

HE8813VG

GaAlAs Infrared Emitting Diode

Description

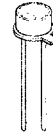
The HE8813VG is a GaAlAs double heterojunction structure 0.8 μm band light emitting diode. It is suitable for use as the light source in still camera autofocus mechanisms.

Features

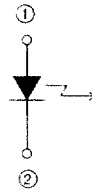
- High efficiency and high power output

Package Type

- HE8813VG: VG



Internal Circuit



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

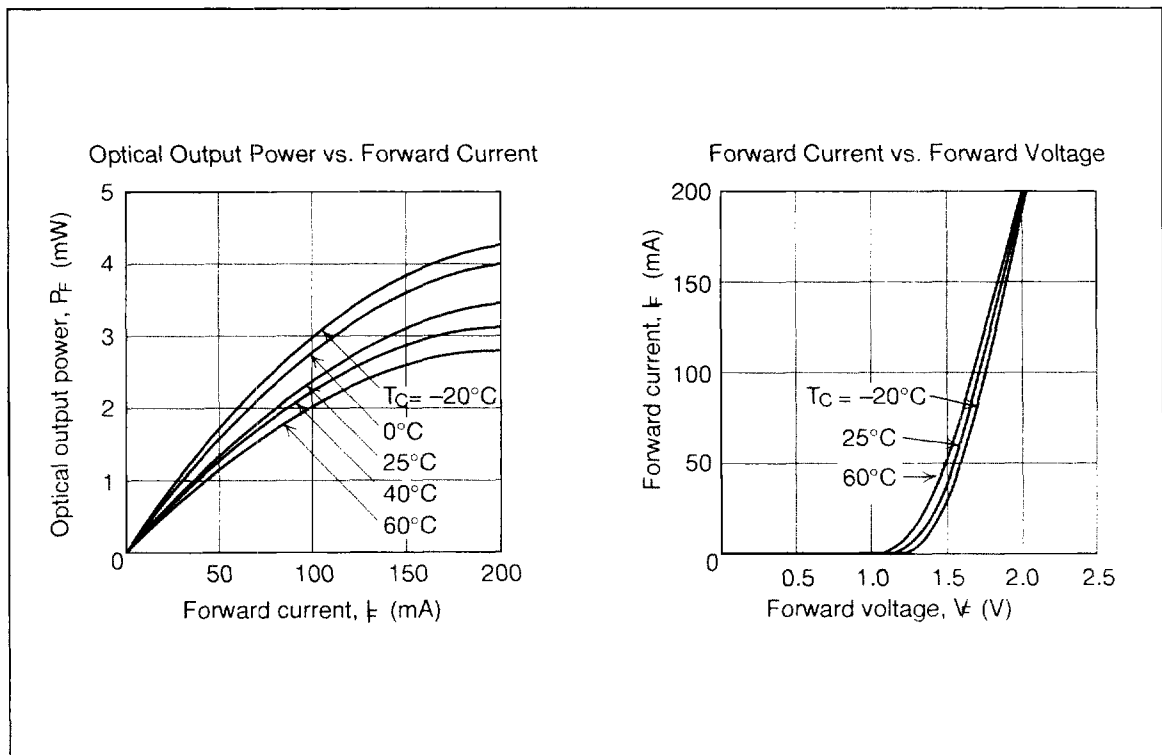
Item	Symbol	Rated Value	Units
Forward current	I_F	200	mA
Reverse voltage	V_R	3	V
Operating temperature	T_{opr}	-20 to +60	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +90	$^\circ\text{C}$

Optical and Electrical Characteristics ($T_C = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Units	Test Conditions
Optical output power	P_F^{*1}	2.2	—	—	mW	$I_F = 150 \text{ mA}$
Peak wavelength	λ_p	800	880	900	nm	$I_F = 150 \text{ mA}$
Spectral width	$\Delta\lambda$	—	50	60	nm	$I_F = 150 \text{ mA}$
Forward voltage	V_F	—	—	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 and fall times	t_r, t_f	—	10	—	ns	$I_F = 50 \text{ mA}$

Note: 1. P_F specification: The optical output within 14 degrees of the acceptance angle.

Typical Characteristic Curves



Typical Characteristic Curves (cont)

