

AlGaAs/GaAs Red Chip ---TK0109SRN

1. Scope

- The specification applies to AlGaAs LED chips.
- Type : TK0109SRN.

2. Structure

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

3. Size

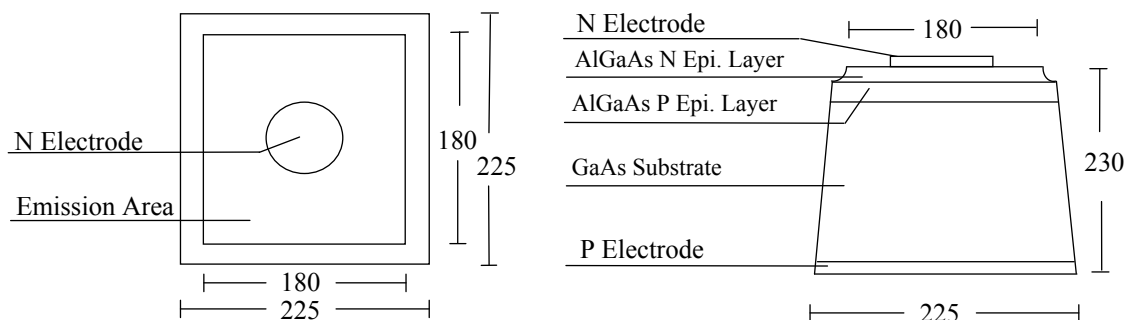
- Chip size : $225\mu\text{m} \times 225\mu\text{m}$
- Chip height : $230\mu\text{m} \pm 30\mu\text{m}$
- Pattern drawing : per fig. 1

4. Electro-Optical Characteristics

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$		1.82	2.00	V
Reverse Voltage	V_R	$I_R = 10\mu\text{A}$	5			V
Luminous Intensity	I_V	$I_F = 20\text{mA}$	6.0	※		mcd
Wavelength	λ_p / λ_d	$I_F = 20\text{mA}$		655/643		nm
Spectrum Width of Half Value	$\Delta\lambda$	$I_F = 20\text{mA}$		20		nm

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- Rank C : $9.0 \leq \text{avg.} < 12.0 \text{ mcd}$
 - Rank D : $12.0 \leq \text{avg.} < 15.0 \text{ mcd}$
 - Rank E : $15.0 \leq \text{avg.} < 18.0 \text{ mcd}$
 - Rank F : $\text{avg.} \geq 18.0 \text{ mcd}$



Unit : μm

fig. 1

2014.Apr



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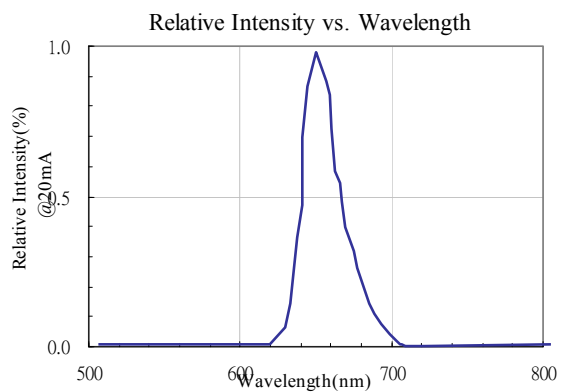
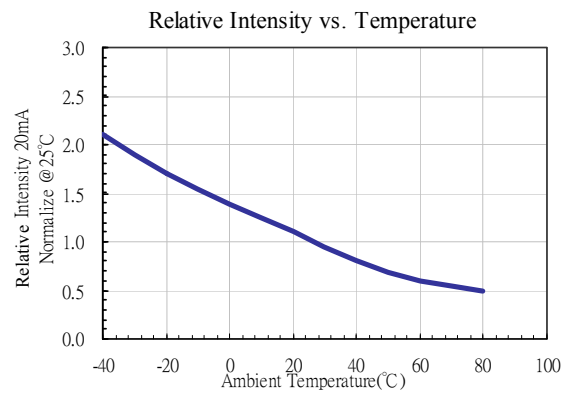
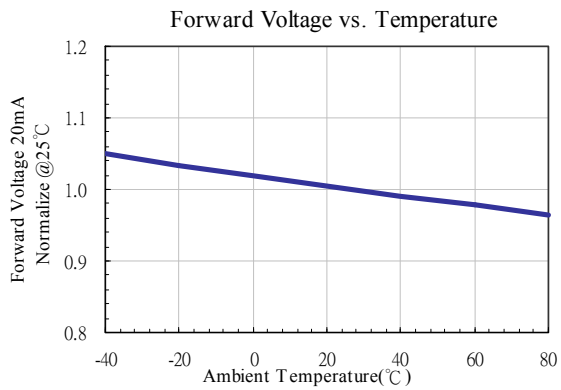
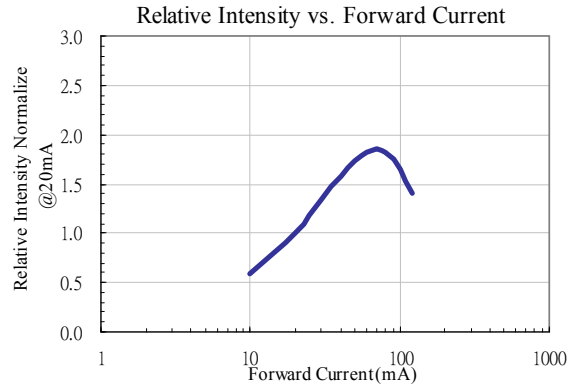
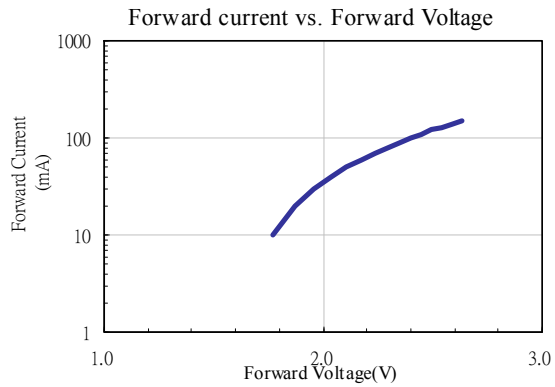
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Electro-Optical Characteristics Curve



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