



Device Number : DDS-322-005 REV: 1.3

## 0.3" Single Digit Displays

MODEL NO ELS-322GWA 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-322series is a large 7.62mm (0.3")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 gray surface.

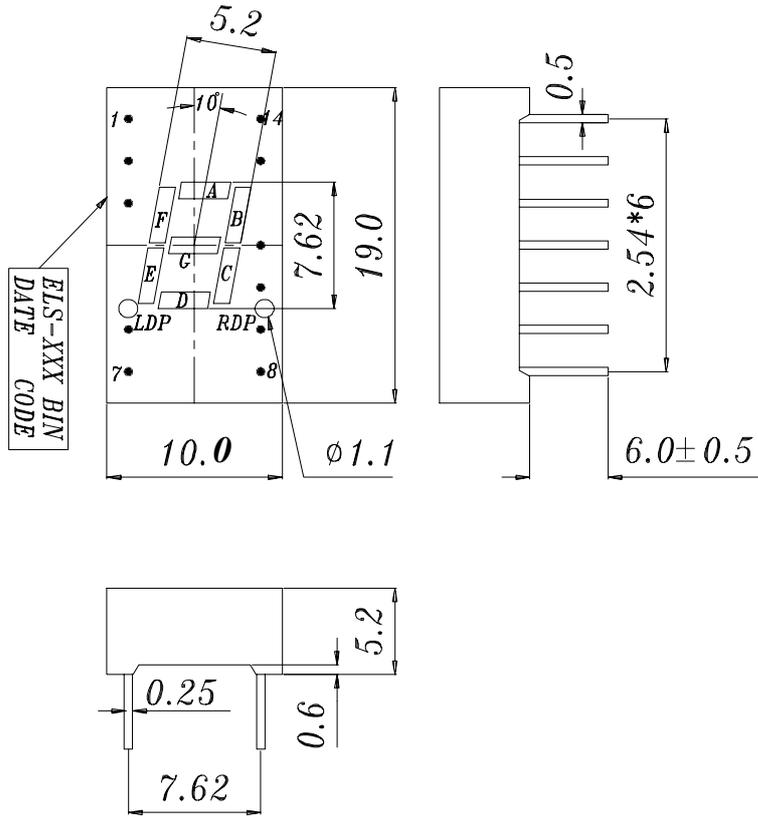
PART NO	Chip	
	Material	Emitted Color
ELS-322GWA	GaP	Green

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.  
 TEL : 886-2-2267-2000,2267-9936  
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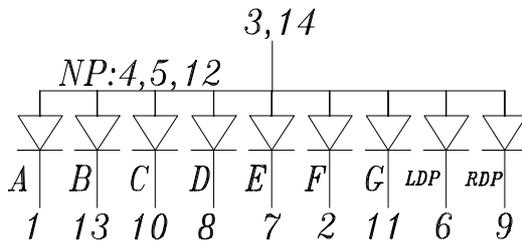
0.3" Single Digit Displays

■ Package Dimensions:



COMMON ANODE

1	CATHODE	A
2	CATHODE	F
3	COMMON ANODE	
4	NO PIN	
5	NO PIN	
6	CATHODE	LDP
7	CATHODE	E
8	CATHODE	D
9	CATHODE	RDP
10	CATHODE	C
11	CATHODE	G
12	NO PIN	
13	CATHODE	B
14	COMMON ANODE	



■ 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	1.05	2.0	----	mcd	IF=10mA
	Per decimal point		0.45	0.8	----	mcd	IF=10mA
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



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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	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:

