

# HL6316G

## AlGaInP Laser Diodes

ODE-208-026 (Z)

Rev.0

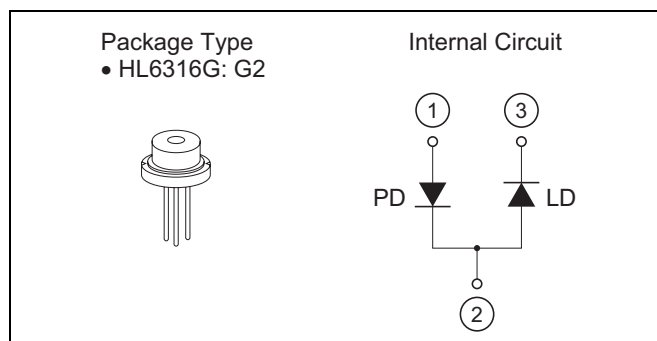
Jul. 01, 2005

### Description

The HL6316G is a 0.63  $\mu\text{m}$  band AlGaInP laser diodes with a multi-quantum well (MQW) structure. It is suitable as light sources for laser pointers and optical equipment.

### Features

- Visible light output: 635 nm Typ
- Single longitudinal mode
- Optical output power: 3 mW CW
- Low operating current: 30 mA Typ
- Low operating voltage: 2.7 V Max
- TM mode oscillation



### Absolute Maximum Ratings

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

Item	Symbol	Ratings	Unit
Optical output power	$P_O$	3	mW
Pulse optical output power	$P_{O(\text{pulse})}$	5 *	mW
LD reverse voltage	$V_{R(\text{LD})}$	2	V
PD reverse voltage	$V_{R(\text{PD})}$	30	V
Operating temperature	$T_{opr}$	-10 to +50	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +85	$^\circ\text{C}$

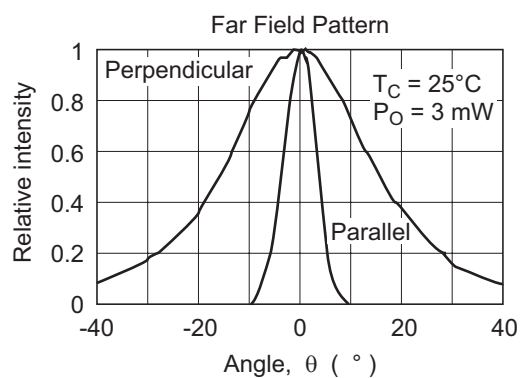
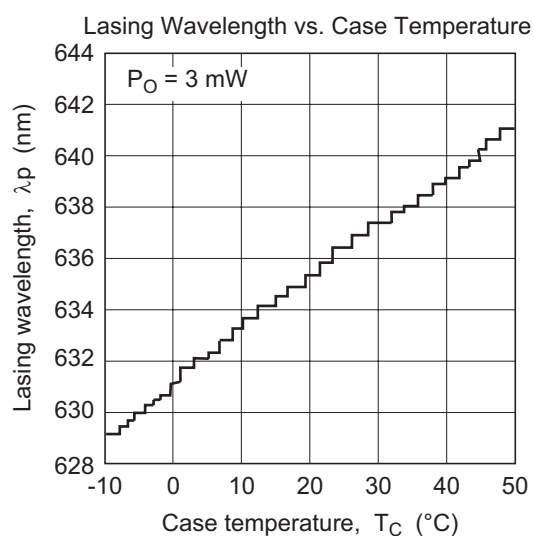
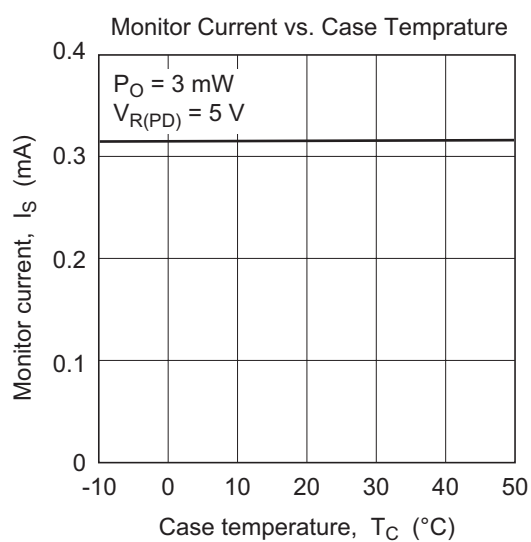
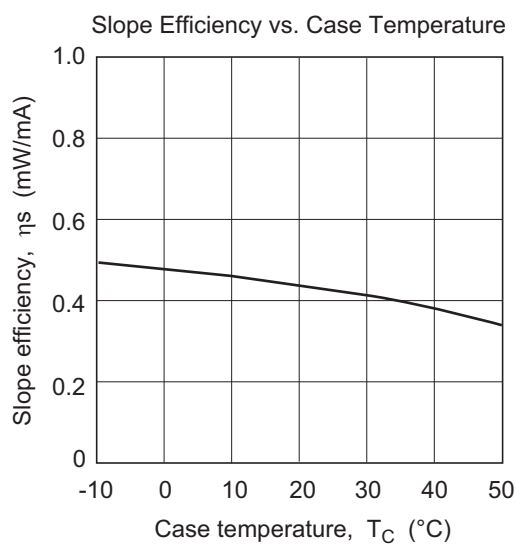
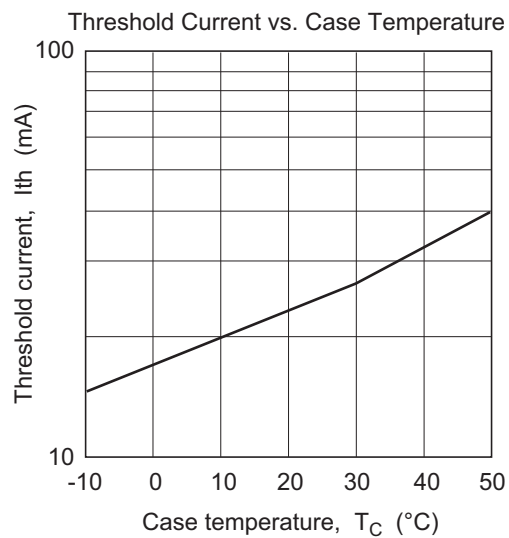
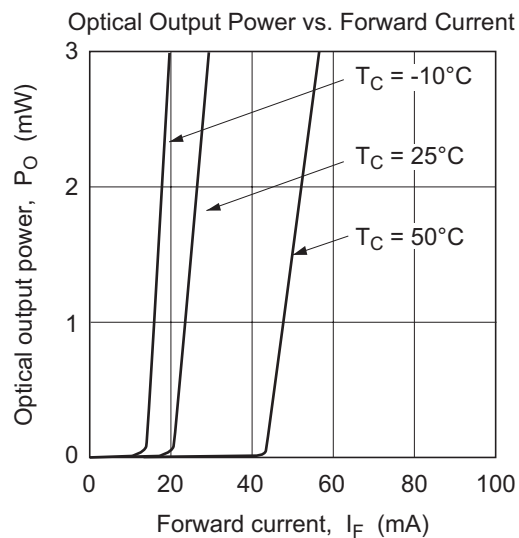
Note: Pulse condition : Pulse width  $\leq 1 \mu\text{s}$ , duty  $\leq 50\%$

### Optical and Electrical Characteristics

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

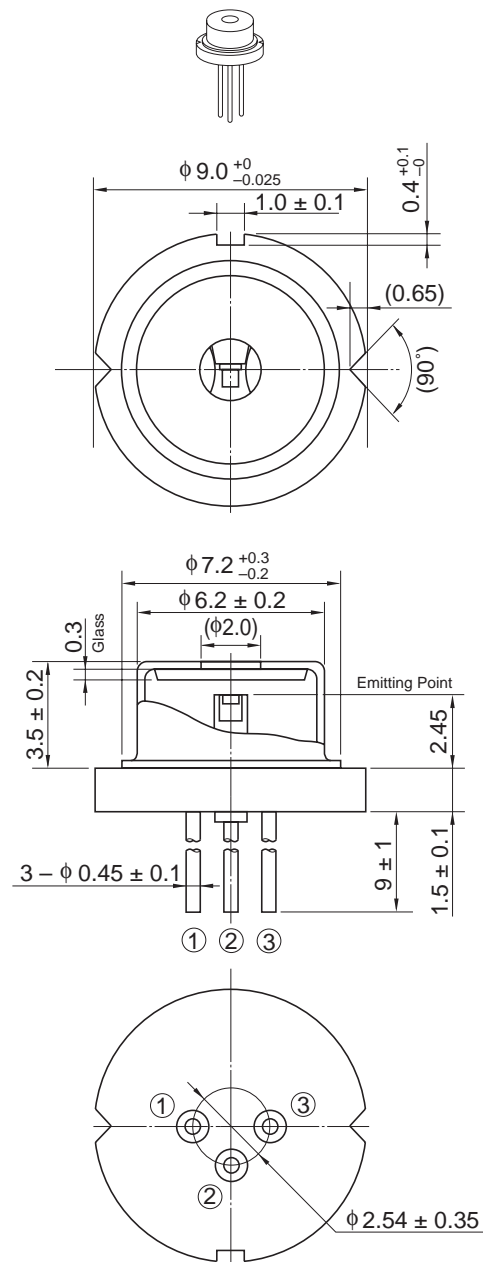
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold current	$I_{th}$	—	25	35	mA	—
Operating current	$I_{OP}$	—	30	42	mA	$P_O = 3 \text{ mW}$
Operating voltage	$V_{OP}$	—	—	2.7	V	$P_O = 3 \text{ mW}$
Beam divergence parallel to the junction	$\theta_{//}$	6	8	10	$^\circ$	$P_O = 3 \text{ mW}$
Beam divergence perpendicular to the junction	$\theta_{\perp}$	23	30	39	$^\circ$	$P_O = 3 \text{ mW}$
Lasing wavelength	$\lambda_p$	630	635	640	nm	$P_O = 3 \text{ mW}$
Monitor current	$I_s$	0.1	0.3	0.6	mA	$P_O = 3 \text{ mW}$ , $V_{R(\text{PD})} = 5 \text{ V}$

## Typical Characteristic Curves



## Package Dimensions

As of July, 2002  
Unit: mm



OPJ Code	LD/G2
JEDEC	—
JEITA	—
Mass (reference value)	1.1 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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