
HE8812SG

GaAlAs Infrared Emitting Diode



ODE-208-1000A (Z)

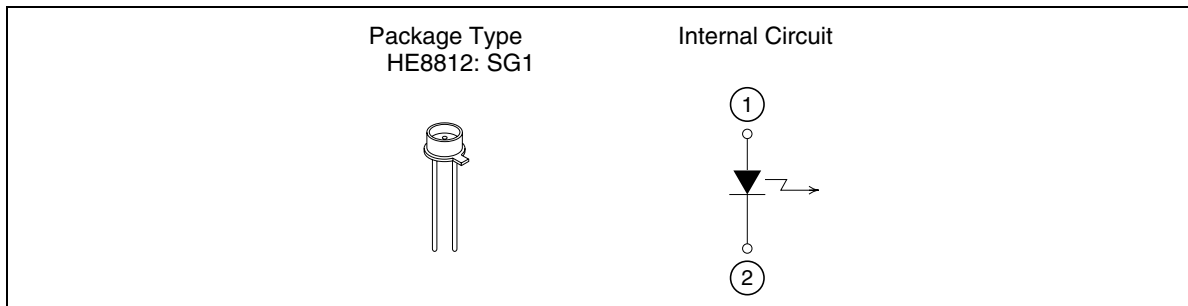
Rev.1
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Description

The HE8812SG is a GaAlAs double heterojunction structure 870 nm band light emitting diode. It is suitable for use as the light source in a wide range of optical control and sensing equipment.

Features

- High efficiency and high output power



HE8812SG

Absolute Maximum Ratings

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

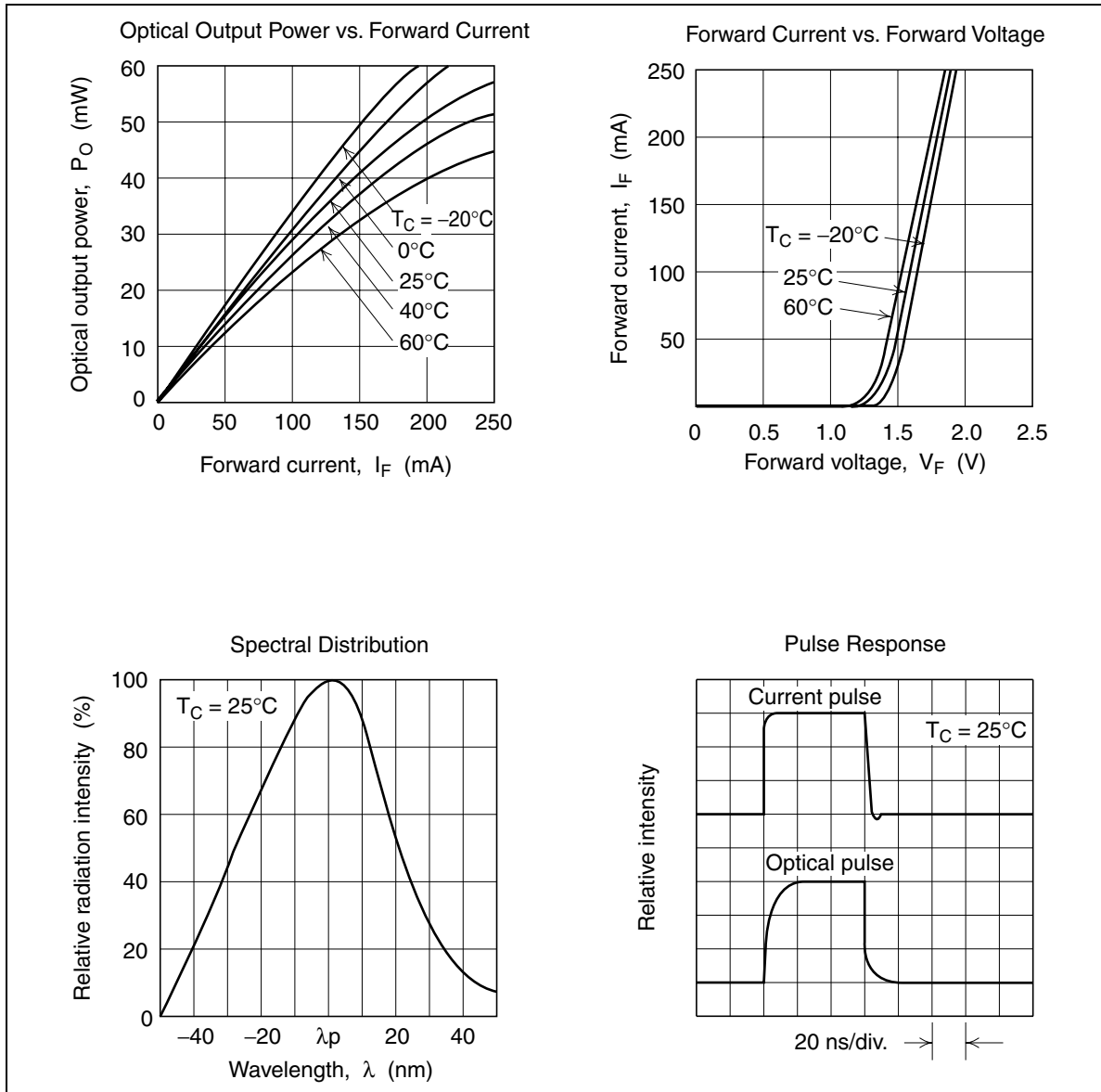
Item	Symbol	Value	Unit
Forward current	I_F	250	mA
Reverse voltage	V_R	3	V
Operating temperature	T_{opr}	-20 to +60	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +90	$^\circ\text{C}$

Optical and Electrical Characteristics

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

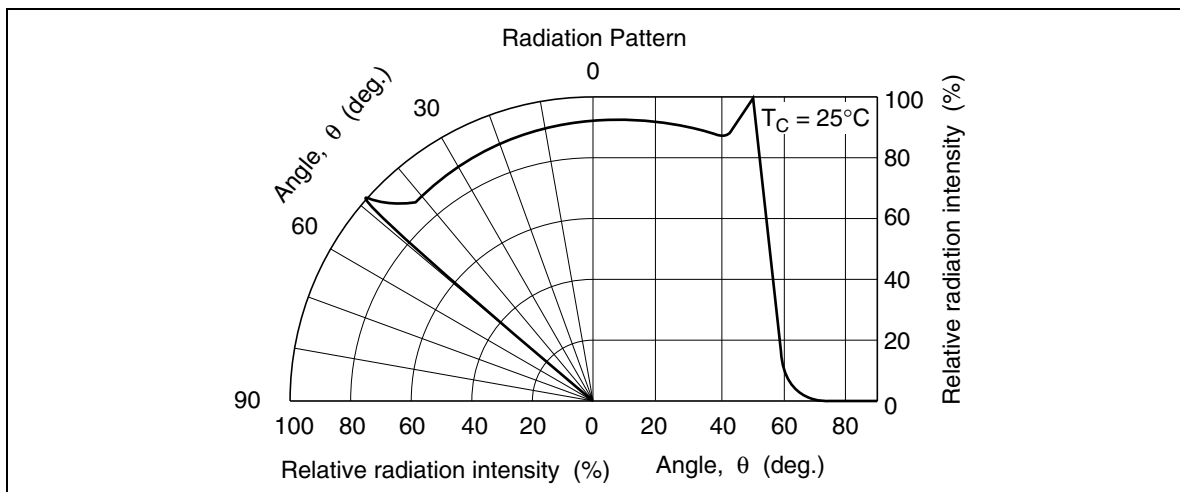
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical output power	P_O	40	—	—	mW	$I_F = 200\text{ mA}$
Peak wavelength	λ_p	840	870	900	nm	$I_F = 200\text{ mA}$
Spectral width	$\Delta\lambda$	—	50	60	nm	$I_F = 200\text{ mA}$
Forward voltage	V_F	—	—	2.5	V	$I_F = 200\text{ mA}$
Reverse current	I_R	—	—	100	μA	$V_R = 3\text{ V}$
Capacitance	C_t	—	30	—	pF	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$
Rise time	t_r	—	10	—	ns	$I_F = 50\text{ mA}$
Fall time	t_f	—	10	—	ns	$I_F = 50\text{ mA}$

Typical Characteristic Curves



HE8812SG

Typical Characteristic Curves (cont)



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

Japan (Japanese) <http://japan.opnext.com/optodevice/>
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