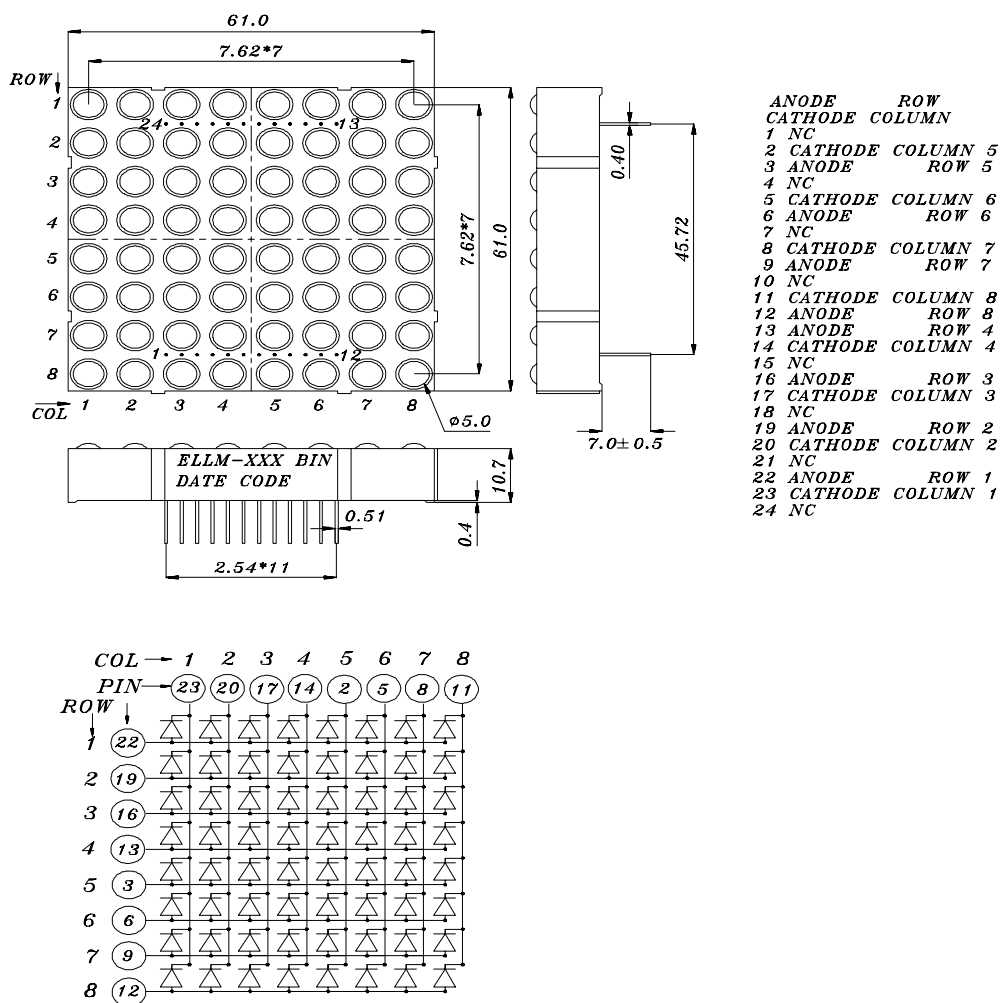
FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>



2.3" 8*8 LED Lamp Dot Matrix Displays

■ 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 .



2.3" 8*8 LED Lamp Dot Matrix Displays

MODEL NO : ELLM-2301WB/SURC/S649 ECN : Page: 3/5

■ 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	-40to+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	800	1500	----	mcd	If=20mA
Peak Wavelength	λ_p	----	632	----	nm	If=20mA
Dominant Wavelength	λ_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	V	Vr=5V



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-231-020 REV: 1.0

2.3" 8*8 LED Lamp Dot Matrix Displays

MODEL NO : ELLM-2301WB/SURC/S649 ECN : Page: 4/5

■ 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

--



2.3" 8*8 LED Lamp Dot Matrix Displays

MODEL NO: ELLM-2301WB/SURC/S649 ECN: Page: 5/5

■ Typical Electro-Optical Characteristic Curves:

