



EVERLIGHT ELECTRONICS CO.,LTD.

DATA SHEET

PART NO. : ELS-322SURWA/S530-A3

DATE : 2007/9/12

DEPARTMENT : CHRD1

REVISION : 2

RECEIVED			
☒ MASS PRODUCTION			
☐ PRELIMINARY			
☐ CUSTOMER DESIGN			
DEVICE NUMBER : CDDS-322-009			
PAGE : 6			
CUSTOMER	DESIGNER	CHECKER	APPROVER

2	舊版板式變更為新版格式	2007/9/12
1		2002/3/22
REV.	DESCRIPTION	RELEASE DATE

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<http://www.everlight.com>

T02197 C91560208



Technical Data Sheet

0.3" Single Digit Displays

ELS-322SURWA/S530-A3

Features :

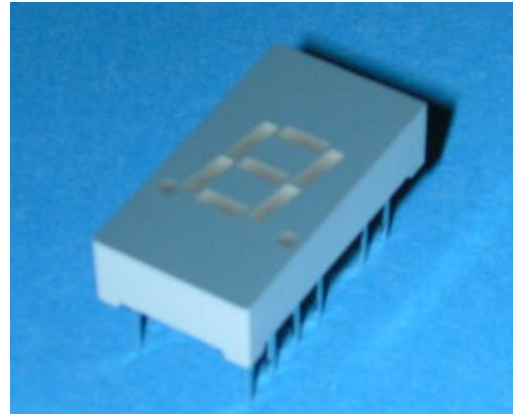
- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.
- Pb free
- The product itself will remain within RoHS compliant version

Descriptions :

- The ELS-322 series is a large 7.62 mm (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 with white segments and gray surface.

Applications :

- Audio equipment
- Instrument panels
- Digital read out display



PART NO.	Chip	
	Material	Emitted Color
ELS-322SURWA/S530-A3	AlGaInP	Brilliant Red

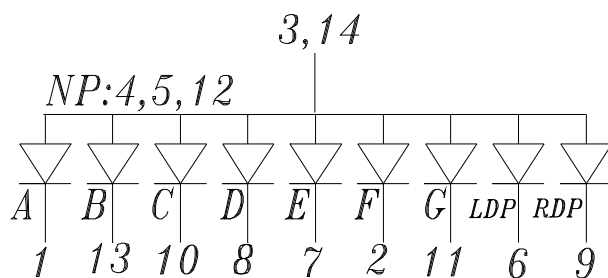
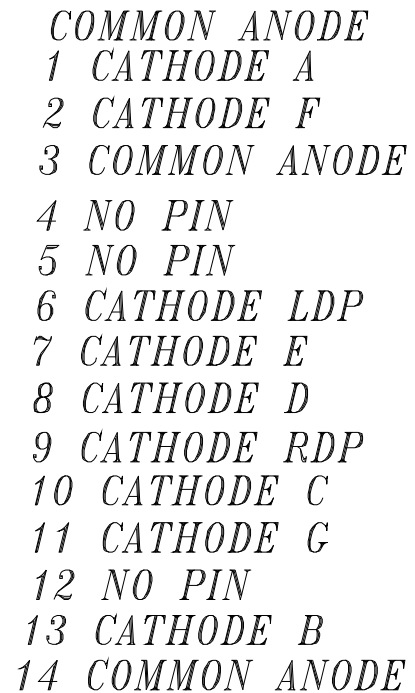
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0.3" Single Digit Displays

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 :

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	
Storage Temperature	Tstg	-40 to +100	
Soldering Temperature *	Tsol	260 ± 5	
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW

Note: *Soldering time 5 seconds.

■ Electronic optical characteristics :

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	I _v	----	3.0	----	mcd	I _F =2mA
			5.6	11.0	----	mcd	I _F =10mA
	Per decimal point		----	0.7	----	mcd	I _F =2mA
			1.0	2.5	----	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		λ	----	20	----	nm	I _F =20mA
Forward Voltage		V _F	----	2.0	2.4	V	I _F =20mA
Reverse Current		I _R	----	----	100	μ A	V _R =5V



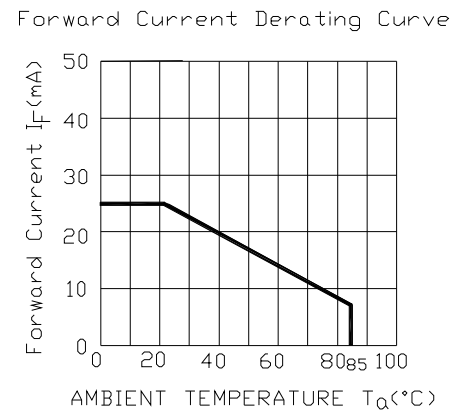
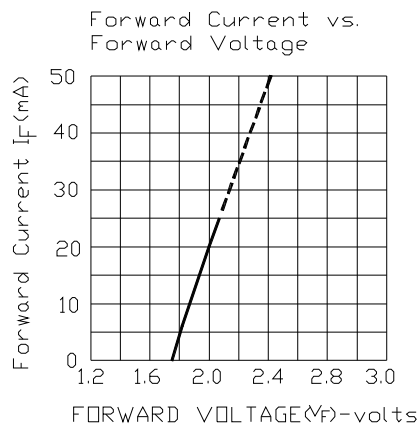
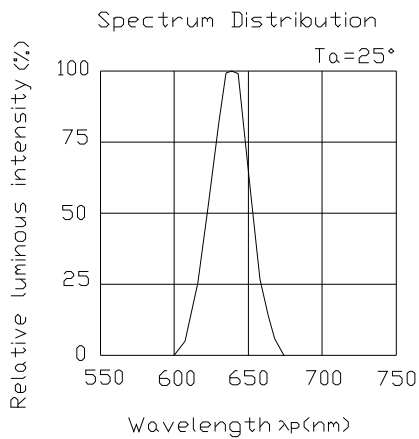
Technical Data Sheet

0.3" Single Digit Displays

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■ Typical Electro-Optical Characteristic Curves:

(SUR)



CONFIDENTIAL



Technical Data Sheet

0.3" Single Digit Displays

ELS-322SURWA/S530-A3

Reliability test items and conditions:

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 ± 5	5 SEC	76 PCS	Iv Ivt*0.5 or Vf U or Vf L	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 = 10 mA	1000 HRS	76 PCS		0/1
7	High Temperature / High Humidity	85 /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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■ Packing Quantity Specification

1. 26PCS/tube, 72 tubes/box
2. 4Boxes/Carton

Label Form Specification



CPN: Customer's Production Number
P/N : Production Number
QTY: Packing Quantity
CAT: Ranks
HUE: Dominant 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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