



0.36" 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-315 series is a large 9.14mm (0.36")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 green segments and gray surface.

PART NO.	Chip	
	Material	Emitted Color
ELS-315GDA	GaP	Green

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

TEL : (020) 84860913 , 84860914

FAX : (020) 84860600

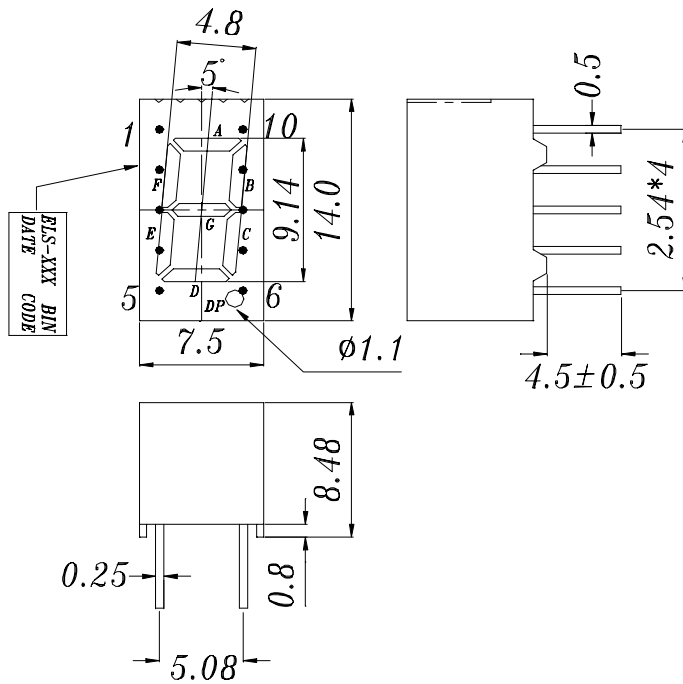
<http://www.everlight.com>

A0112067

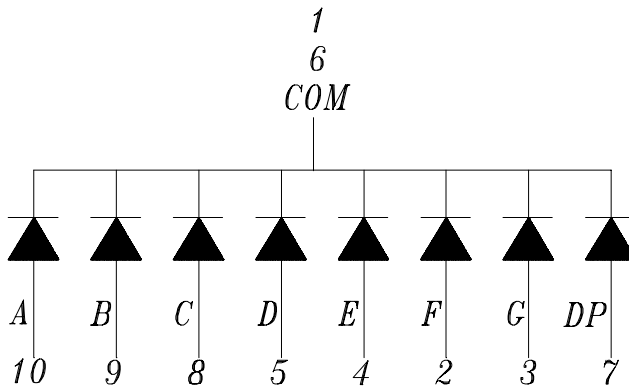
0.36" Single Digit Displays

PART NO. : ELS-315GDA      ECN : \_\_\_\_\_      Page: 2/5

■ Package Dimensions:



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



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number :         CDDS-315-012         REV:         1        

0.36" Single Digit Displays

PART NO. :         ELS-315GDA         ECN :                          Page:         3/5        

■ 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	0.45	0.9	----	mcd	IF=10mA
	Per decimal point		0.15	0.30	----		
Peak Wavelength		λ p	----	565	----	nm	IF=20mA
Dominant Wavelength		λ d	----	570	----	nm	IF=20mA
Spectrum Radiation	Bandwidth	△ λ	----	30	----	nm	IF=20mA
Forward Voltage		VF	1.7	2.1	2.4	V	IF=20mA
Reverse Current		IR	----	----	10	μ A	VR=5V



0.36" Single Digit Displays

PART NO. : ELS-315GDA

ECN :                     

Page: 4/5

■ Typical Electro-Optical Characteristic Curves:

GHIP Material:Gap  
Emitted Color:Yellow Green

Spectrum Distribution  
Ta=25°

Wavelength λp (nm)	Relative luminous intensity (%)
500	0
550	25
565	100
580	75
600	25
650	0
700	0

Forward Current vs. Forward Voltage

FORWARD VOLTAGE (VF)-volts	Forward Current IF (mA)
1.6	0
1.8	5
2.0	15
2.2	30
2.4	50

Forward Current Derating Curve

AMBIENT TEMPERATURE TQ(°C)	Forward Current IF (mA)
0	30
25	30
50	20
75	10
85	0



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDS-315-012 REV: 1

0.36" Single Digit Displays

PART NO. : ELS-315GDA 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°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

--	--	--	--	--	--