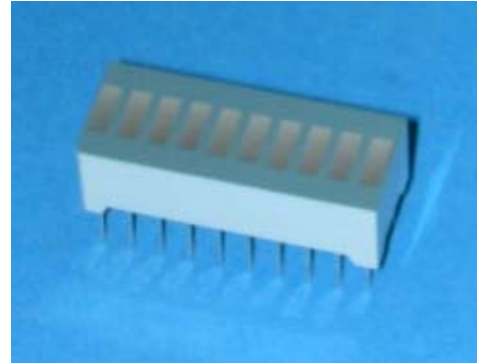


Technical Data Sheet
10 Bar Graph Displays

ELB-1001EWA

■ **Features :**

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



■ **Descriptions :**

- The ELB-1001 series are ten-element bar graph displays. designed 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 devices are made with white segments and gray surface.

■ **Applications :**

- Audio equipment
- Instrument panels
- Digital read out display

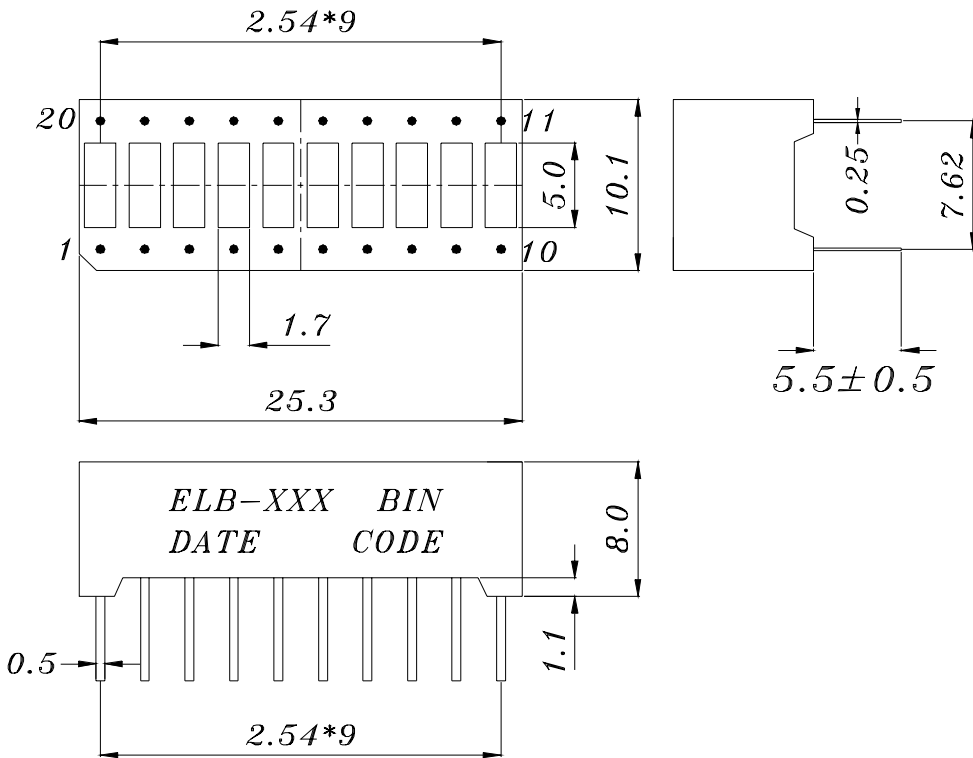
PART NO.	Chip	
	Material	Emitted Color
ELB-1001EWA	GaAsP/GaP	Orange



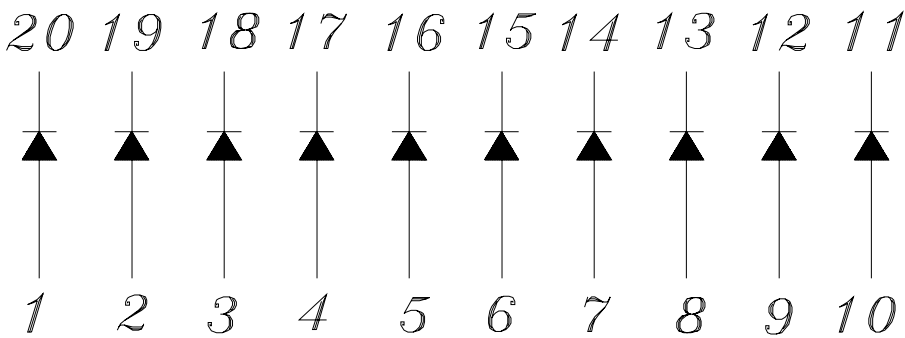
Technical Data Sheet
10 Bar Graph Displays

ELB-1001EWA

Package Dimensions



- 1 ANODE BAR 1
- 2 ANODE BAR 2
- 3 ANODE BAR 3
- 4 ANODE BAR 4
- 5 ANODE BAR 5
- 6 ANODE BAR 6
- 7 ANODE BAR 7
- 8 ANODE BAR 8
- 9 ANODE BAR 9
- 10 ANODE BAR 10
- 11 CATHODE BAR 10
- 12 CATHODE BAR 9
- 13 CATHODE BAR 8
- 14 CATHODE BAR 7
- 15 CATHODE BAR 6
- 16 CATHODE BAR 5
- 17 CATHODE BAR 4
- 18 CATHODE BAR 3
- 19 CATHODE BAR 2
- 20 CATHODE BAR 1



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.

**Technical Data Sheet
10 Bar Graph Displays****ELB-1001EWA**

■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	30	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Power Dissipation	P _d	100	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	I _{F(Peak)}	160	mA

■ Electronic optical characteristics :

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	I _v	1.05	2.3	----	mcd	I _F =10mA
Peak Wavelength		λ _p	----	635	----	nm	I _F =20mA
Dominant Wavelength		λ _d	----	625	----	nm	I _F =20mA
Spectrum Radiation Bandwidth		Δλ	----	45	----	nm	I _F =20mA
Forward Voltage		V _F	1.7	2.0	2.4	V	I _F =20mA
Reverse Current		I _R	----	----	10	μA	V _R =5V

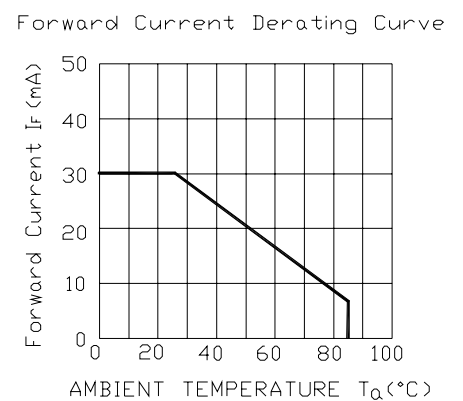
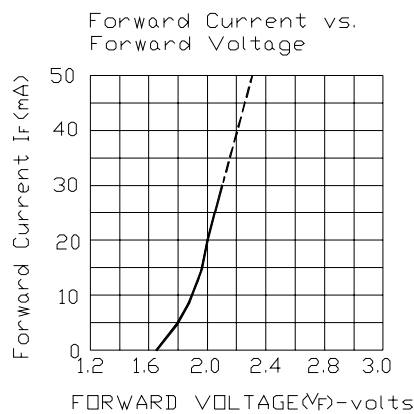
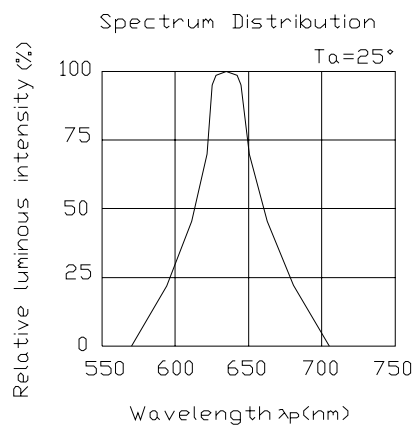


Technical Data Sheet
10 Bar Graph Displays

ELB-1001EWA

■ Typical Electro-Optical Characteristic Curves:

CHIP Material:GaAsP/GaP
Emitted Color:Hi-Eff Red/Orange





Technical Data Sheet
10 Bar Graph Displays

ELB-1001EWA

■ 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