
HL6724MG

AlGaInP Laser Diode



ODE-208-261E (Z)

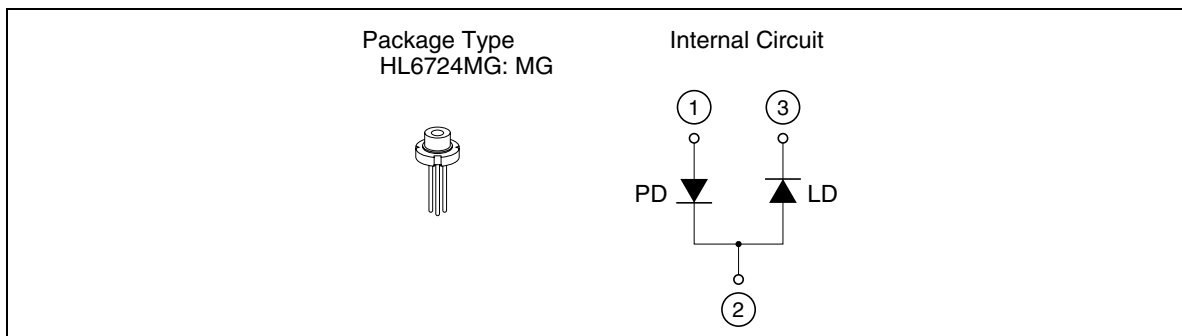
Rev.5
Jan. 2003

Description

The HL6724MG is a 0.67 μm band AlGaInP laser diode with a multi-quantum well (MQW) structure. It is suitable as a light source for laser pointers and optical equipments for amusement.

Features

- Visible light output: 670 nm Typ
- Single longitudinal mode
- Optical output power: 5 mW CW
- Low operating current: 35 mA Typ
- Low operating voltage: 2.7 V Max



HL6724MG

Absolute Maximum Ratings

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

Item	Symbol	Rated Value	Unit
Optical output power	P_o	5	mW
Pulse optical output power	$P_{O(\text{pulse})}$	6 *	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	$^\circ\text{C}$

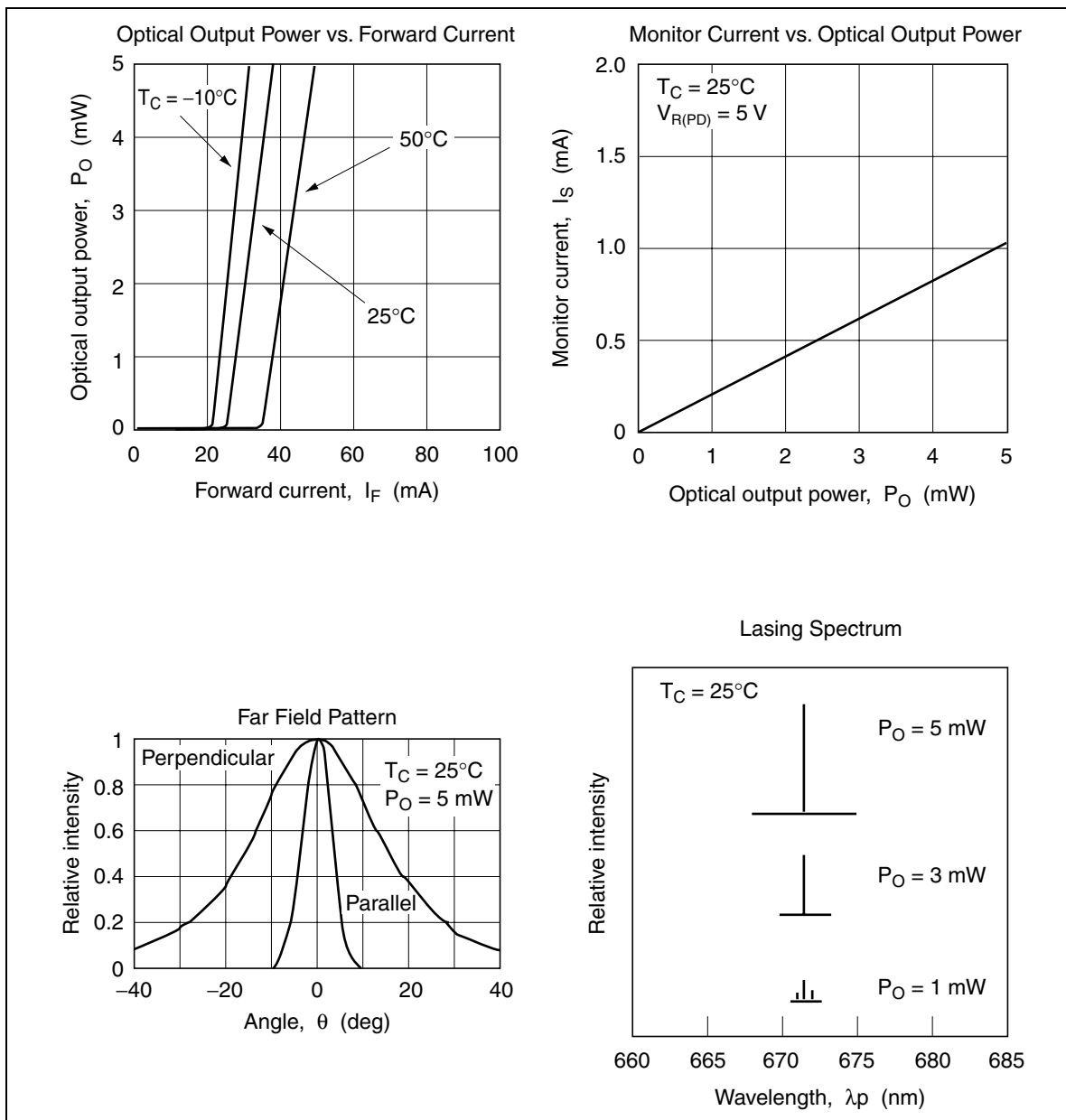
Note: Pulse condition : Pulse width $\leq 1 \mu\text{s}$, duty $\leq 50\%$

Optical and Electrical Characteristics

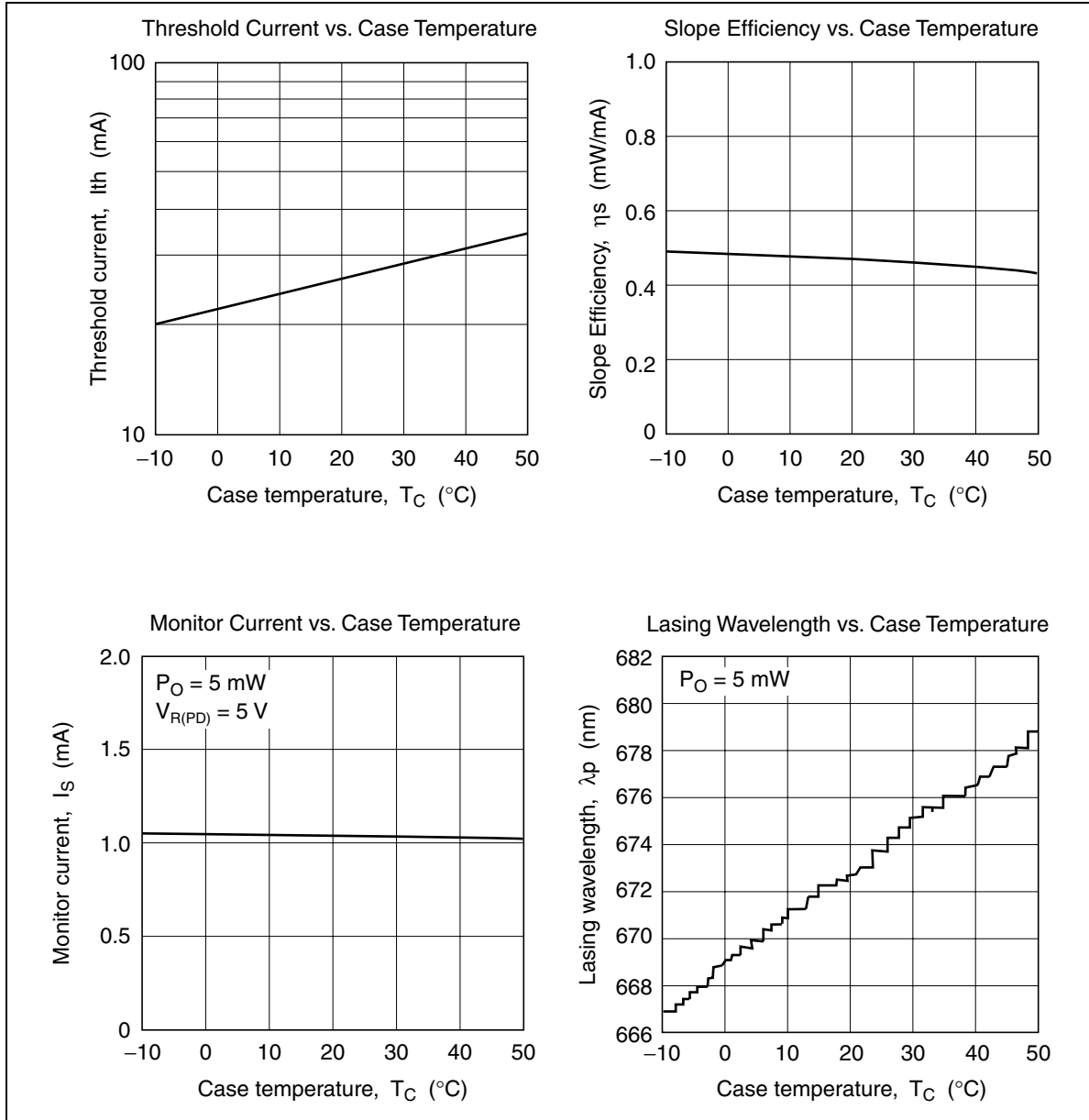
($T_c = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical output power	P_o	5	—	—	mW	—
Threshold current	I_{th}	—	25	35	mA	—
LD operating current	I_{OP}	—	35	50	mA	$P_o = 5 \text{ mW}$
LD operating voltage	V_{OP}	—	—	2.7	V	$P_o = 5 \text{ mW}$
Beam divergence parallel to the junction	$\theta_{//}$	5	8	11	deg.	$P_o = 5 \text{ mW}$
Beam divergence parpendicular to the junction	θ_{\perp}	22	30	40	deg.	$P_o = 5 \text{ mW}$
Astigmatism	A_s	—	5	—	μm	$P_o = 5 \text{ mW}$, NA = 0.55
Lasing wavelength	λ_p	660	670	680	nm	$P_o = 5 \text{ mW}$
Monitor current	I_s	0.4	0.9	2.0	mA	$P_o = 5 \text{ mW}$, $V_{R(\text{PD})} = 5 \text{ V}$

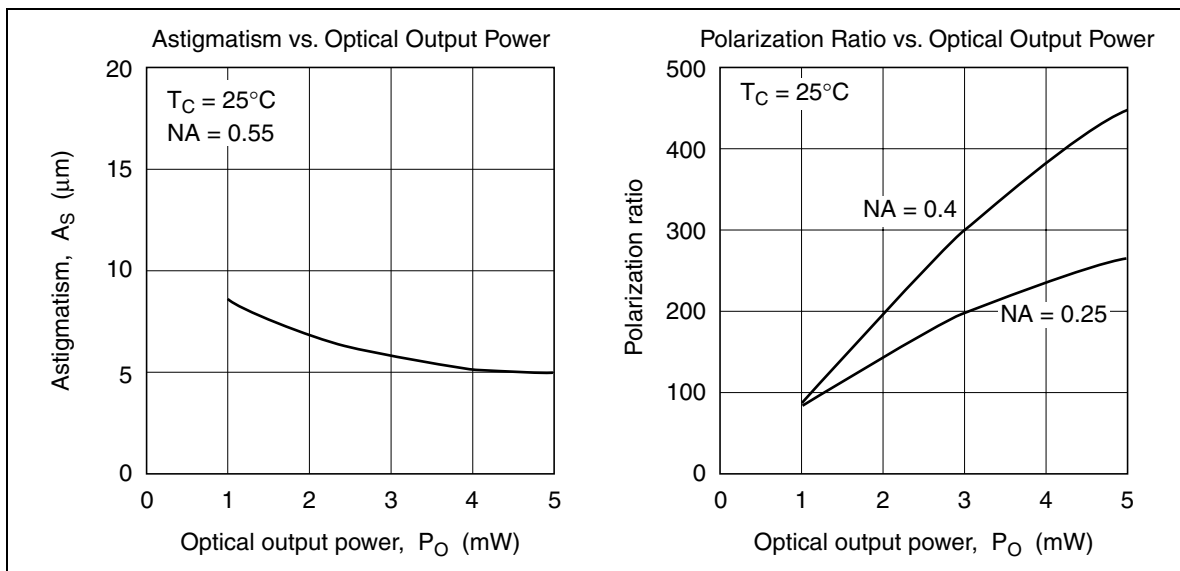
Typical Characteristic Curves



Typical Characteristic Curves (cont)



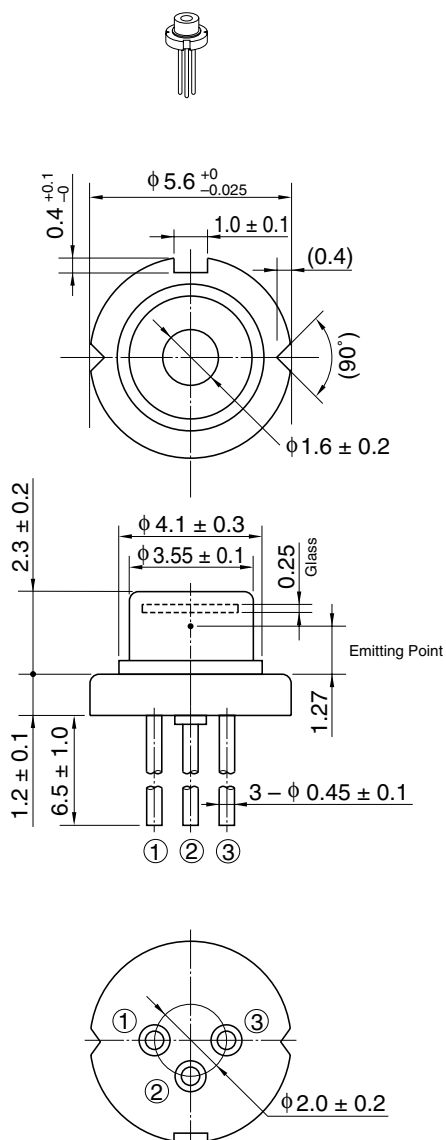
Typical Characteristic Curves (cont)



HL6724MG

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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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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