

# AlGaInP/GaAs Soft Orange Chip ---TK0508SON

## 1. Scope

- The specification applies to AlGaInP LED chips.
- Type : TK0508SON.

## 2. Structure

- AlGaInP/GaAs soft orange LED chip.
- Electrode P (anode) side : Aluminum or Gold.
- Electrode N (cathode) side : Gold alloy.

## 3. Size

- Chip size :  $200\mu\text{m} \times 200\mu\text{m}$
- Chip height :  $180\mu\text{m} \pm 30\mu\text{m}$
- Pattern drawing : per fig. 1

## 4. Electro-Optical Characteristics

( $T_a = +25^\circ\text{C}$ )

| Parameter                    | Symbol                  | Condition                     | Min. | Typ.    | Max. | Unit |
|------------------------------|-------------------------|-------------------------------|------|---------|------|------|
| Forward Voltage              | $V_F$                   | $I_F = 20\text{ mA}$          |      | 2.00    | 2.30 | V    |
| Reverse Voltage              | $V_R$                   | $I_R = 10\text{ }\mu\text{A}$ | 5    |         |      | V    |
| Luminous Intensity           | $I_V$                   | $I_F = 20\text{ mA}$          |      | ※       |      | mcd  |
| Wavelength                   | $\lambda_p / \lambda_d$ | $I_F = 20\text{ mA}$          |      | 610/605 |      | nm   |
| Spectrum Width of Half Value | $\Delta \lambda$        | $I_F = 20\text{ mA}$          |      | 20      |      | nm   |

- ※
- Rank H : min.  $\geq 50.0$ ,  $65.0 \leq \text{avg.} < 75.0$
  - Rank I : min.  $\geq 60.0$ ,  $75.0 \leq \text{avg.} < 85.0$
  - Rank J : min.  $\geq 70.0$ ,  $85.0 \leq \text{avg.} < 95.0$
  - Rank K : min.  $\geq 80.0$ ,  $95.0 \leq \text{avg.} < 105.0$
  - Rank L : min.  $\geq 90.0$ ,  $105.0 \leq \text{avg.} < 115.0$
  - Rank M : min.  $\geq 90.0$ ,  $115.0 \leq \text{avg.} < 125.0$

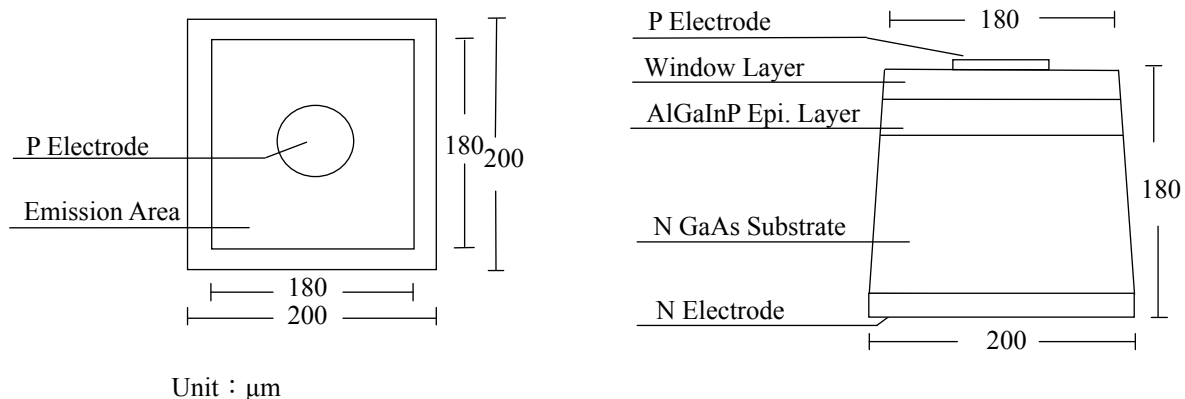


fig. 1

2012.May



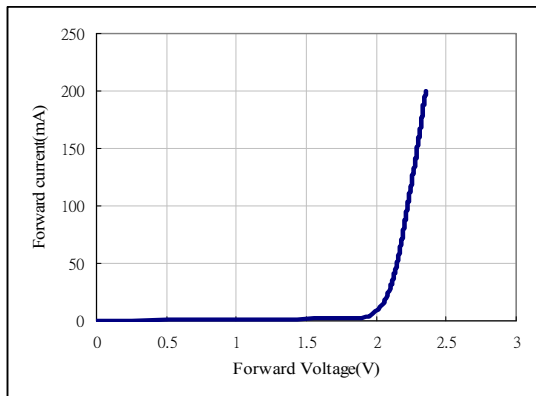
☐ TYNTEK Head Office  
☐ TYNTEK Chunan Branch  
[http : //www.tyntek.com.tw](http://www.tyntek.com.tw)

Tel : 886-3-5781616      Fax : 886-3-5780545  
Tel : 886-37-582997      Fax : 886-37-582908  
E-mail : [service@serv.tyntek.com.tw](mailto:service@serv.tyntek.com.tw)

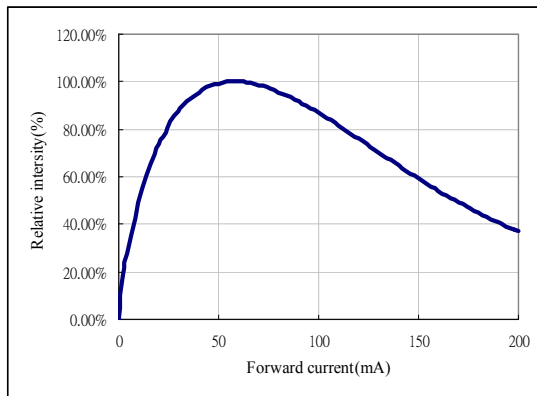
# AlGaInP/GaAs Soft Orange Chip ---TK0508SON

## Electro-Optical Characteristics Curve

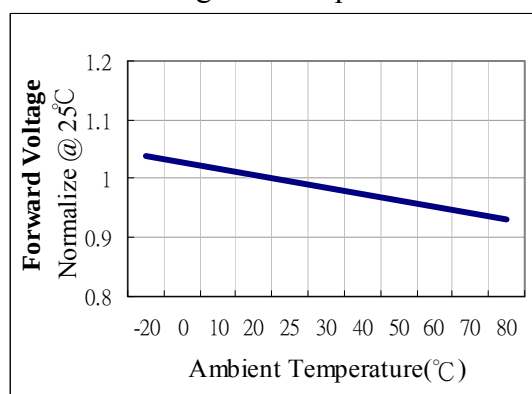
Forward current vs. Forward voltage



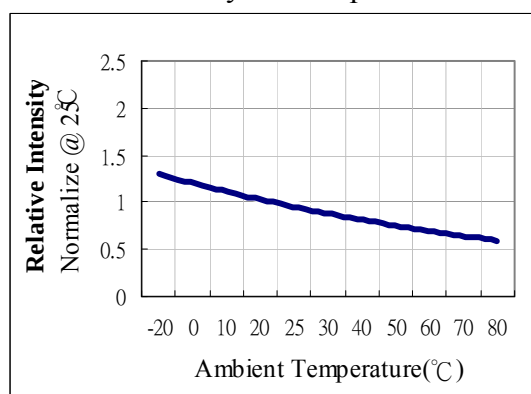
Relative intensity vs. Forward current



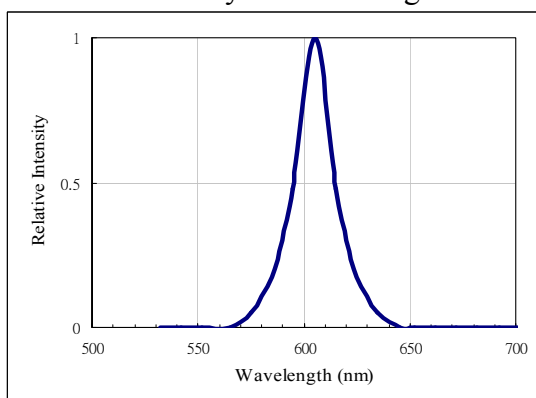
Forward voltage vs. Temperature



Relative intensity vs. Temperature



Relative intensity vs. Wavelength



☐ TYNTEK Head Office  
☐ TYNTEK Chunan Branch  
<http://www.tyntek.com.tw>

Tel : 886-3-5781616

Tel : 886-37-582997

E-mail : [service@serv.tyntek.com.tw](mailto:service@serv.tyntek.com.tw)

Fax : 886-3-5780545

Fax : 886-37-582908