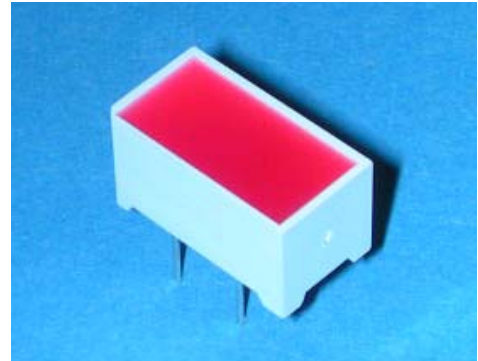


Technical Data Sheet
12.7*6.35mm Light Bars**ELB-1010SURD/S530-A3****■ Features :**

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

■ 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.

**■ Applications :**

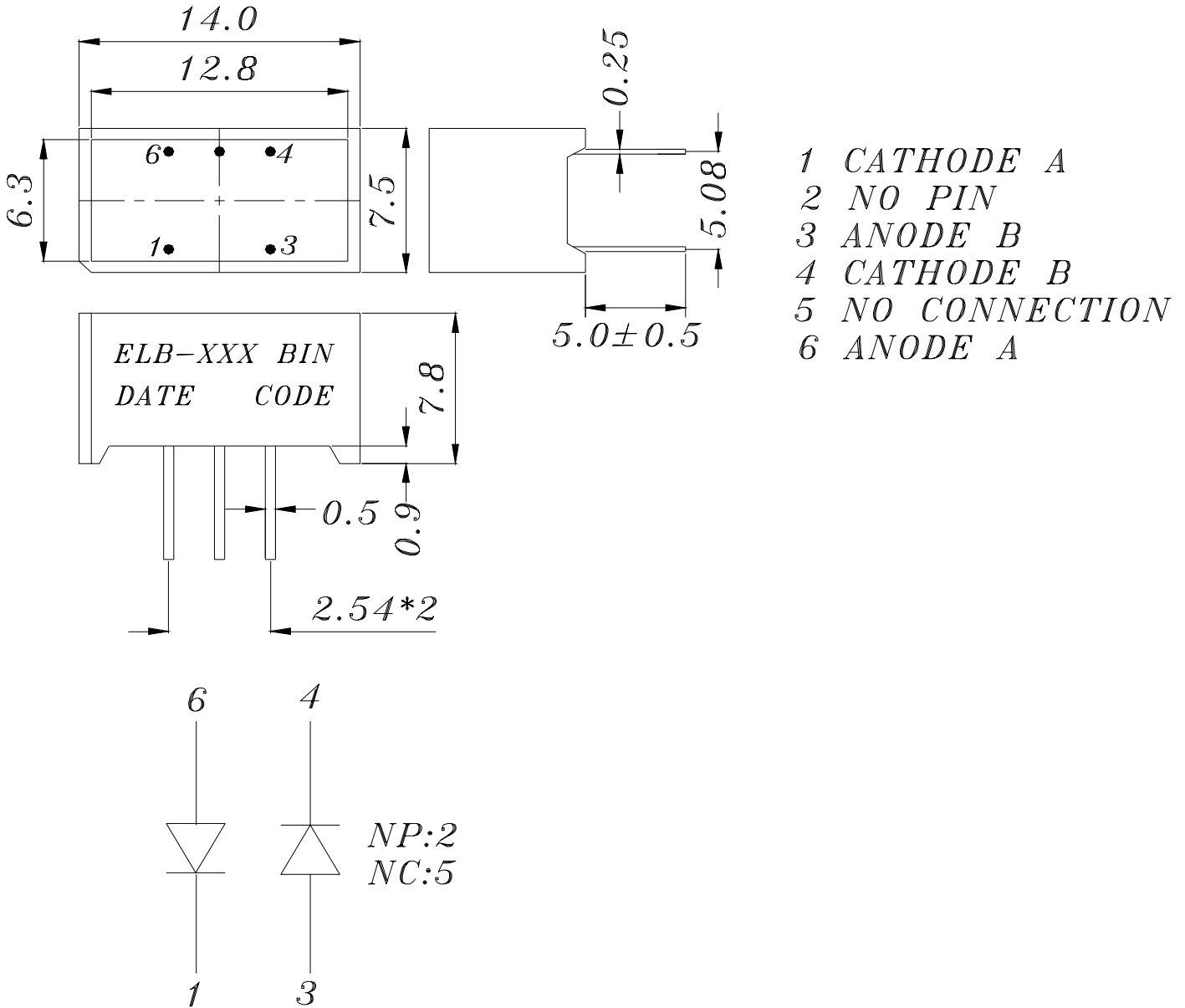
- Audio equipment
- Instrument panels
- Digital read out display

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

Technical Data Sheet
12.7*6.35mm Light Bars

ELB-1010SURD/S530-A3

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.

**Technical Data Sheet
12.7*6.35mm Light Bars****ELB-1010SURD/S530-A3**

■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	25	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	P _d	60	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	----	4.0	----	mcd	I _F =2mA
			11.0	24.0	----	mcd	I _F =10mA
Peak Wavelength		λ _p	----	632	----	nm	I _F =20mA
Dominant Wavelength		λ _d	----	624	----	nm	I _F =20mA
Spectrum Radiation Bandwidth		Δλ	----	20	----	nm	I _F =20mA
Forward Voltage		V _F	----	2.0	2.4	V	I _F =20mA
Reverse Current		I _R	----	----	100	μA	V _R =5V

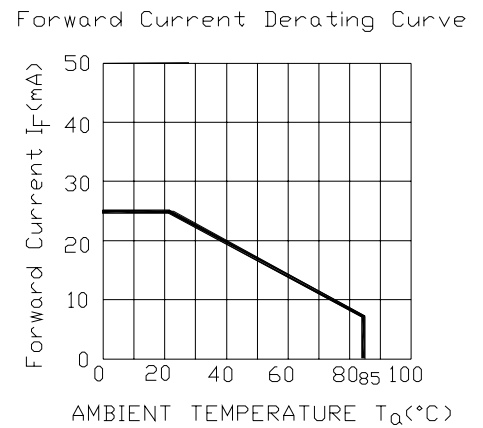
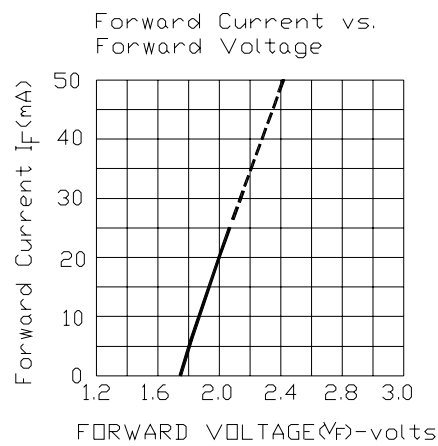
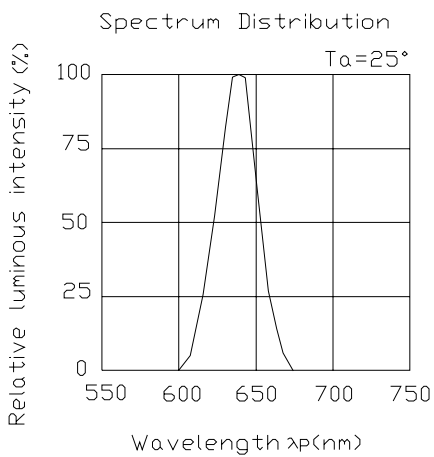


Technical Data Sheet
12.7*6.35mm Light Bars

ELB-1010SURD/S530-A3

■ Typical Electro-Optical Characteristic Curves:

(SUR)



**Technical Data Sheet
12.7*6.35mm Light Bars****ELB-1010SURD/S530-A3****■ 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