



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-512-040 REV: 1.0

## 0.56" Single Digit Displays

MODEL NO : ELS-512EWB 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-512 series is a large 14.22mm (0.56")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 black surface.

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PART NO	Chip		C.C. or C.A.
	Material	Emitted Color	
ELS-512EWB	GaAsP/GaP	Orange	C.A.

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<http://www.everlight.com>



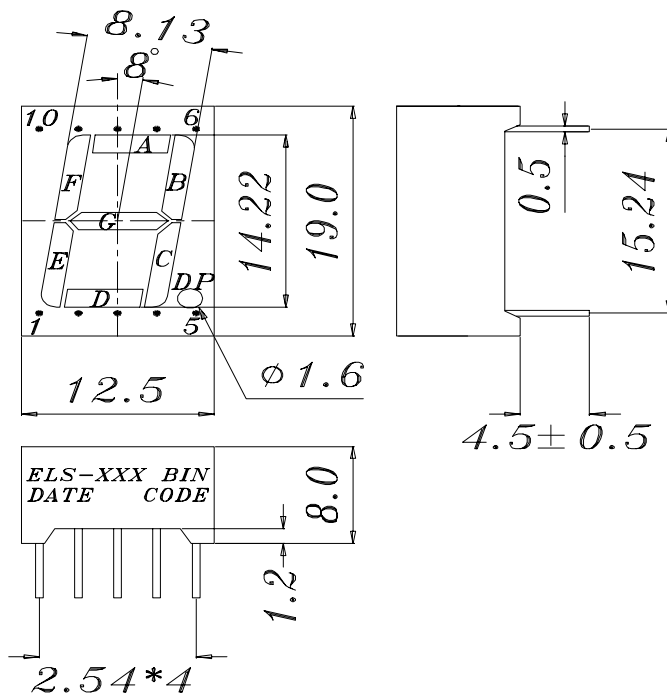
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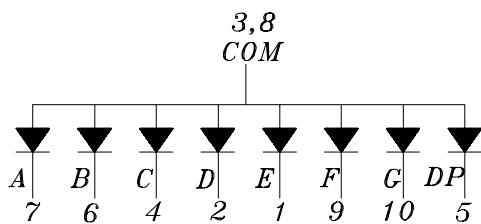
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### Package Dimensions:



**COMMON ANODE**  
 1 CATHODE E  
 2 CATHODE D  
 3 COMMON ANODE  
 4 CATHODE C  
 5 CATHODE DP  
 6 CATHODE B  
 7 CATHODE A  
 8 COMMON ANODE  
 9 CATHODE F  
 10 CATHODE G



### 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	30	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
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	0.75	2.00	----	mcd	If=10mA
	Per decimal point		0.25	0.50	----		
Peak Wavelength		$\lambda_p$	----	635	----	nm	If=20mA
Dominant Wavelength		$\lambda_d$	----	625	----	nm	If=20mA
Spectrum Radiation Bandwidth		$\Delta \lambda$	----	45	----	nm	If=20mA
Forward Voltage		Vf	1.7	2.0	2.4	V	If=20mA
Reverse Current		Ir	----	----	10	$\mu A$	Vr=5V



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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°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 DataSheet4U.com	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:

