

# HL6525MG

## Visible High Power Laser Diode

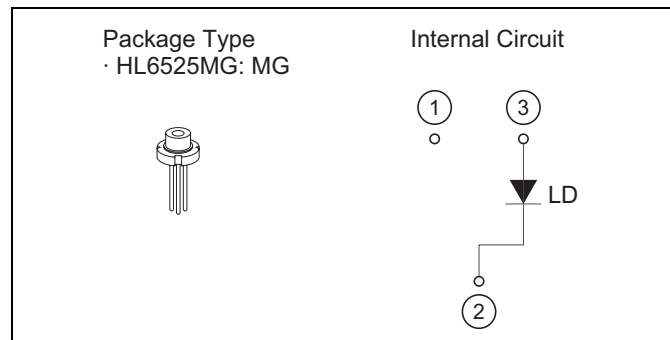
ODE-208-054 (Z)  
Rev.0  
Oct. 20, 2006

### Description

The HL6525MG is a 0.65  $\mu\text{m}$  band AlGaInP laser diode (LD) with a multi-quantum well (MQW) structure. It is suitable as a light source for large capacity optical disc memories, and various other types of optical equipment.

### Features

- Operating temperature: 75°C Max  
(140 mW(pulse), PW = 100ns, duty = 50%)
- Small package :  $\phi$  5.6 mm
- Visible light output :  $\lambda_p = 658$  nm Typ
- Low operating current :  $I_{op} = 100$  mA Typ  
( $P_o = 60$  mW)



### Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Optical output power	$P_o$	70	mW
Pulse optical output power	$P_{O(\text{pulse})}$	140 * <sup>1</sup>	mW
Laser diode reverse voltage	$V_{R(\text{LD})}$	2	V
CW Operating temperature	$T_{opr(\text{CW})}$	-10 to +75	°C
Pulse Operating temperature	$T_{opr(\text{pulse})}$	-10 to +75	°C
Storage temperature	$T_{stg}$	-40 to +85	°C

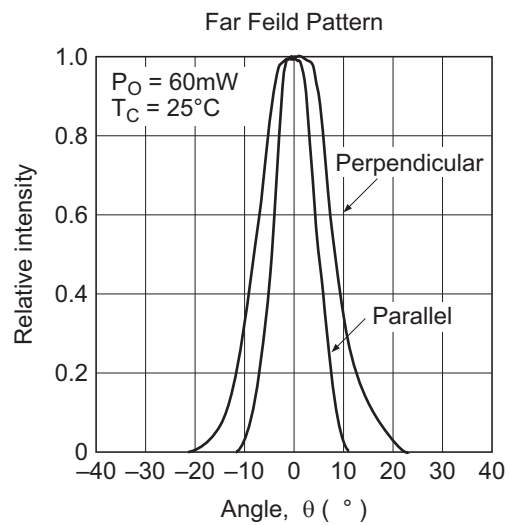
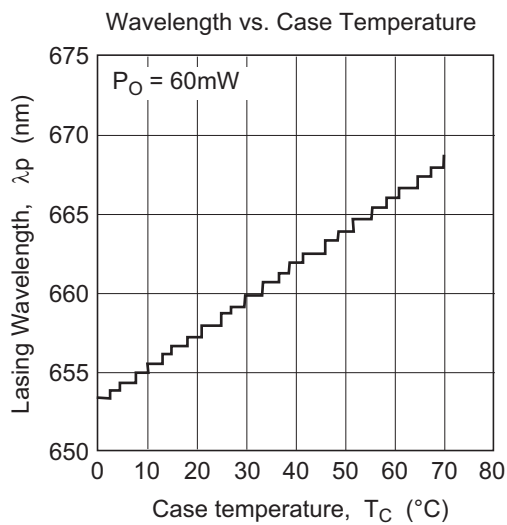
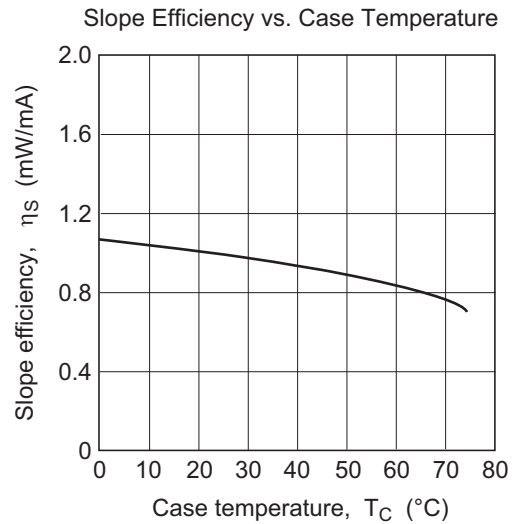
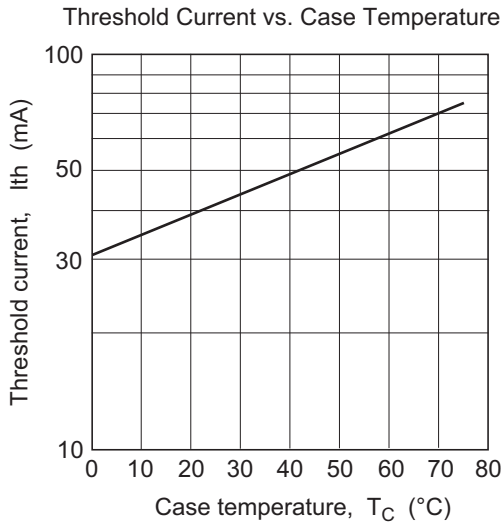
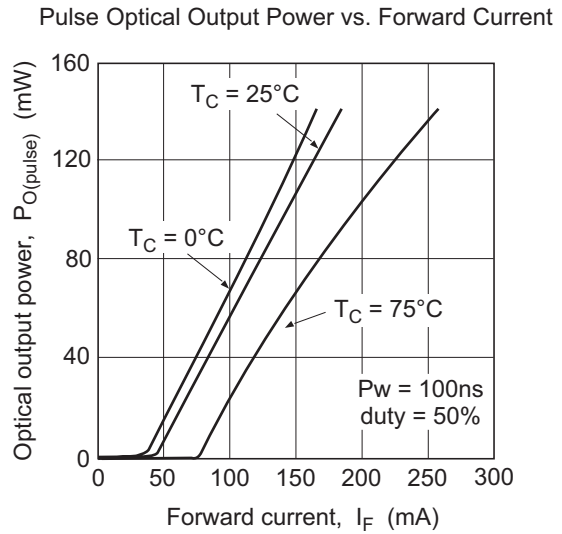
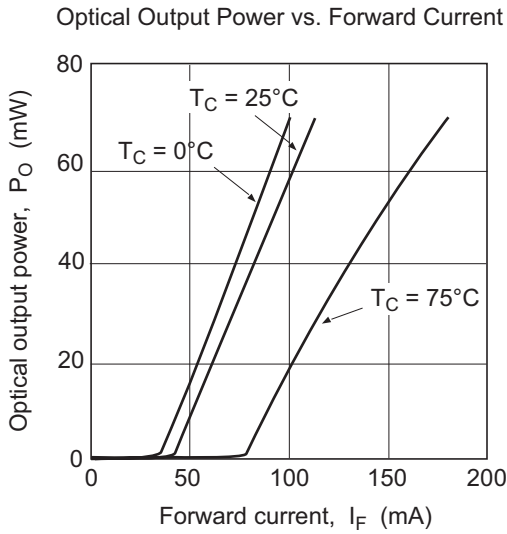
Note: 1. Pulse condition : Pulse width = 100 ns, duty = 50%

### Optical and Electrical Characteristics

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

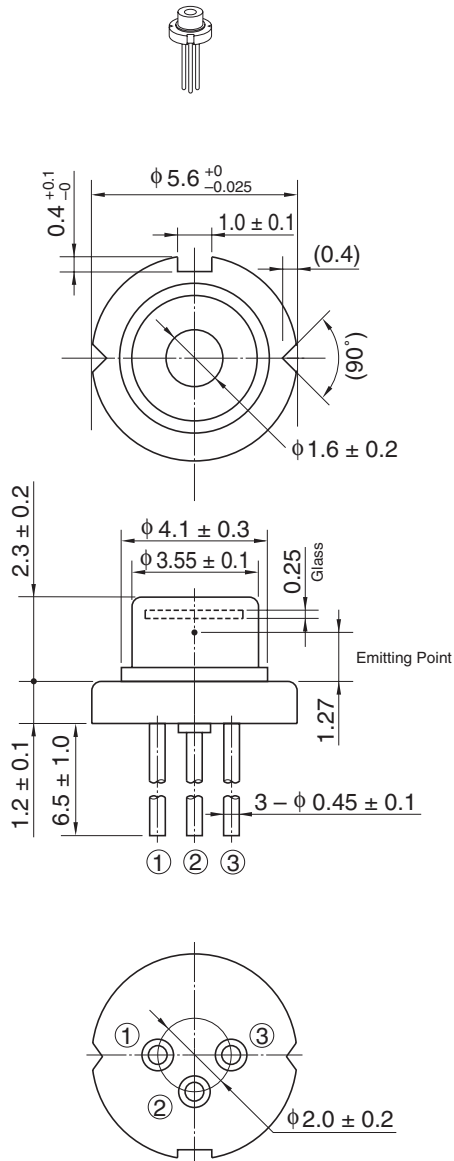
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold current	$I_{th}$	—	40	55	mA	—
Operating current	$I_{op}$	—	100	120	mA	$P_o = 60$ mW
Operating voltage	$V_{OP}$	—	2.6	3.0	V	$P_o = 60$ mW
Lasing wavelength	$\lambda_p$	652	658	662	nm	$P_o = 60$ mW
Beam divergence parallel to the junction	$\theta_{//}$	7.5	10.0	12.0	°	$P_o = 60$ mW
Beam divergence perpendicular to the junction	$\theta_{\perp}$	15	17	19	°	$P_o = 60$ mW
Astigmatism	$A_s$	—	1	—	$\mu\text{m}$	$P_o = 3$ mW, NA = 0.55

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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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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