

AlGaAs/AlGaAs Infrared Chip ---TK0114IRD

1. Scope

- The specification applies to AlGaAs infrared chips.
- Type : TK0114IRD.

2. Structure

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

3. Size

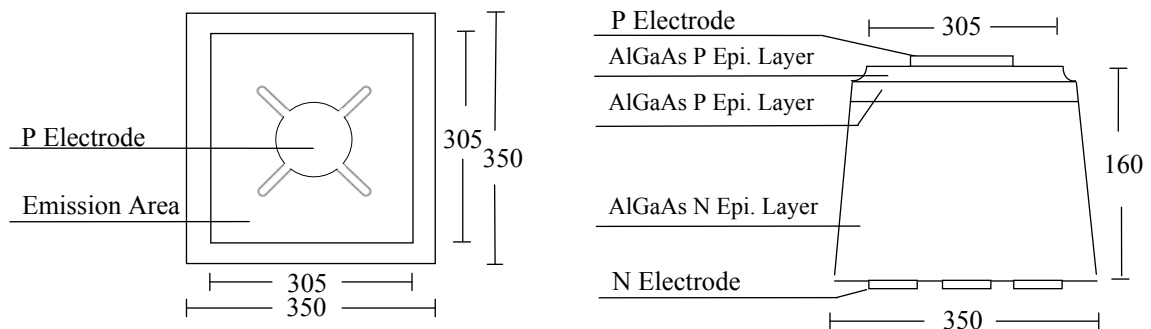
- Chip size : $350\mu\text{m} \times 350\mu\text{m}$
- Chip height : $160\mu\text{m} \pm 40\mu\text{m}$
- Pattern drawing : per fig. 1

4. Electro-Optical Characteristics

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$		1.70	1.90	V
Reverse Voltage	V_R	$I_R = 10\mu\text{A}$	5			V
Radiant Power	P_O	$I_F = 20\text{mA}$	3.2	4.0		mw
Peak Wavelength	λ_p	$I_F = 20\text{mA}$		730		nm
Spectrum Width of Half Value	$\Delta\lambda$	$I_F = 20\text{mA}$		50		nm
Optical Rise Time	T_R	$I_F = 20\text{mA}$		15		ns
Optical Fall Time	T_F	$I_F = 20\text{mA}$		9		ns

5. Application



Unit : μm

fig. 1

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Electro-Optical Characteristics Curve

