

AlGaInP/GaAs Deep Red Chip ---TK0508DRN

1. Scope

- The specification applies to AlGaInP LED chips.
- Type : TK0508DRN.

2. Structure

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

3. Size

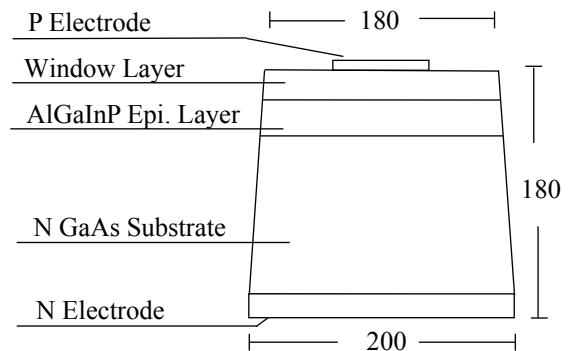
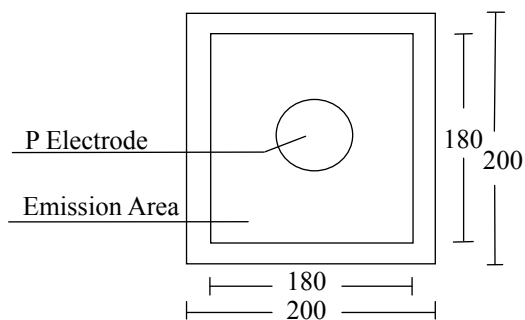
- Chip size : 200 μ m $\times$ 200 μ m
- Chip height : 180 μ m $\pm$ 30 μ m
- Pattern drawing : per fig. 1

4. Electro-Optical Characteristics

(Ta = +25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 20 mA		2.00	2.30	V
Reverse Voltage	V _R	I _R = 10 μ A	5			V
Luminous Intensity	I _V	I _F = 20 mA		※		mcd
Wavelength	λ_p / λ_d	I _F = 20 mA		650/639		nm
Spectrum Width of Half Value	$\Delta \lambda$	I _F = 20 mA		20		nm

- ※
- Rank C : min. ≥ 15.0 , 20.0 $\leq$ avg. < 25.0
 - Rank D : min. ≥ 20.0 , 25.0 $\leq$ avg. < 35.0
 - Rank E : min. ≥ 25.0 , 35.0 $\leq$ avg. < 45.0
 - Rank F : min. ≥ 35.0 , 45.0 $\leq$ avg. < 55.0



Unit : μ m

fig. 1

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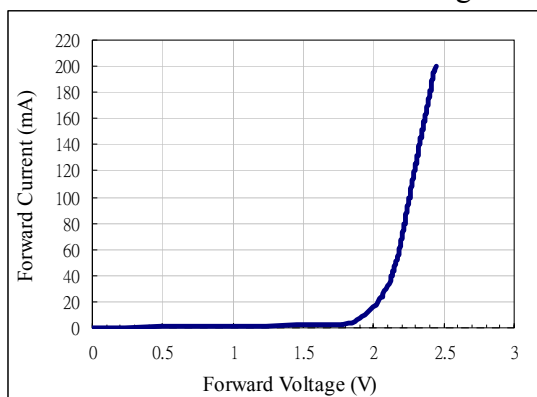
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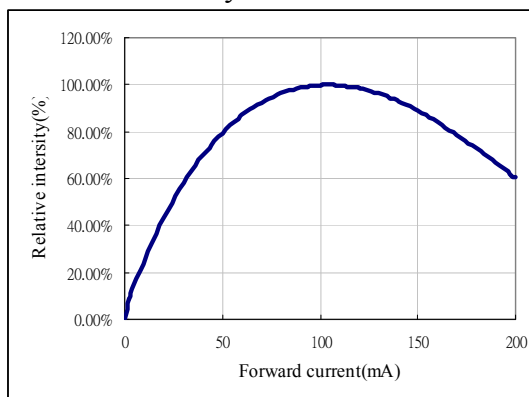
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Electro-Optical Characteristics Curve

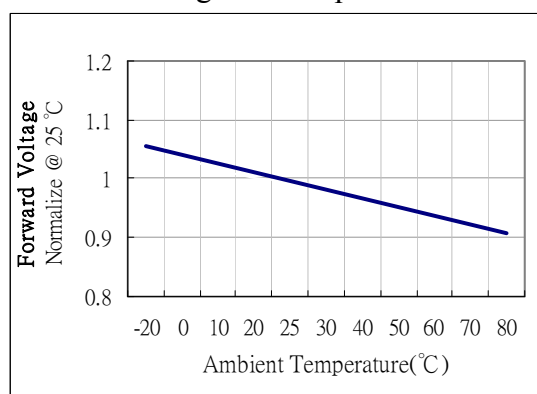
Forward current vs. Forward voltage



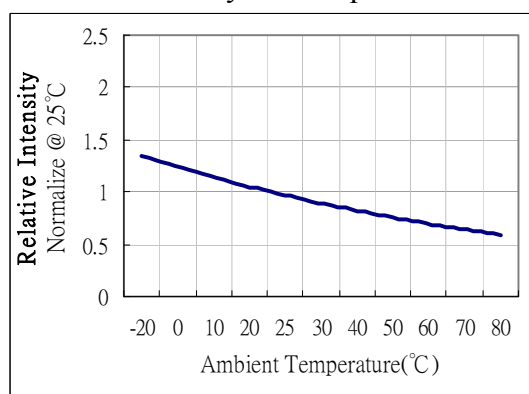
Relative intensity vs. Forward current



Forward voltage vs. Temperature



Relative intensity vs. Temperature



Relative intensity vs. Wavelength

