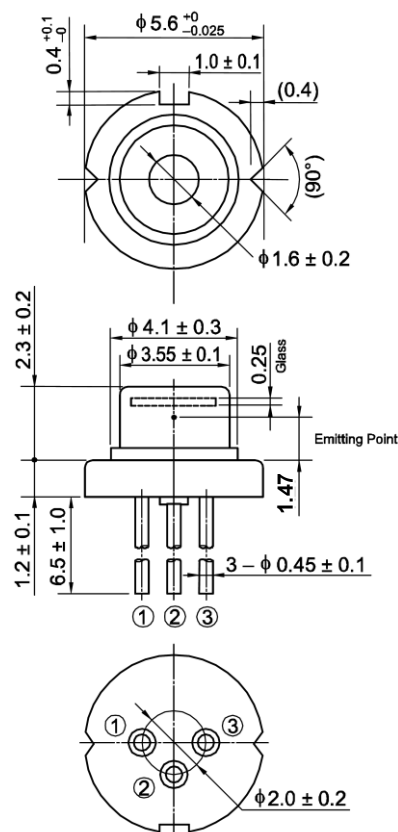


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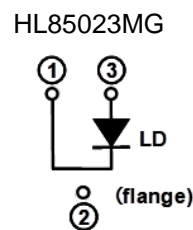
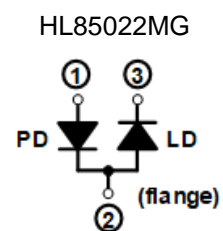
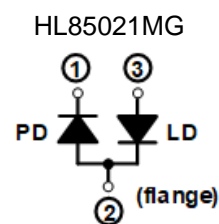
850nm/260mW Infrared Laser Diode

Outline



(Unit: mm)

Internal Circuit



Features

- Infrared light output: 850nm Typ.
- High optical output power: 260mW (CW)
- Operating current: 270mA Typ. at 250mW
- Wide operating temperature: $-20 \sim +75^\circ\text{C}$
- Single transverse mode
- TE mode oscillation

Application

- Night vision
- Sensor application
- Laser module

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Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Optical output power	Po	260	mW
LD reverse voltage	V _{R(LD)}	2	V
PD reverse voltage ^{Note1)}	V _{R(PD)}	30	V
Operating temperature	Topr	-20 ~ +75	°C
Storage temperature	Tstg	-40 ~ +85	°C

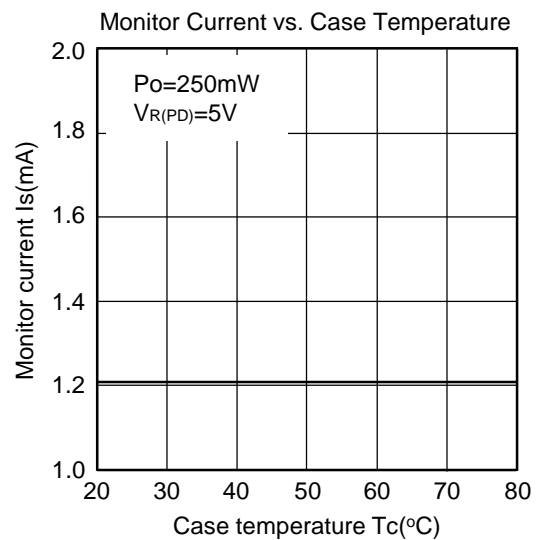
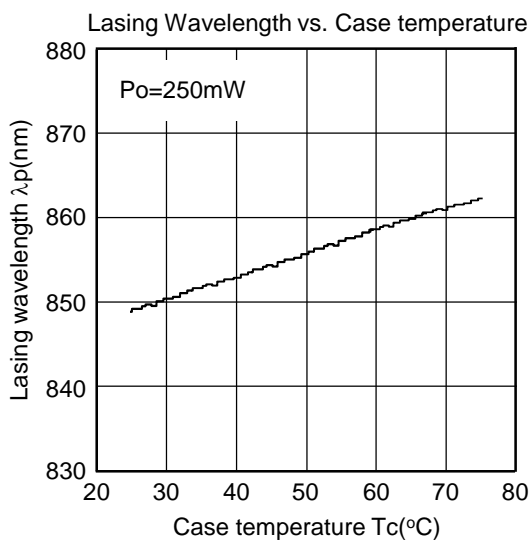
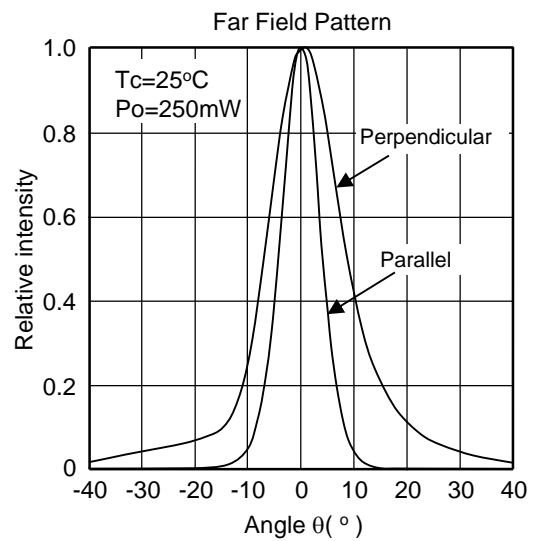
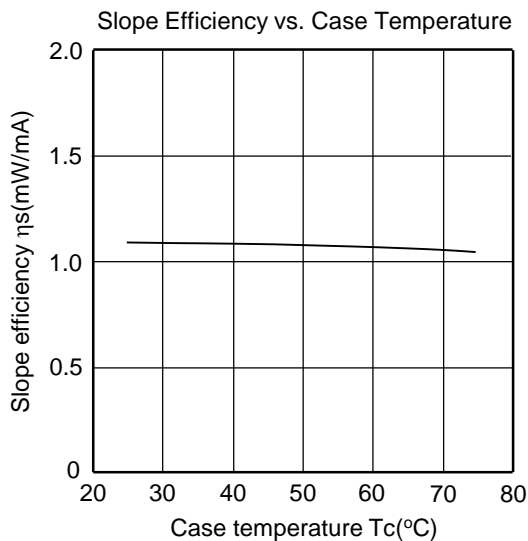
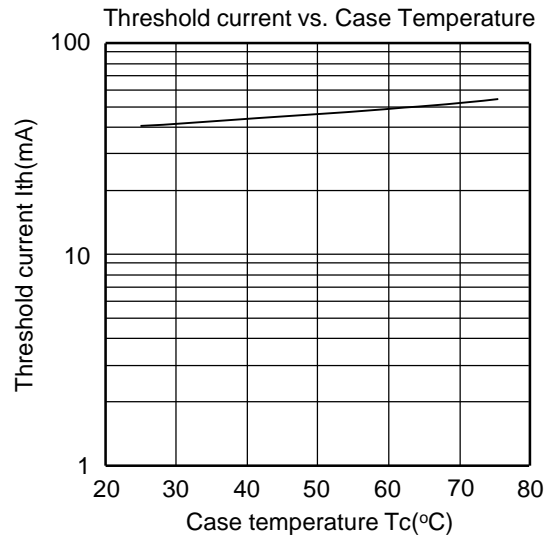
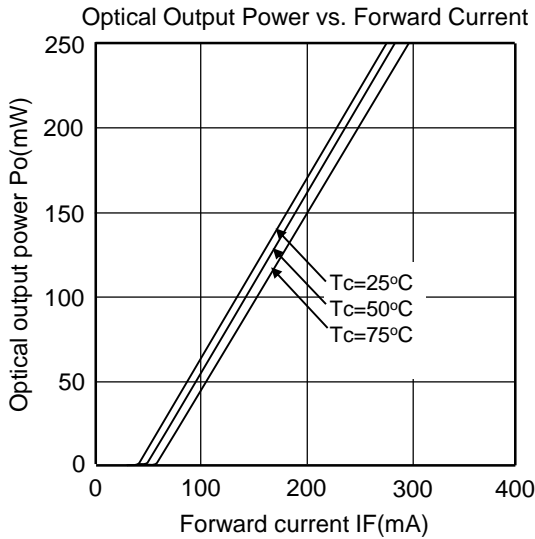
Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I _{th}	-	45	-	mA	-
Operating current	I _{op}	-	270	-	mA	Po=250mW
Operating voltage	V _{op}	-	2.6	-	V	Po=250mW
Beam divergence Parallel to the junction	θ _{//}	-	7.5	-	°	Po=250mW, FWHM
Beam divergence Perpendicular to the junction	θ _⊥	-	15	-	°	Po=250mW, FWHM
Lasing Wavelength	λ _p	840	850	860	nm	Po=250mW
Monitor current ^{Note1)}	I _s	-	1.2	-	mA	Po=250mW, V _{R(PD)} =5V

Note1) Not applicable to RHL85023MG.

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Typical Characteristic Curves



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2. This product (without violet laser diode) contains gallium arsenide (GaAs), which may seriously endanger your health even at very low doses. Please avoid treatment which may create GaAs powder or gas, such as disassembly or performing chemical experiments, when you handle the product. 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.

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Product data and parameters may vary by user application and over time.

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