

# OPA8510HPR

High Speed

# Infrared LED Chip

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	$V_{F1}$		1.1		V	IF=10uA
	$V_{F2}$		1.4	1.6	V	IF=150mA
Reverse Voltage	$V_R$	5			V	IR=10uA
Power	$P_O$	18	21		mW	IF=150mA
Wavelength	$\lambda_P$		850		nm	IF=50mA
	$\Delta\lambda$		45		nm	IF=50mA
Rise Time	$T_r$		11.5		ns	
Fall Time	$T_f$		6.6		ns	

※ Note : LED chip is mounted on TO-18 gold header without resin coating.

- 4. **Mechanical Data** (a) Emission Area            ----- 38.4mil x 38.4mil
- (b) Bottom Area                        ----- 39.4mil x 39.4mil
- (c) Bonding Pad                        ----- 100um
- (d) Chip Thickness                      ----- 7mil
- (e) Junction Height                     ----- 6.3mil

