



0.42" Quadruple Digit Displays

PART NO. : ELF-4G6VGWB 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 ELF-4G6 series is a large 10.7 mm (0.42")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
ELF-4G6VGWB	GaP	Green

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T00758

A89123309



REV: 1.0

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- ```
COMMON ANODE
1 COMMON ANODE UC,LC
2 COMMON ANODE D1
3 COMMON ANODE D2
4 COMMON ANODE D3
5 COMMON ANODE D4
6 CATHODE C
7 CATHODE F
8 CATHODE E
9 CATHODE D
10 CATHODE C
11 CATHODE B
12 CATHODE A
13 NO CONNECT
14 NO CONNECT
15 NO CONNECT
16 NO CONNECT
17 NO CONNECT
```

Supplier will reserve authority on material change for above specification.



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDF-4G6-066 REV: 1.0

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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     | 4    | 6    | ---- | mcd  | IF=10mA   |
|                              | Per decimal point |        | 3    | 4    | ---- |      |           |
| 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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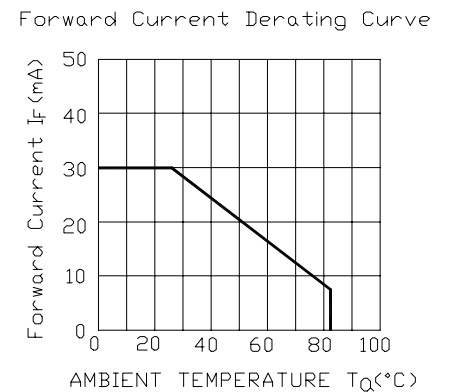
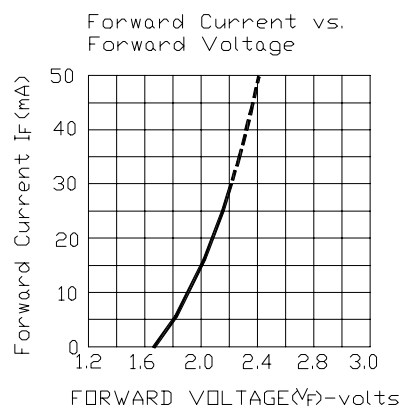
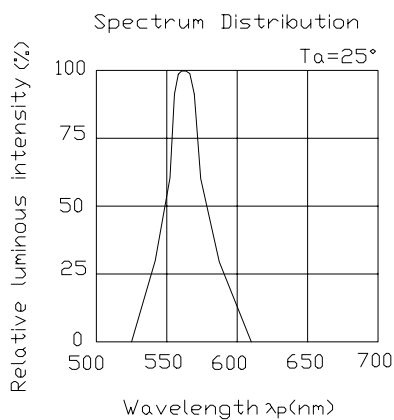
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ECN :

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## Typical Electro-Optical Characteristic Curves:

CHIP Material:GaP  
Emitted Color:Yellow Green





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0.42" Quadruple Digit Displays

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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<br>└ 5 min<br>L : -55°C 30min | 50 CYCLE         | 76 PCS      | 0/1   |
| 3  | Thermal Shock                    | H : +100°C 5min<br>└ 10 sec<br>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   |