HL6388MG

Visible High Power Laser Diode

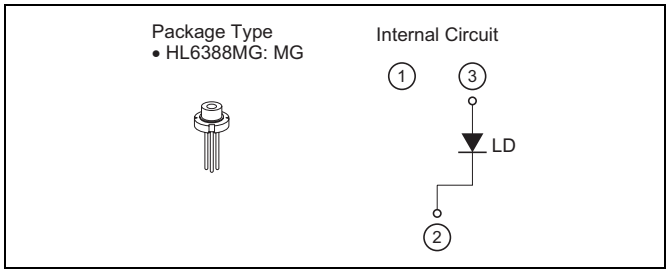
ODE2006-00 (P)
Preliminary
Rev.0
Jul. 08, 2008

Description

The HL6388MG is 0.64 µm band AlGaInP laser diodes with a multi-quantum well (MQW) structure. It is suitable as light sources for laser show, laser display and various other types of optical equipment.

Features

- Visible light output: 640 nm Typ
- Multiple transverse mode
- Optical output power: 250 mW CW
- Small package: ϕ5.6mm



Absolute Maximum Ratings

(T_C = 25°C)

Item	Symbol	Ratings	Unit
Optical output power	P_O	250	mW
LD reverse voltage	$V_{R(LD)}$	2	V
Operating temperature	Topr	–10 to +50*	°C
Storage temperature	Tstg	–40 to +85	°C

*Note: Operating Temperature is defined by Case Temperature “Tc”. High increase in temperature of LD chip itself is expected during operation due to high current density.
Thus, without proper heat dissipation, it is observed that no specific output power is achieved or it results to LD degradation. It is advised that sufficient measure of heat dissipation should be taken so that LD’s maximum operating temperature is not exceeded during actual operation.

Optical and Electrical Characteristics

(T_C = 25°C)

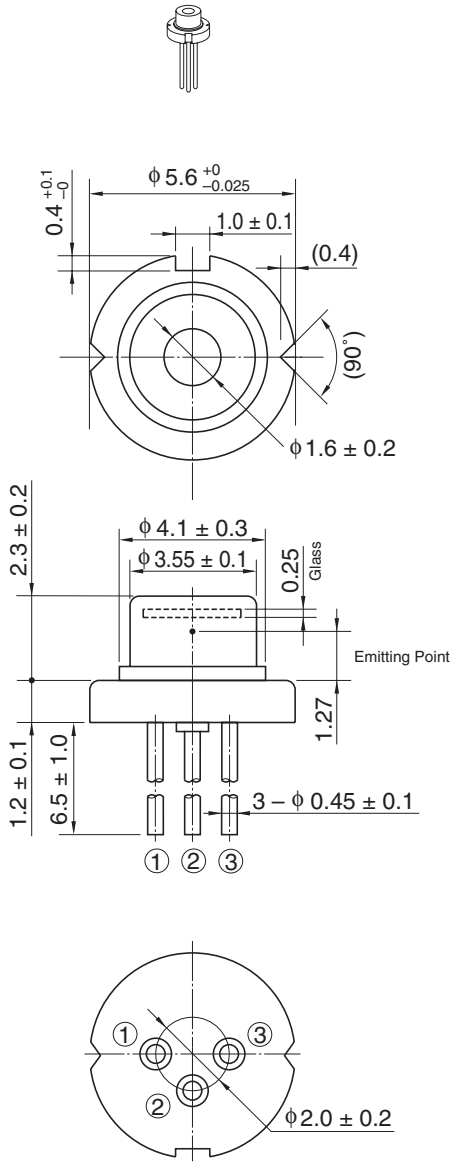
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	Ith	—	110	—	mA	—
Operating current	I_{OP}	—	360	—	mA	P_O = 250 mW
Operating voltage	V_{OP}	—	2.3	—	V	P_O = 250 mW
Beam divergence parallel to the junction	θ//	—	10	—	°	P_O = 250 mW
Beam divergence perpendicular to the junction	θ⊥	—	40	—	°	P_O = 250 mW
Lasing wavelength	λp	632	637	642	nm	P_O = 250 mW

Note: This type is under development. Therefore, this data sheet may be changed without any notice.

Package Dimensions

As of July, 2002

Unit: mm



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

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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.
2. This product 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.
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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