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# HL6724MG

AlGaInP Laser Diode

# HITACHI

Literature Order Number  
Rev 0  
February 1997

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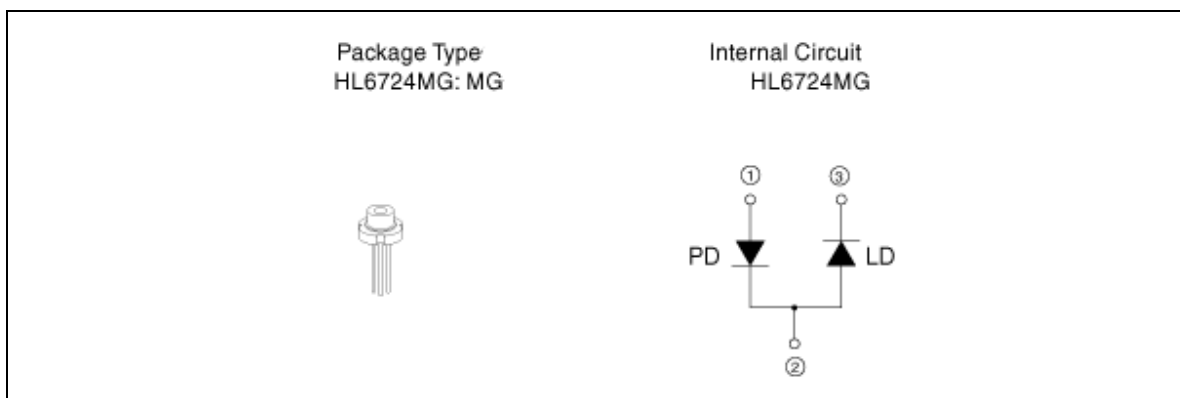
## Description

The HL6724MG is a 0.67  $\mu\text{m}$  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: 670nm Typ
- Optical output power: 5 mW CW
- Low operating current: 35 mA Typ
- Low operating voltage: 2.7 V Max

## HL6724MG



### Absolute Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

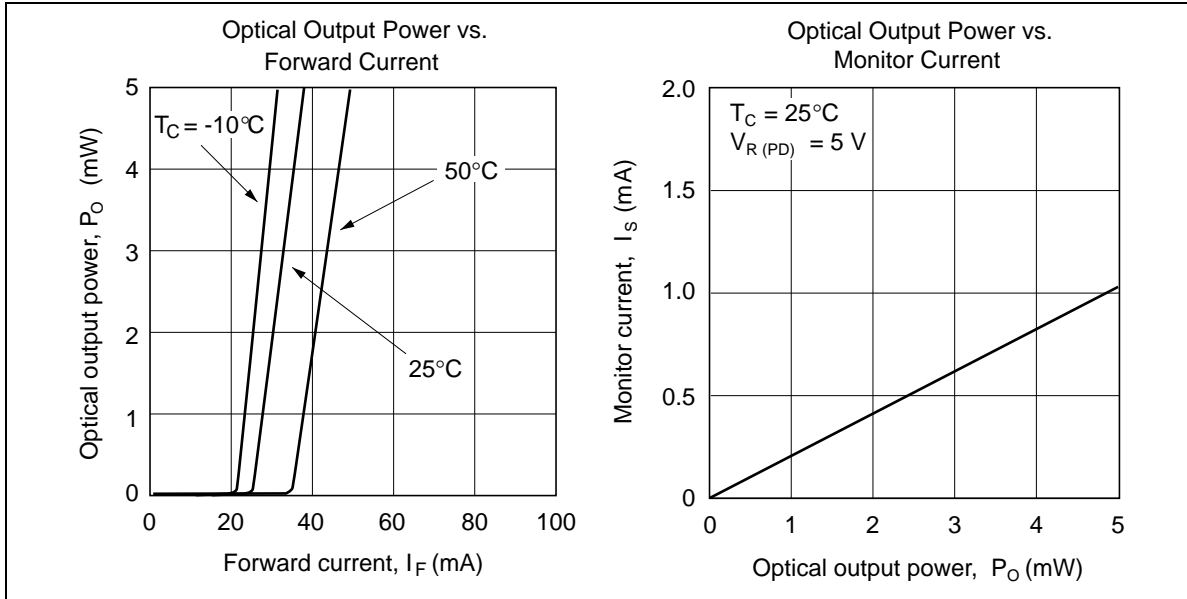
Item	Symbol	Rated Value	Unit
Optical output power	$P_o$	5	mW
Pulse optical output power	$P_{O(pulse)}$	$6^{*1}$	mW
LD reverse voltage	$V_{R(LD)}$	2	V
PD reverse voltage	$V_{R(PD)}$	30	V
Operating temperature	$T_{opr}$	-10 to +50	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +85	$^\circ\text{C}$

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

### Optical and Electrical Characteristics ( $T_c = 25^\circ\text{C}$ )

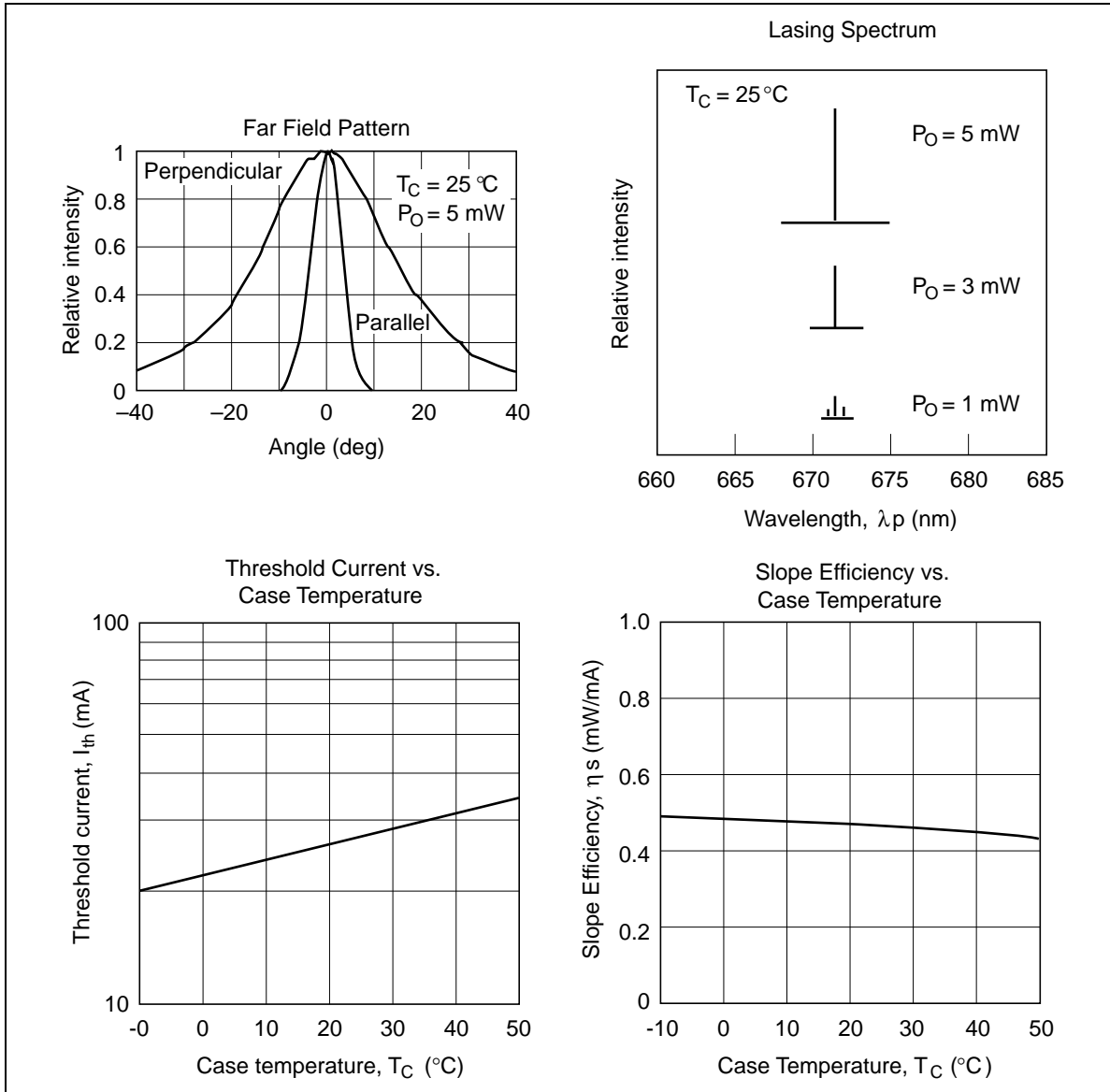
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical output power	$P_o$	5	—	—	mW	Kink free
Threshold current	$I_{th}$	—	25	—	mA	
Operating current	$I_{op}$	—	35	—	mA	$P_o = 5 \text{ mW}$
Operating voltage	$V_{op}$	—	—	2.7	V	$P_o = 5 \text{ mW}$
Lasing wavelength	$\lambda_p$	660	670	680	nm	$P_o = 5 \text{ mW}$
Beam divergence (parallel)	$\theta_{//}$	5	8	11	deg.	$P_o = 5 \text{ mW}$
Beam divergence (perpendicular)	$\theta_{\perp}$	22	30	40	deg.	$P_o = 5 \text{ mW}$
Monitor current	$I_s$	—	0.9	—	mA	$P_o = 5 \text{ mW}$ , $V_{R(PD)} = 5 \text{ V}$

Typical Characteristic Curves



# HL6724MG

## Typical Characteristic Curves (cont)



Typical Characteristic Curves (cont)

