HE7601SG

GaAlAs Infrared Emitting Diode

ODE-208-996B (Z)

Rev.2
Mar. 2005

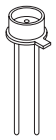
Description

The HE7601SG is a 770 nm band GaAlAs infrared emitting diode with a double heterojunction structure. It is suitable as a light source for optical control devices and sensors.

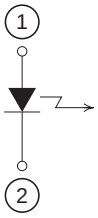
Features

- High efficiency and high output power

Package Type
• HE7601SG: SG1



Internal Circuit



Absolute Maximum Ratings

(T_C = 25°C)

Item	Symbol	Value	Unit
Forward current	I_F	250	mA
Reverse voltage	V_R	3	V
Operating temperature	Topr	–20 to +60	°C
Storage temperature	Tstg	–40 to +90	°C

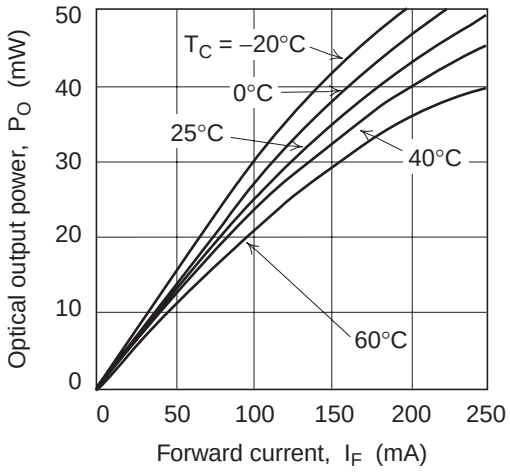
Optical and Electrical Characteristics

(T_C = 25°C)

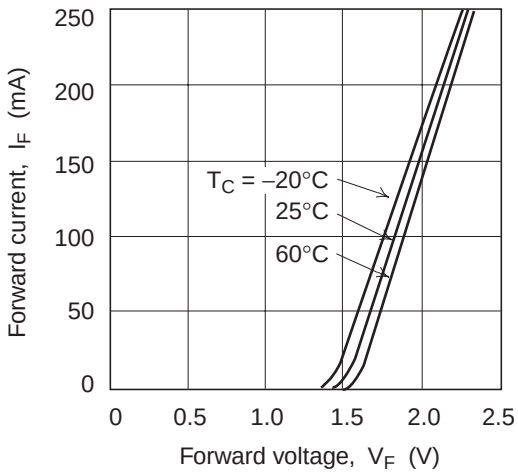
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical output power	P_O	30	—	—	mW	I_F = 200 mA
Peak wavelength	λp	740	770	800	nm	I_F = 200 mA
Spectral width	$\Delta\lambda$	—	50	60	nm	I_F = 200 mA
Forward voltage	V_F	—	—	2.5	V	I_F = 200 mA
Reverse current	I_R	—	—	100	µA	V_R = 3 V
Capacitance	Ct	—	30	—	pF	V_R = 0 V, f = 1 MHz
Rise time	t_r	—	10	—	ns	I_F = 50 mA
Fall time	t_f	—	10	—	ns	I_F = 50 mA

Typical Characteristic Curves

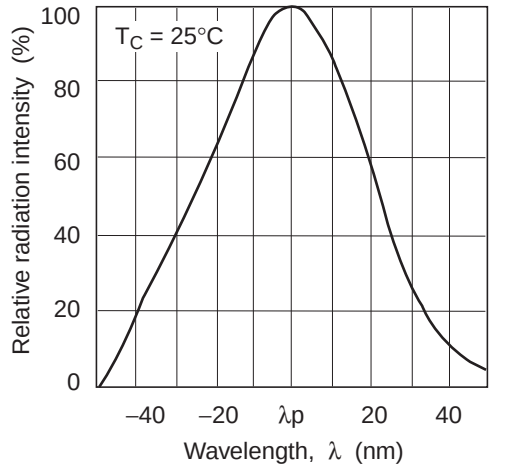
Optical Output Power vs. Forward Current



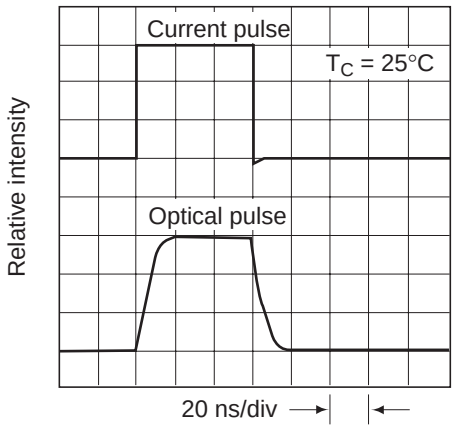
Forward Current vs. Forward Voltage



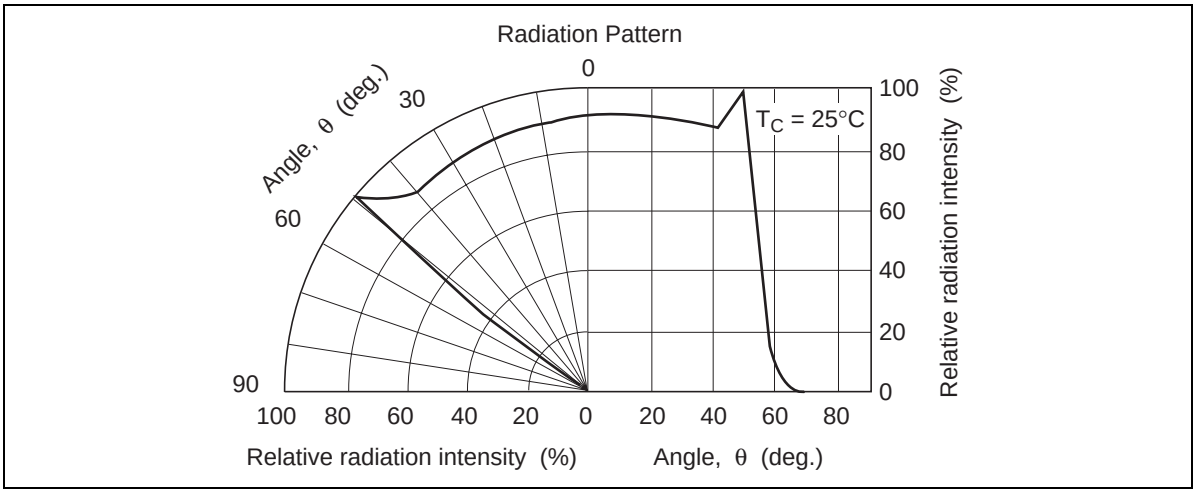
Spectral Distribution



Pulse Response

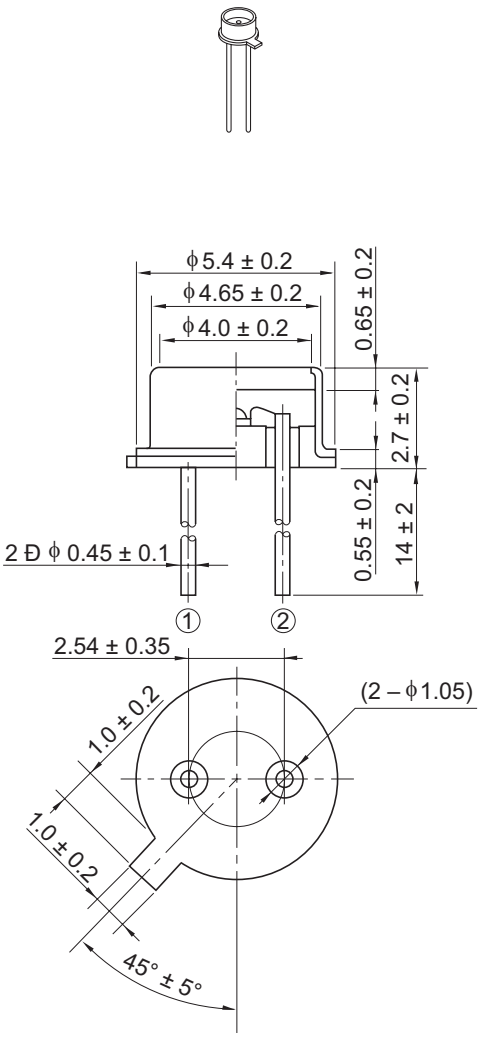


Typical Characteristic Curves (cont)



Package Dimensions

As of July, 2002
Unit: mm



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

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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

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Device Business Unit Opnext Japan, Inc.
190 Kashiwagi, Komoro-shi, Nagano 384-8511, Japan
Tel: (0267) 22-4111

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