



0.56" Single Digit Displays

■ 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 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-512IDR	GaAsP/GaP	Hi-Eff Red	C.A.

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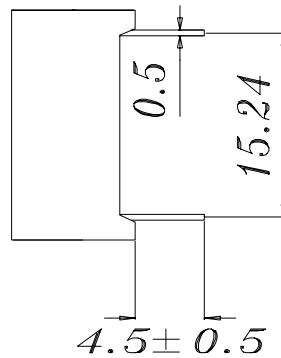
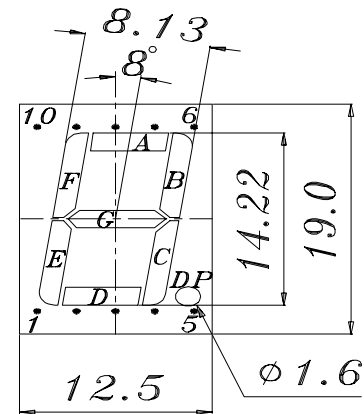
<http://www.everlight.com>



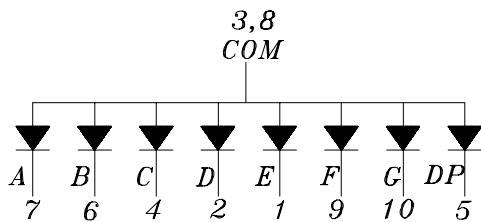
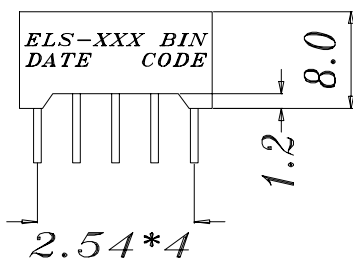
0.56" Single Digit Displays

MODEL NO : ELS-512IDR ECN : _____ Page: 2/5

■ 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.

Device Number : DDS-512-038 REV: 1.0

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■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _r	5	V
Forward Current	I _f	30	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Power Dissipation	P _d	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _f (Peak)	160	mA

■ Electronic optical characteristics :

Parameter		Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Per segment	I _v	0.45	0.80	----	mcd	I _f =10mA
	Per decimal point		0.25	0.50	----		
Peak Wavelength		λ _p	----	635	----	nm	I _f =20mA
Dominant Wavelength		λ _d	----	625	----	nm	I _f =20mA
Spectrum Radiation Bandwidth		Δλ	----	45	----	nm	I _f =20mA
Forward Voltage		V _f	1.7	2.0	2.4	V	I _f =20mA
Reverse Current		I _r	----	----	10	μA	V _r =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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ECN :

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■ Typical Electro-Optical Characteristic Curves:

