



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number :     DDB-100-017     REV:     1.1    

## 10 Bar Graph Displays

MODEL NO :     ELB-1001HDA     ECN :            Page:     1/5    

### ■ Features :

- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.

### ■ Applications:

- Audio equipment
- Instrument panels
- Digital read out display

### ■ Descriptious :

- The ELB-1001 series are ten-element bar graph displays. Design for viewing distances up to 7 meters.
- There are separate anodes and cathodes for each light segment and choice of five colors is offered.
- These device is made with bright red segments and gray surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELB-1001HDA	GaP	Bright Red	****

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

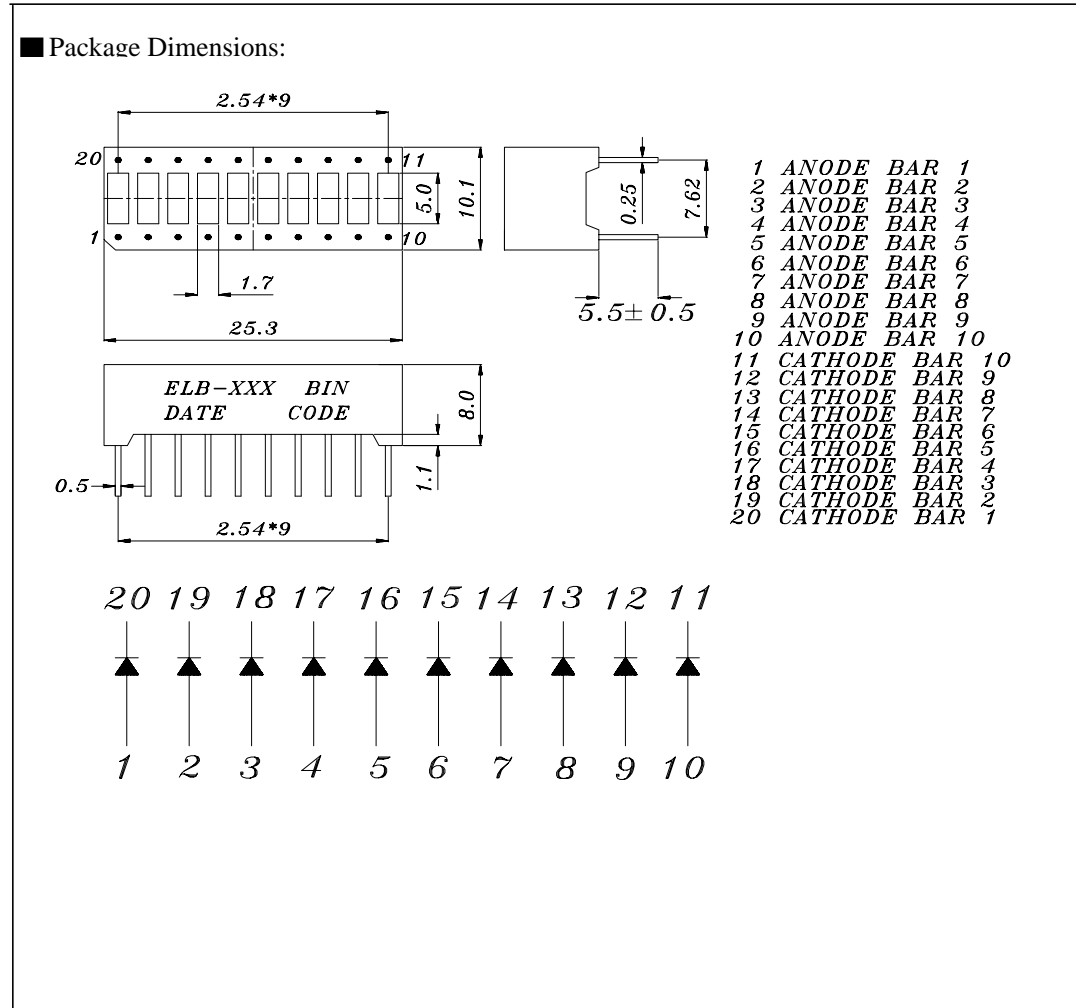
TEL : 886-2-2267-2000,2267-9936

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

<http://www.everlight.com>



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■ 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	15	mA
Operating Temperature	ToPr	-40 to +85	°C
Storage Temperature	TsTg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	45	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	50	mA

■ Electronic optical characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	0.3	0.7	----	mcd	If=10mA
Peak Wavelength	λ p	----	697	----	nm	If=10mA
Dominant Wavelength	λ d	----	650	----	nm	If=10mA
Spectrum Radiation Bandwidth	△ λ	----	90	----	nm	If=10mA
Forward Voltage	Vf	1.5	2.0	2.4	V	If=10mA
Reverse Current	Ir	----	----	10	μ 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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Page: 5/5

## Typical Electro-Optical Characteristic Curves:

