



Device Number : DDS-321-002 REV: 1.1

0.3" Single Digit Display

MODEL NO : ELS-321IDR 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-321series is a large 7.62mm (0.3")high seven segment display design for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light .
- These device is made with red segments and red surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELS-321IDR	GaAsP/GaP	Hi-EffRed	C.C.

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<http://www.everlight.com>



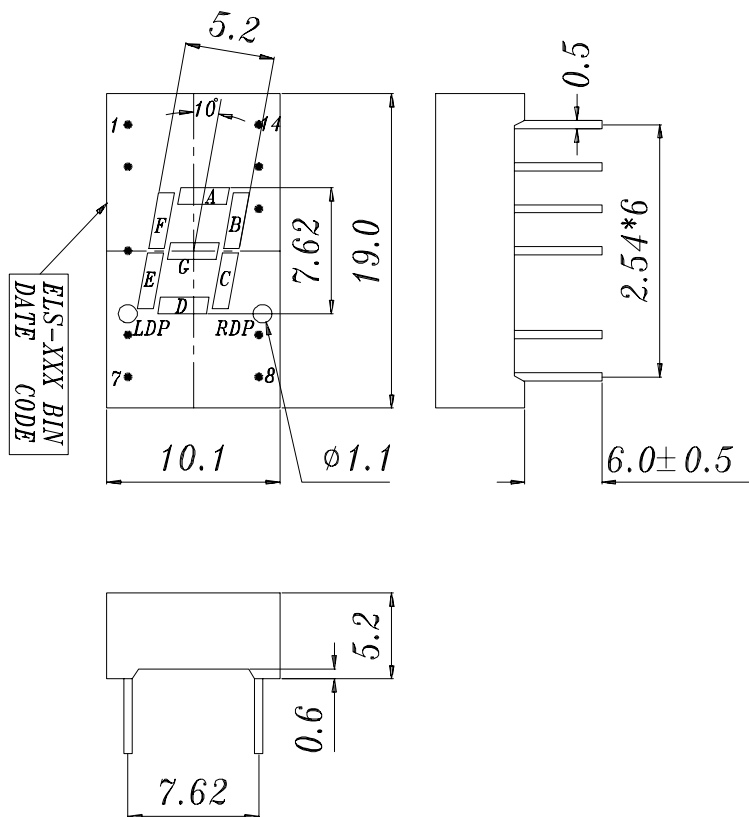
EVERLIGHT ELECTRONICS CO.,LTD.

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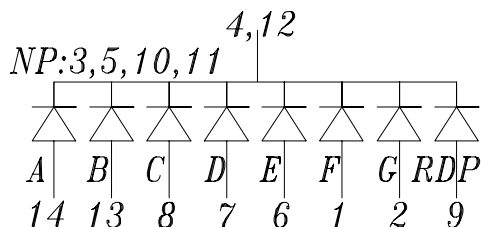
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MODEL NO : ELS-321IDR ECN : Page: 2/5

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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MODEL NO : ELS-321IDR ECN : Page: 3/5

■ Absolute maximum ratings at Ta = 25℃ :

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	100	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	0.8	----	mcd	If=10mA
	Per decimal point		0.18	0.30	----	mcd	If=10mA
Peak Wavelength		λ p	----	635	----	nm	If=20mA
Dominant Wavelength		λ d	----	625	----	nm	If=20mA
Spectrum Radiation Bandwidth		△ λ	----	45	----	nm	If=20mA
Forward Voltage		Vf	1.7	2.0	2.4	V	If=20mA
Reverse Current		Ir	----	----	10	μ A	Vr=5V



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MODEL NO : ELS-321IDR ECN : Page: 4/5

Reliability test item and condition:

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



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MODEL NO: ELS-321IDRECN : Page: 5/5

■ Typical Electro-Optical Characteristic Curves:

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