



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-321-001 REV: 1.1

## 0.3" Single Digit Display

MODEL NO : ELS-321HDB 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 black surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELS-321HDB	GaP	Bright Red	C.C.

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL : 886-2-2267-2000,2267-9936

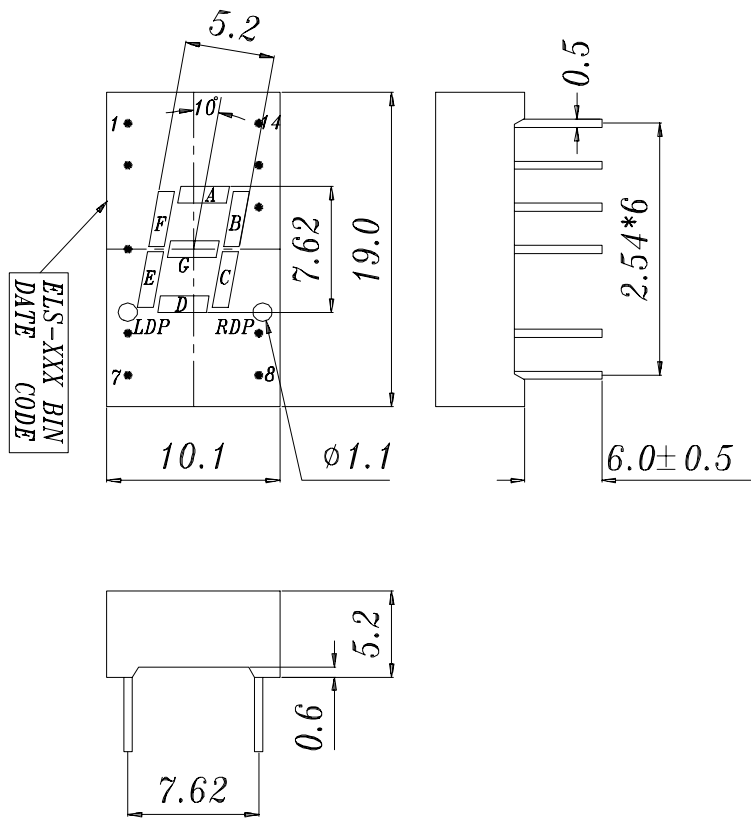
FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>



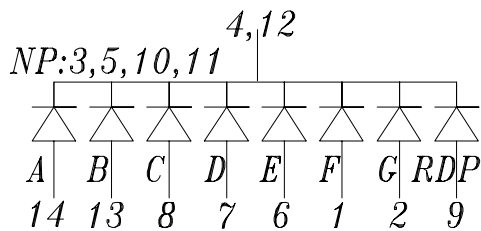
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■ Package Dimensions:



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	Vr	5	V
Forward Current	If	15	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	45	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	50	mA

■ Electronic optical characteristics :

Parameter		Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Per segment	Iv	0.11	0.3	----	mcd	If=10mA
	Per decimal point		0.04	0.10	----	mcd	If=10mA
Peak Wavelength		$\lambda p$	----	697	----	nm	If=10mA
Dominant Wavelength		$\lambda d$	----	650	----	nm	If=10mA
Spectrum Radiation Bandwidth		$\Delta \lambda$	----	90	----	nm	If=10mA
Forward Voltage		Vf	1.5	2.0	2.4	V	If=10mA
Reverse Current		Ir	----	----	10	$\mu A$	Vr=5V



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■ 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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