



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDDB-101-008 REV: 1

12.7*6.35mm Light Bars

PART NO. : ELB-1010SURD/S530-A3 ECN : Page: 1/5

■ Features :

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

■ Applications;

- Audio equipment
- Instrument panels
- Digital read out display

■ Descriptions :

- The ELB-1010 series is 12.7*6.35mm light bar display. 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 device are available with red offering a wide possibility in design.

PART NO.	Chip	
	Material	Emitted Color
ELB-1010SURD/S530-A3	AlGaInP	Hyper Red

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<http://www.everlight.com>

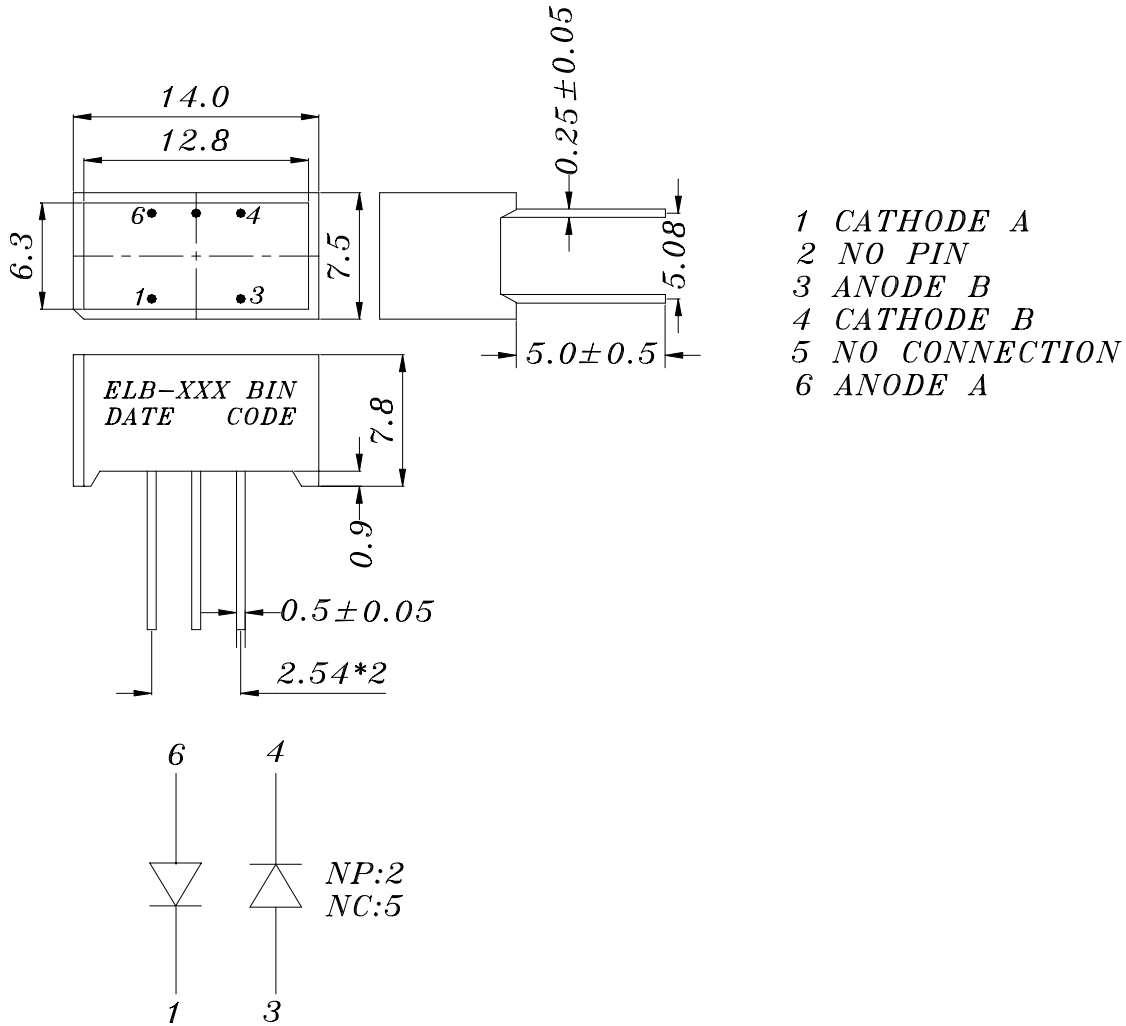
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■ Package Dimensions:



■ 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	25	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	TsTg	-40 to +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 :

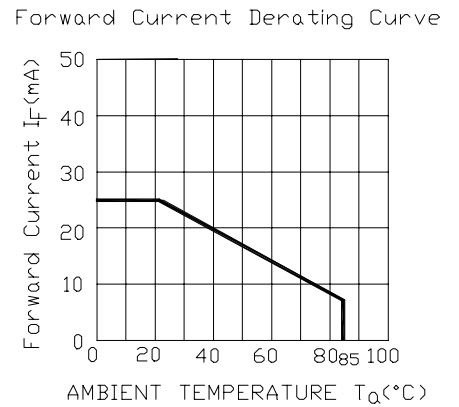
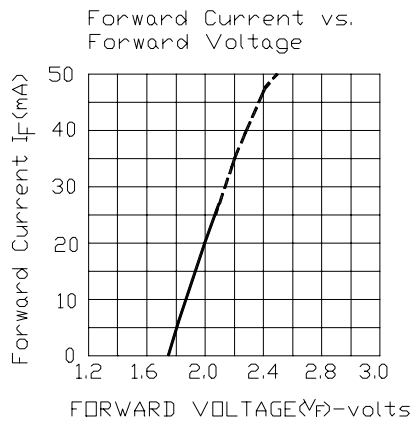
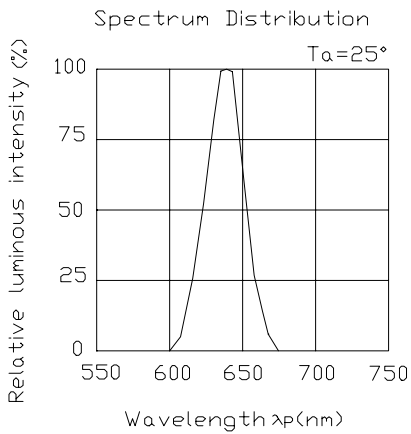
Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	Iv	15.0	30.0	----	mcd	IF=10mA
Peak Wavelength		λp	----	632	----	nm	IF=20mA
Dominant Wavelength		λd	----	624	----	nm	IF=20mA
Spectrum Radiation Bandwidth		$\Delta \lambda$	----	20	----	nm	IF=20mA
Forward Voltage		VF	----	2.0	2.4	V	IF=20mA
Reverse Current		IR	----	----	100	μA	VR=5V



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Typical Electro-Optical Characteristic Curves:

(SUR)





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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