

# AlGaInP/GaP Hyper Orange Red Chip ---TK0612UOA

## 1. Scope

- AlGaInP WB High- Brightness LED chip.
- Type : TK0612UOA.

## 2. Structure

- AlGaInP/GaP
- N Electrode (cathode) side : Gold.
- P Electrode (anode) side : Gold.

## 3. Size

- Chip size : 12mil × 12mil ( 0.29mm × 0.29mm )
- Chip height : 270 $\mu$ m  $\pm$  10 $\mu$ m
- Pattern drawing : per fig. 1

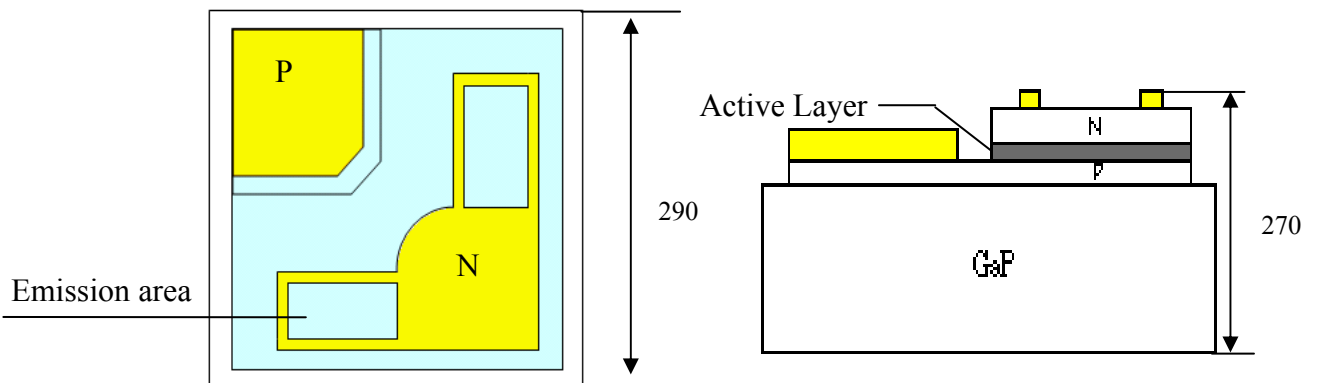
## 4. Electro-Optical Characteristics

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{ mA}$		2.2	2.4	V
Reverse Voltage	$I_R$	$V_R = 10\text{V}$			5	$\mu\text{A}$
Luminous Intensity	$I_V$	$I_F = 20\text{ mA}$	※			mcd
Wavelength	$\lambda_d$	$I_F = 20\text{ mA}$	618	623	628	nm
Spectrum Width of Half Value	$\Delta \lambda$	$I_F = 20\text{ mA}$		20		nm
Maximum junction Temperature	$T_c$				120 $^\circ\text{C}$	

\*Power will increase by 30~50% with dies packaged by transparent paste (透明絕緣膠)

- ※
- Rank R : Min.  $\geq 240$  Avg.  $\geq 250$
  - Rank S : Min.  $\geq 260$  Avg.  $\geq 275$
  - Rank T : Min.  $\geq 300$  Avg.  $\geq 315$
  - Rank U : Min.  $\geq 350$  Avg.  $\geq 365$



\* **Storage condition** : temperature 0 ~ 35 $^\circ\text{C}$ , humidity  $\leq 60\%$  RH.

Unit :  $\mu\text{m}$

fig. 1

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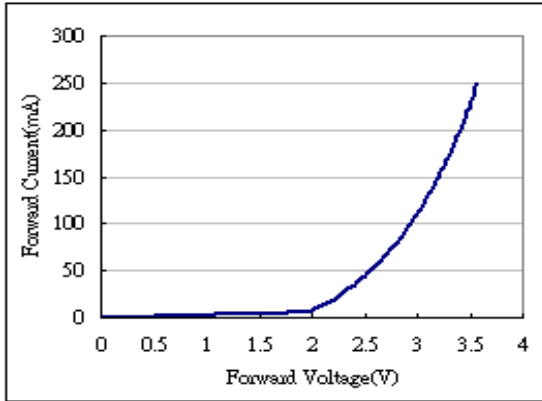
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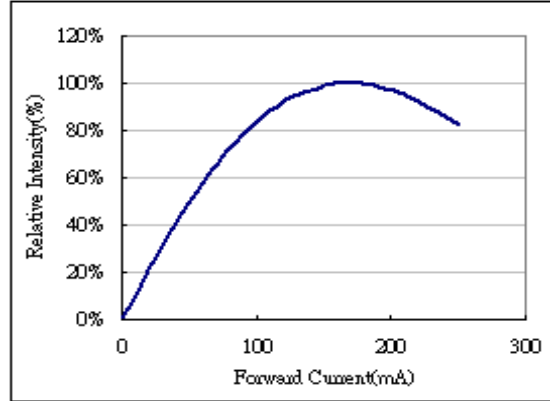
# AlGaInP/Gap Hyper Orange Red Chip ---TK0612UOA

## Electro-Optical Characteristics Curve

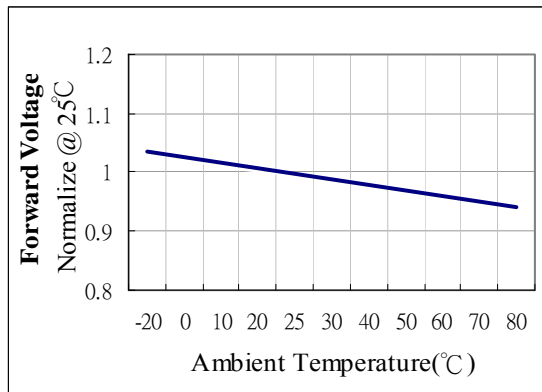
Forward current vs. Forward voltage



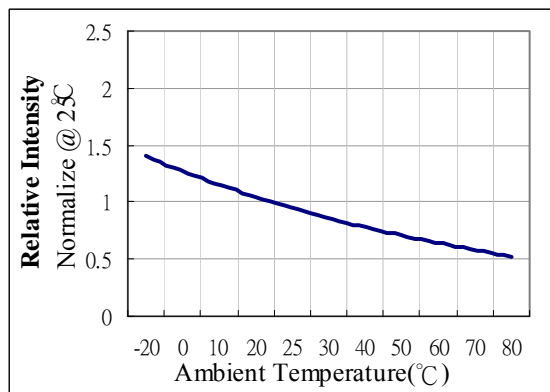
Relative intensity vs. Forward current



Forward voltage vs. Temperature



Relative intensity vs. Temperature



Relative intensity vs. Wavelength

