# OPA8509

# Infrared LED Chip

High Speed

**GaAlAs/GaAlAs**

## 1. Material

| | | |
|---|---|---|
| Substrate | GaAlAs | (N Type) Removed |
| Epitaxial Layer | GaAlAs | (P/N Type) |

## 2. Electrode

N(Cathode) Side Gold Alloy
P(Anode) Side Gold Alloy

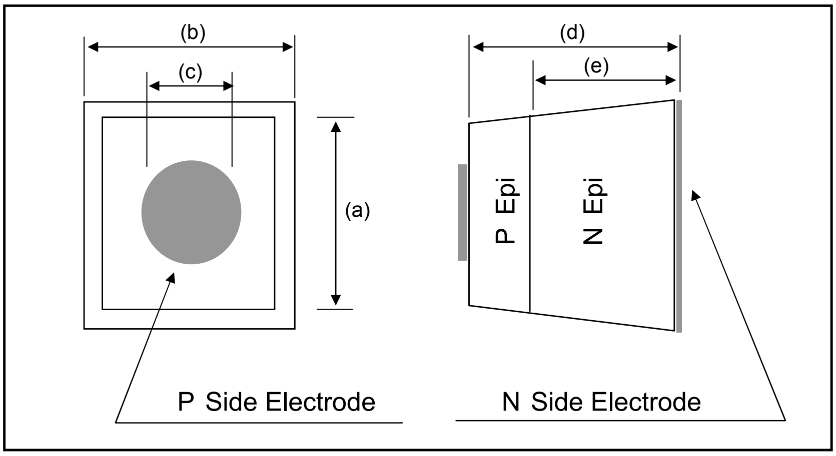
## 3. Electro-Optical Characteristics

| Parameter | Symbol | Min | Typ | Max | Unit | Condition |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_{F(1)}$ | | 1.1 | | V | IF=10uA |
| | $V_{F(2)}$ | | 1.65 | 1.8 | V | IF=50mA |
| Reverse Voltage | $V_R$ | 5 | | | V | IR=10uA |
| Power | $P_O$ | 6 | 7 | 9 | mW | IF=50mA |
| Wavelength | $\lambda_P$ | | 850 | | nm | IF=50mA |
| | $\Delta\lambda$ | | 45 | | nm | IF=50mA |
| Rise Time | Tr | | 15 | | ns | |
| Fall Time | Tf | | 8 | | ns | |

※ Note : Power is measured by Sorter E/T system with bare chip.

## 4. Mechanical Data

| | | | | |
|---|---|---|---|---|
| (a) Emission Area | --------------------- | 8.1mil | x | 8.1mil |
| (b) Bottom Area | --------------------- | 9.1mil | x | 9.1mil |
| (c) Bonding Pad | --------------------- | 110um | | |
| (d) Chip Thickness | --------------------- | 7mil | | |
| (e) Junction Height | --------------------- | 6.0mil | | |



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