



0.36" Single Digit Displays

MODEL NO : ELS-316SURWA/S530-A2 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 ELS-316 series is a large 9.14mm (0.36")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.

PART NO	Chip	
	Material	Emitted Color
ELS-316SURWA/S530-A2	AlGaInP	Hyper Red

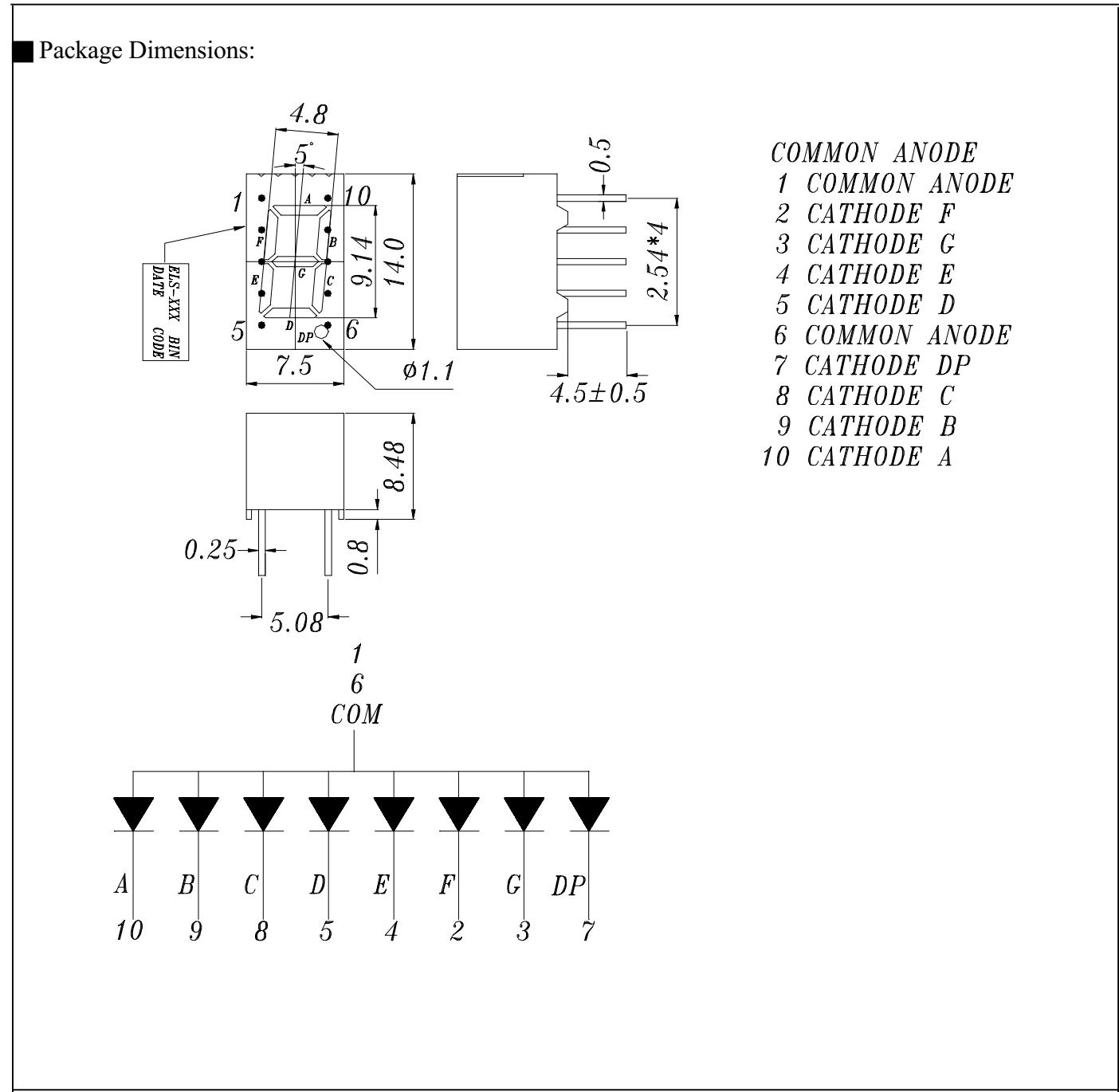
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■ Notes:

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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MODEL NO : ELS-316SURWA/S530-A2 ECN : _____ Page: 3/5■ Absolute maximum ratings at $T_a = 25^\circ\text{C}$:

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	$^\circ\text{C}$
Storage Temperature	Tstg	-40 to +100	$^\circ\text{C}$
Soldering Temperature	Tsol	260 ± 5	$^\circ\text{C}$
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	0.45	1.4	----	IF=2mA
			2.0	6.4	----	
	Per decimal point	Iv	0.14	0.4	----	IF=2mA
			0.7	2.1	----	
Peak Wavelength	λ_p	----	632	----	nm	IF=20mA
Dominant Wavelength	λ_d	----	624	----	nm	IF=20mA
Spectrum Radiation Bandwidth	$\Delta \lambda$	---	20	---	nm	IF=20mA
Forward Voltage	V_F	----	2.0	2.4	V	IF=20mA
Reverse Current	I_R	----	----	10	μA	VR=5V



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-316-016 REV: 1.1

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■ Reliability test items and conditions:					
NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : $+85^{\circ}\text{C}$ 30min ↓ 5 min L : -55°C 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : $+100^{\circ}\text{C}$ 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

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■ Typical Electro-Optical Characteristic Curves: