EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDB-100-006 REV: 1.0

10 Bar Graph Displays

MODEL NO : ELB-1001UBDA ECN : Page: 1/4

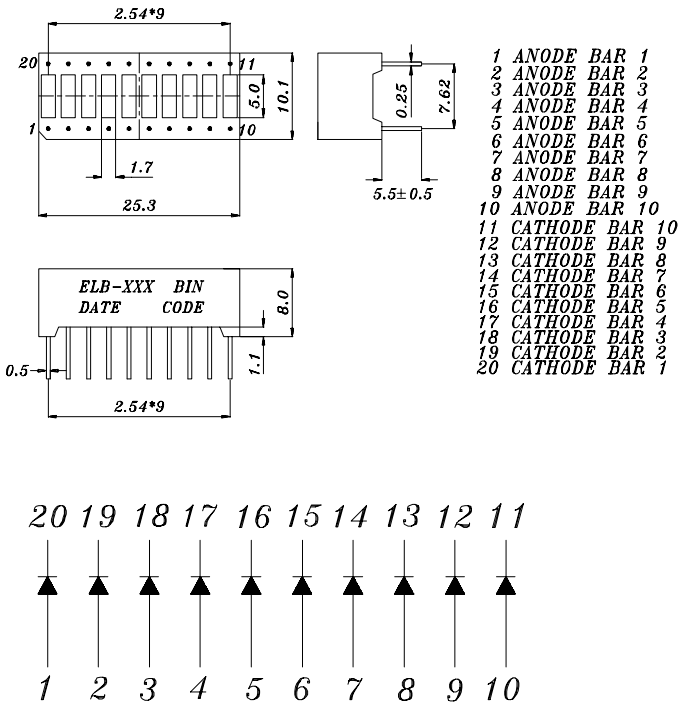
Features :

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

Description :

- 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 blue segments and gray surface.

Package Dimension:



Applications:

- Audio equipment
- Instrument panels
- Digital readout display

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.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELB-1001UBDA	GaN/Sic Substrate	Blue	*****

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

10 Bar Graph Displays

MODEL NO : ELB-1001UBDA ECN : Page: 2/4

■ Absolute maximum ratings at Ta = 25℃ :

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	140	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	70	mA

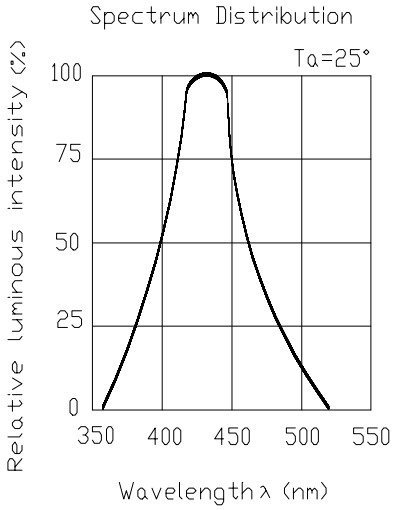
■ Electronic optical characteristics :

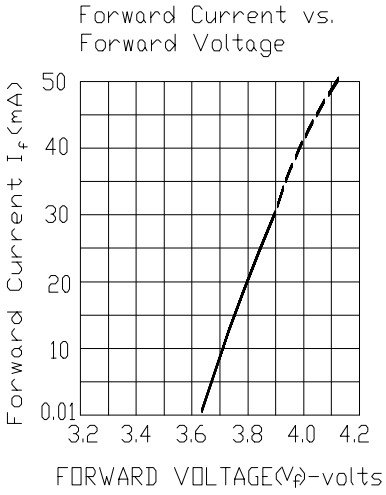
Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	11.0	15.0	----	mcd	If=10mA
Peak Wavelength	λ p	----	430	----	nm	If=20mA
Dominant Wavelength	λ d	----	466	----	nm	If=20mA
Spectrum Rediation Bandwidth	△ λ	----	65	----	nm	If=20mA
Forward Voltage	Vf	----	3.8	4.5	V	If=20mA
Reverse Current	Ir	----	----	10	μA	Vr=5V

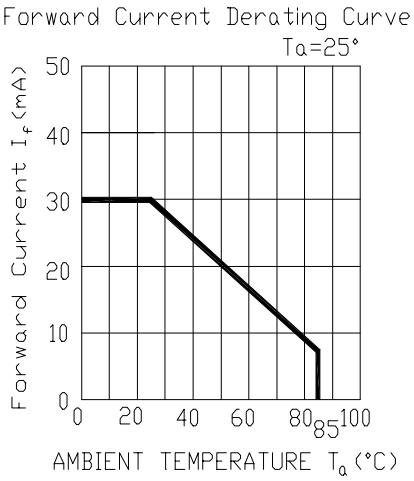
10 Bar Graph Displays

MODEL NO: ELB-1001UBDA ECN : Page: 3/4

Typical Electro-Optical Characteristic Curves:







EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDB-100-006 REV: 1.0

10 Bar Graph Displays

MODEL NO : ELB-1001UBDA ECN : Page: 4/4

■ 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