



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDS-512-007 REV: 3

0.56" Single Digit Displays

PART NO. : ELS-512SRWB/S288 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.

PART NO.	Chip	
	Material	Emitted Color
ELS-512SRWB/S288	GaAlAs	Super Red

OFFICE : 7c Building ,Lian Hua Port Industrial District, Lian Hua Shan Bonded Processing Zone Pan Yu, Guang Zhou, China

TEL : (020) 84860913 , 84860914

FAX : (020) 84860600

<http://www.everlight.com>



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDS-512-007 REV: 3

0.56" Single Digit Displays

PART NO. : ELS-512SRWB/S288 ECN : Page: 3/5

■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	40	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	110	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	IF(Peak)	180	mA

■ Electronic optical characteristics :

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	Iv	11.0	14.0	17.6	mcd	IF=10mA
	Per decimal point		1.5	3.5	5.0		
Peak Wavelength		λ p	----	660	----	nm	IF=20mA
Dominant Wavelength		λ d	----	643	----	nm	IF=20mA
Spectrum Radiation Bandwidth		△ λ	----	20	----	nm	IF=20mA
Forward Voltage		VF	1.5	1.7	2.4	V	IF=20mA
Reverse Current		IR	----	----	10	μ A	VR=5V



0.56" Single Digit Displays

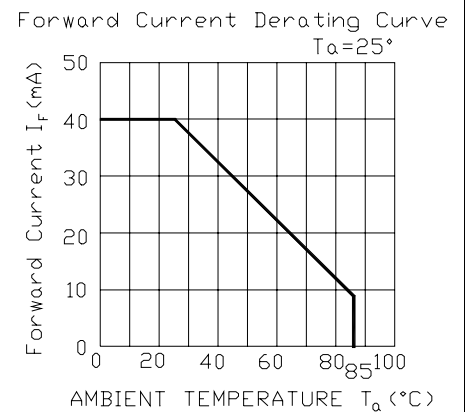
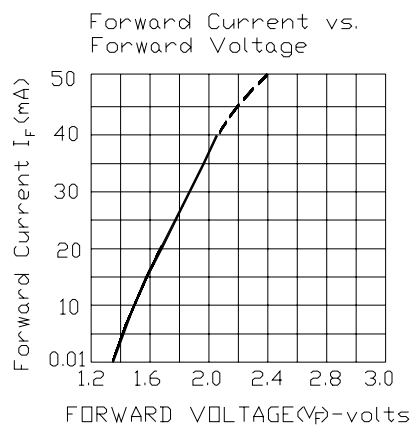
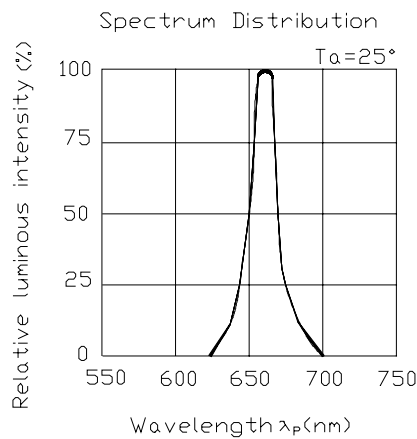
PART NO. : ELS-512SRWB/S288

ECN :

Page: 4/5

■ Typical Electro-Optical Characteristic Curves:

SR





EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDS-512-007 REV: 3

0.56" Single Digit Displays

PART NO. : ELS-512SRWB/S288 ECN : Page: 5/5

■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 ℃	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85℃ 30min └ 5 min L : -55℃ 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100℃ 5min └ 10 sec L : -10℃ 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55℃	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℃/85% RH	1000 HRS	76 PCS	0/1

--