

HE8807SG/FL

GaAlAs Infrared Emitting Diodes

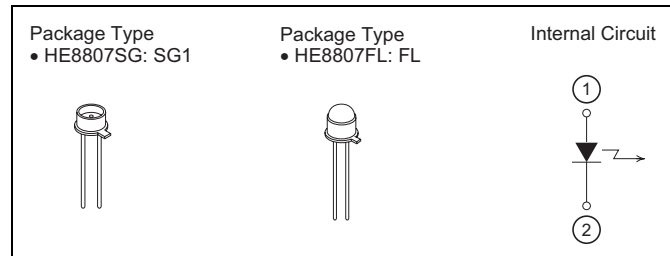
ODE-208-050 (Z)
Rev.0
Oct. 30, 2006

Description

The HE8807SG/FL are single heterojunction structure GaAlAs light emitting diodes with a wavelength of 880 nm.

Features

- High output, high efficiency
- Narrow spectral width
- Sharp radiation directivity (HE8807FL)
- Wide radiation directivity (HE8807SG)
- High reliability



Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Forward current	I_F	200	mA
Reverse voltage	V_R	3	V
Operating temperature	T_{opr}	-20 to +85	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +100	$^\circ\text{C}$

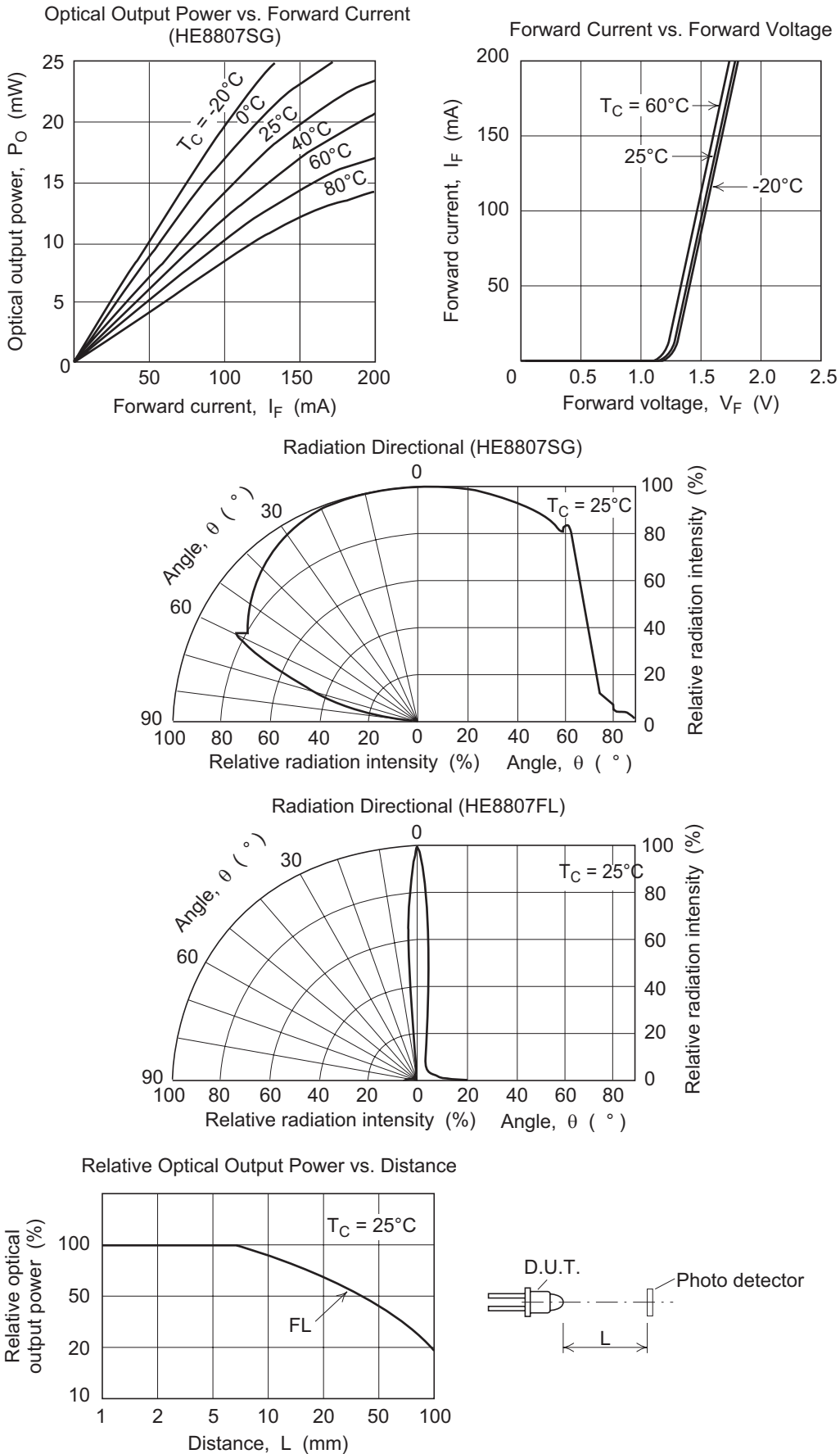
Optical and Electrical Characteristics

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

Item	Symbol	Min	Typ	Max	Unit	Test Conditions	
Optical output power	HE8807SG	P_O	10	20	—	mW	$I_F = 150\text{ mA}$
	HE8807FL	P_f^*	0.5	1.0	—		$I_F = 20\text{ mA}$
Peak wavelength	λ_p	800	880	900	nm	$I_F = 150\text{ mA}$	
Spectral width	$\Delta\lambda$	—	30	60	nm	$I_F = 150\text{ mA}$	
Forward voltage	V_F	—	1.7	2.3	V	$I_F = 150\text{ mA}$	
Reverse current	I_R	—	—	100	μA	$V_R = 3\text{ V}$	
Capacitance	C_t	—	10	—	pF	$V_R = 0\text{ V}, f = 1\text{ MHz}$	
Rise time	t_r	—	20	—	ns	$I_F = 50\text{ mA}$	
Fall time	t_f	—	20	—	ns	$I_F = 50\text{ mA}$	

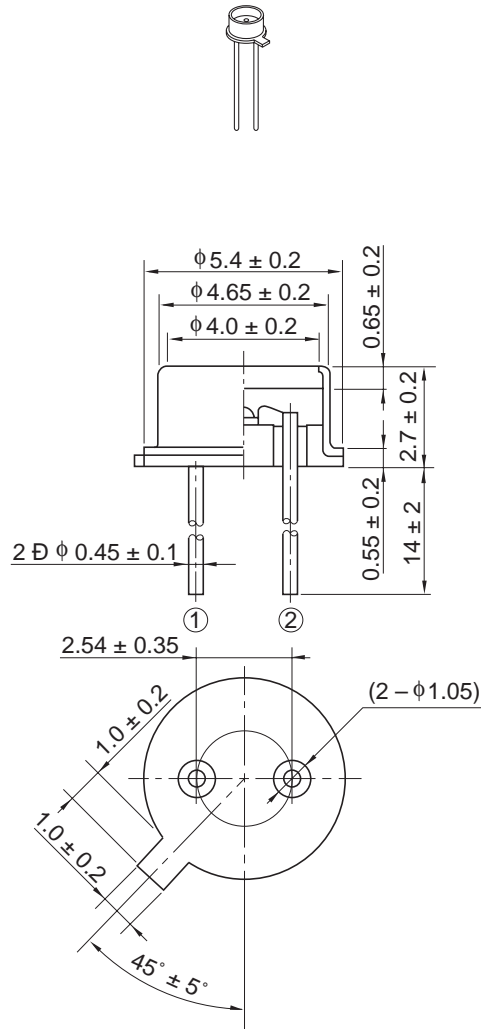
Note: P_f specification: The optical output within 9 degrees of the acceptance angle.

Typical Characteristic Curves



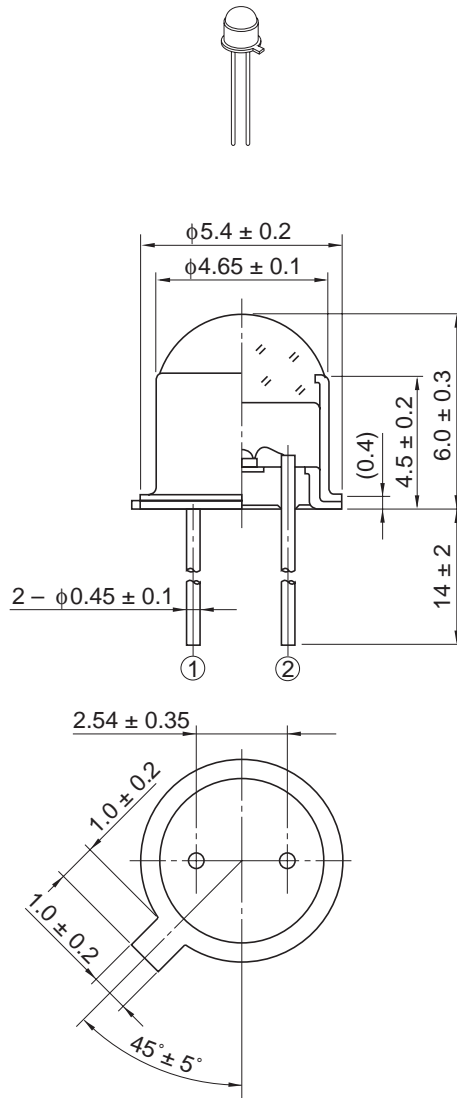
Package Dimensions

As of July, 2002
Unit: mm



OPJ Code	IR/SG1
JEDEC	—
JEITA	—
Mass (reference value)	0.25 g

As of July, 2002
Unit: mm



OPJ Code	IR/FL
JEDEC	—
JEITA	—
Mass (reference value)	0.27 g

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1. The laser light is harmful to human body especially to eye no matter what directly or indirectly. The laser beam shall be observed or adjusted through infrared camera or equivalent.
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When disposing of the product, please follow the laws of your country and separate it from other waste such as industrial waste and household garbage.
3. Definition of items shown in this CAS is in accordance with that shown in Opto Device Databook issued by OPJ unless otherwise specified.

Sales Offices



Device Business Unit Opnext Japan, Inc.

Takagi Bldg., 3F, 1-3-9, Iwamoto-cho, Chiyoda-ku, Tokyo 101-0032 Japan
Tel: (03) 3865-5591

For the detail of Opnext, Inc., see the following homepage:

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