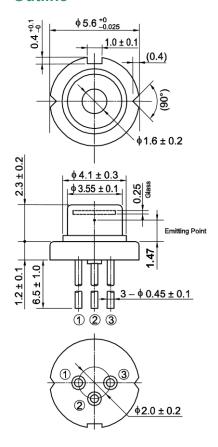
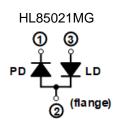
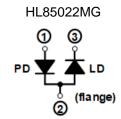
850nm/260mW Infrared Laser Diode

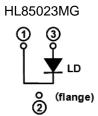
Outline



Internal Circuit







(Unit: mm)

Features

- Infrared light output: 850nm Typ.
- High optical output power: 260mW (CW)
- Operating current: 270mA Typ. at 250mW
- Wide operating temperature: -40 ~ +75°C
- Single transverse mode
- TE mode oscillation

Application

- Night vision
- Sensor application
- Laser module

Data Sheet

Absolute Maximum Ratings (Tc=25°C)

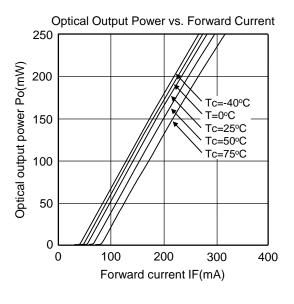
Item	Symbol	Ratings	Unit
Optical output power	Ро	260	mW
LD reverse voltage	V _{R(LD)}	2	V
PD reverse voltage Note1)	V _{R(PD)}	30	V
Operating temperature	Topr	-40 ~ +75	°C
Storage temperature	Tstg	-40 ~ +85	°C

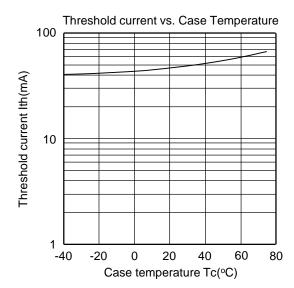
Optical and Electrical Characteristics (Tc=25°C)

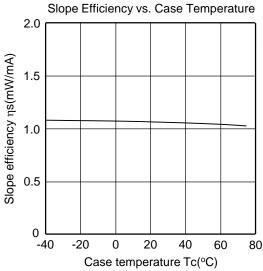
Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Threshold current	Ith	-	45	80	mA	-
Operating current	lop	-	270	320	mA	Po=250mW
Operating voltage	Vop	-	2.6	3.0	V	Po=250mW
Beam divergence Parallel to the junction	θ//	5	8	11	0	Po=250mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	11	15	19	0	Po=250mW, FWHM
Lasing Wavelength	λр	840	850	860	nm	Po=250mW
Monitor current Note1)	Is	0.2	1.4	3.1	mA	Po=250mW, VR(PD)=5V

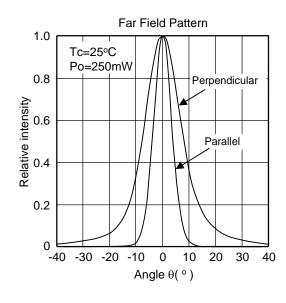
Note1) Not applicable to HL85023MG.

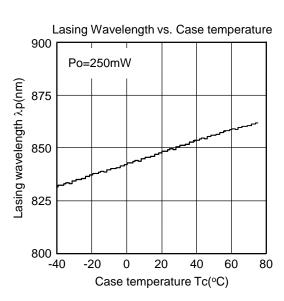
Typical Characteristic Curves

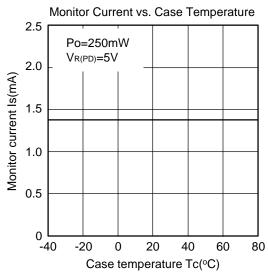












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