



Technical Data Sheet
0.3" Single Digit Displays

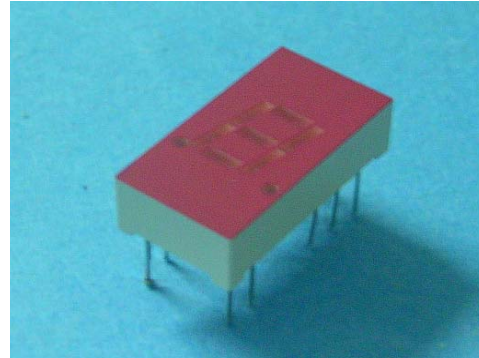
ELS-321SDRDR/S530-A3

■ **Features :**

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

■ **Descriptions :**

- The ELS-321series is a large7.62mm (0.3")high seven segment display designed for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light.
- These devices are made withred segments andred surface.



■ **Applications :**

- Audio equipment
- Instrument panels
- Digital read out display

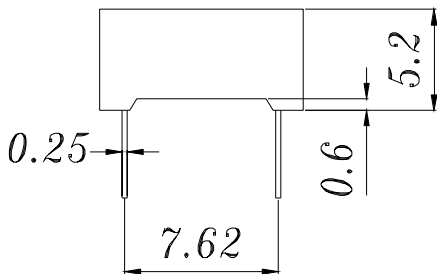
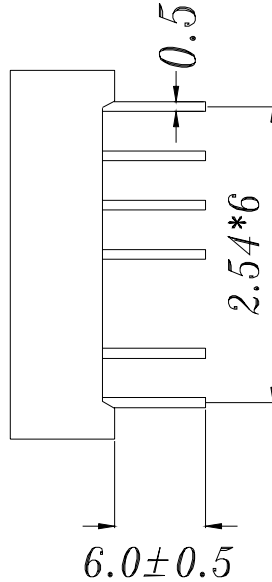
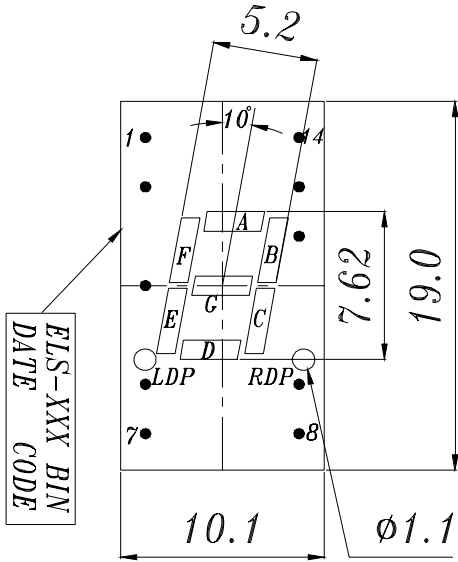
PART NO.	Chip	
	Material	Emitted Color
ELS-321SDRDR/S530-A3	AlGaInP	Super Deep-Red

BG0506212 50009903

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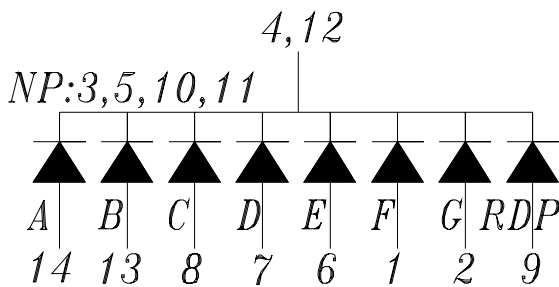
ELS-321SDRDR/S530-A3

Package Dimensions



COMMON CATHODE

- 1 ANODE F
- 2 ANODE G
- 3 NO PIN
- 4 COMMON CATHODE
- 5 NO PIN
- 6 ANODE E
- 7 ANODE D
- 8 ANODE C
- 9 ANODE RDP
- 10 NO PIN
- 11 NO PIN
- 12 COMMON CATHODE
- 13 ANODE B
- 14 ANODE A



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	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

Note: *Soldering time ≤ 5 seconds.

■ Electronic optical characteristics :

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	I _v	----	2.3	----	mcd	I _F =2mA
			4.0	8.9	----	mcd	I _F =10mA
	Per decimal point		----	0.4	----	mcd	I _F =2mA
			1.0	2.0	----	mcd	I _F =10mA
Peak Wavelength		λ _p	----	650	----	nm	I _F =20mA
Dominant Wavelength		λ _d	----	639	----	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

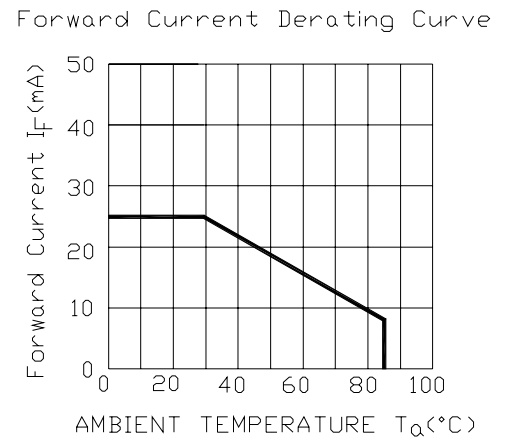
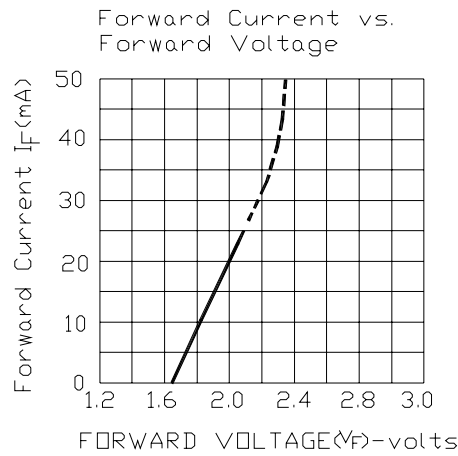
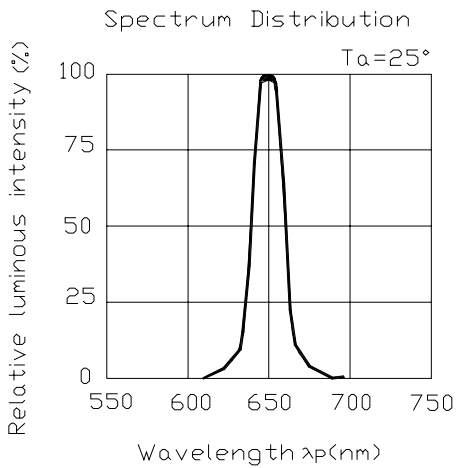


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Typical Electro-Optical Characteristic Curves:

(SDR)



**Technical Data Sheet
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The reliability of products shall be satisfied with items listed below.

Confidence level : 97%

LTPD : 3%

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Failure Judgment Criteria	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	5 SEC	76 PCS	Iv ≤ Ivt*0.5 or Vf ≥ U or Vf ≤ L	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

Note : Ivt : The test Iv value of the chip before the reliability test

Iv : The test value of the chip that has completed the reliability test

U : Upper Specification Limit

L : Lower Specification Limit



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ELS-321SDRDR/S530-A3

■ Packing Quantity Specification

1.26PCS/tube, 72 tubes/box

2.4Boxes/Carton

Label Form Specification



CPN:

P/N:



S321SDRDR/S530-A3

QTY:



LOT NO:

MADE IN CHINA

CAT:

HUE:

REF:

CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot Number

MADE IN CHINA: Production Place

Notes :

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

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