

HL6327MG/28MG

AlGaInP Laser Diodes

ODE-208-031 (Z)

Rev.0

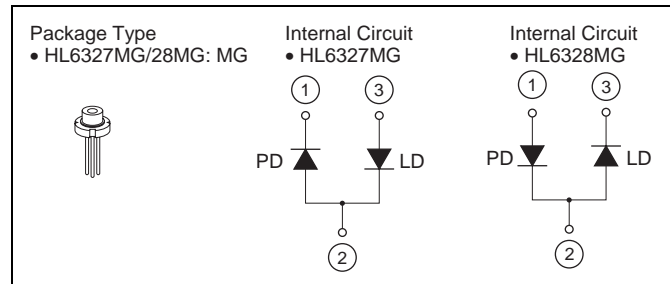
Jul. 01, 2005

Description

The HL6327MG/28MG are 0.63 μm band AlGaInP laser diodes with a multi-quantum well (MQW) structure. They are suitable as light sources for laser levelers, laser scanners and optical equipment for measurement.

Features

- Visible light output : 635 nm Typ
- Single longitudinal mode
- Optical output power : 5 mW CW
- Low operating current : 40 mA Typ
- Low operating voltage : 2.4 V Max
- Operating temperature : +50°C
- TM mode oscillation



Absolute Maximum Ratings

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

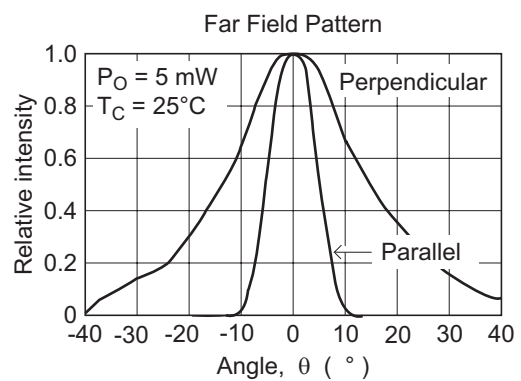
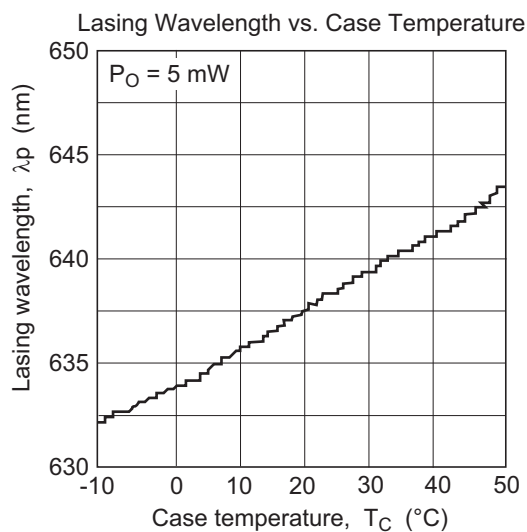
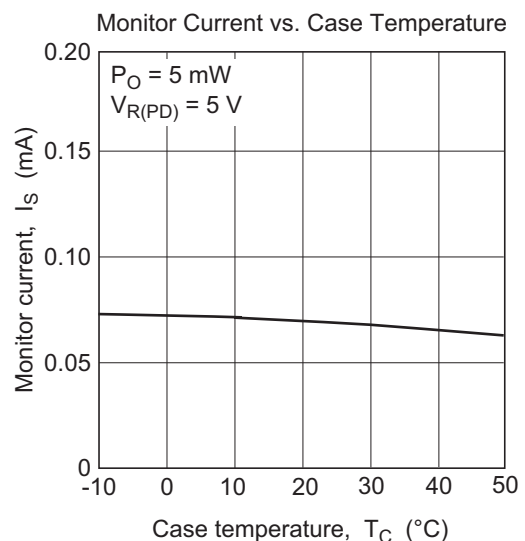
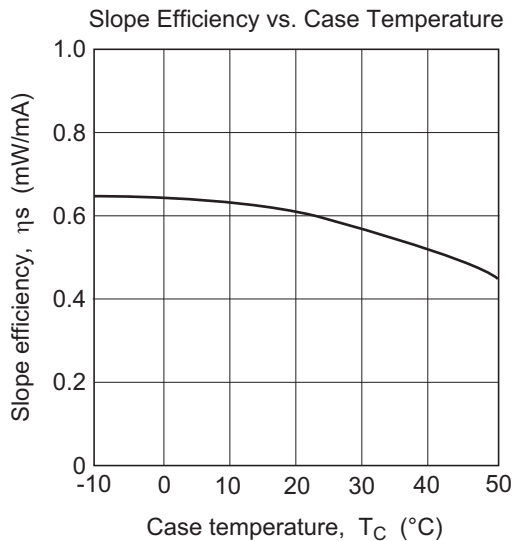
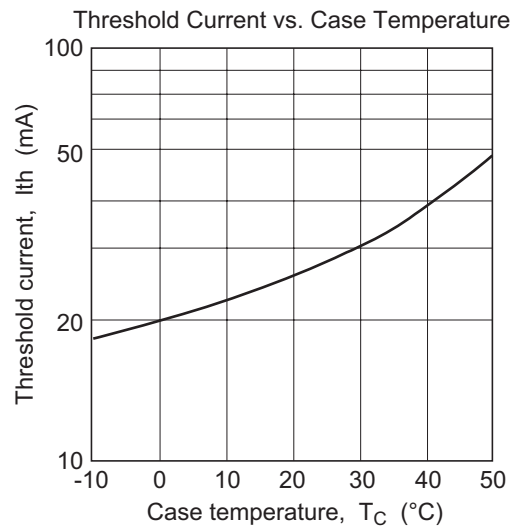
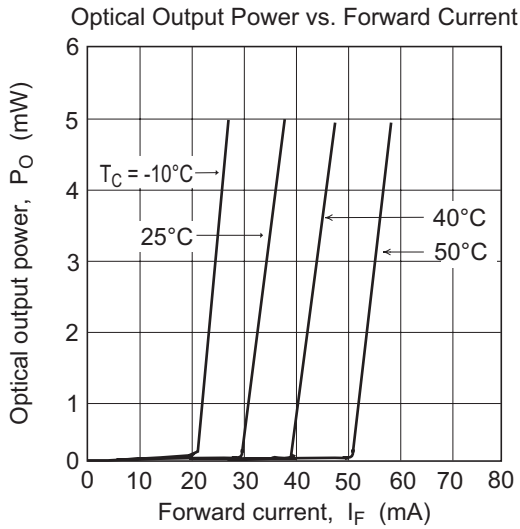
Item	Symbol	Ratings	Unit
Optical output power	P_O	5	mW
LD reverse voltage	$V_{R(LD)}$	2	V
PD reverse voltage	$V_{R(PD)}$	30	V
Operating temperature	T_{opr}	-10 to +50	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +85	$^\circ\text{C}$

Optical and Electrical Characteristics

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

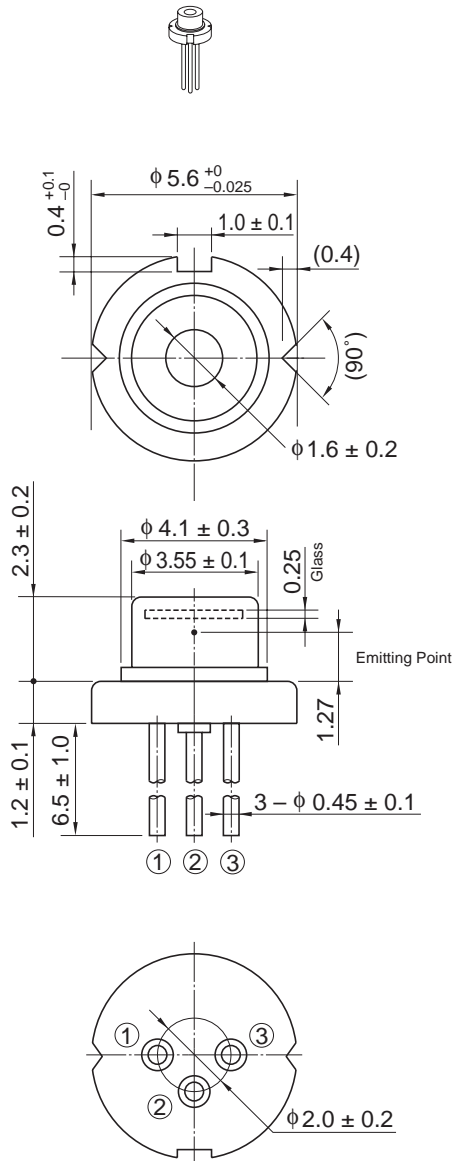
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I_{th}	—	30	50	mA	—
Operating current	I_{OP}	—	40	60	mA	$P_O = 5 \text{ mW}$
Operating voltage	V_{OP}	—	2.2	2.4	V	$P_O = 5 \text{ mW}$
Slope efficiency	η_s	0.3	0.5	0.8	mW/mA	$3 \text{ (mW)} / (I_{(4\text{mW})} - I_{(1\text{mW})})$
Beam divergence parallel to the junction	$\theta_{//}$	6	8	11	$^\circ$	$P_O = 5 \text{ mW}$
Beam divergence perpendicular to the junction	θ_{\perp}	25	31	37	$^\circ$	$P_O = 5 \text{ mW}$
Lasing wavelength	λ_p	630	635	640	nm	$P_O = 5 \text{ mW}$
Monitor current	I_s	0.02	0.07	0.12	mA	$P_O = 5 \text{ mW}, V_{R(PD)} = 5 \text{ V}$

Typical Characteristic Curves



Package Dimensions

As of July, 2002
Unit: mm



OPJ Code	LD/MG
JEDEC	—
JEITA	—
Mass (reference value)	0.3 g

Cautions

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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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