
HL6724MG

AlGaInP Laser Diode

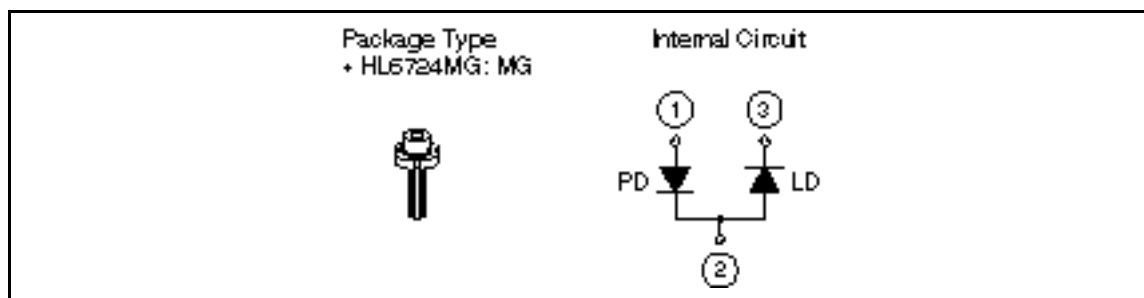
HITACHI

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

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



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

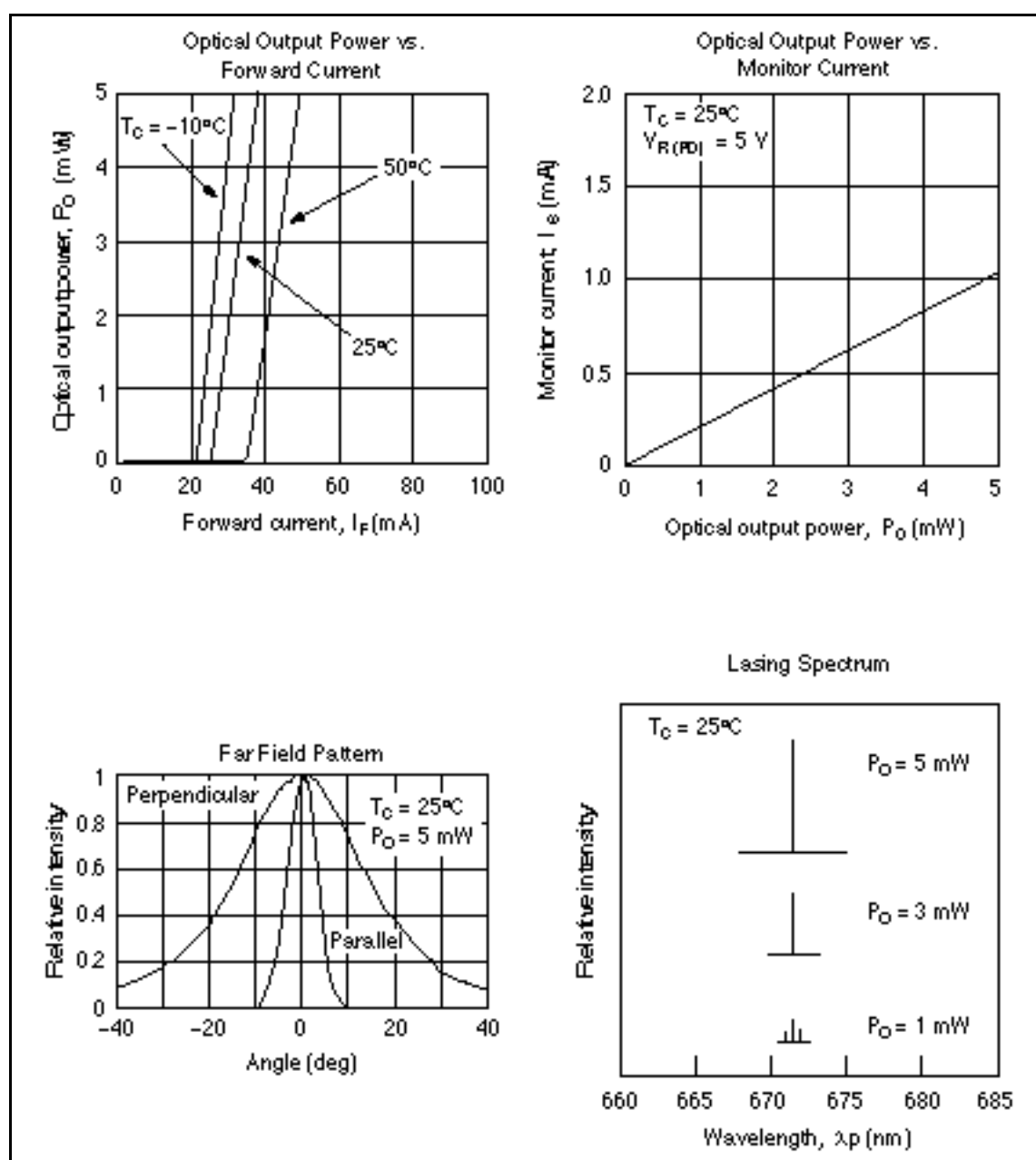
Item	Symbol	Rated Value	Unit
Optical output power	P_O	5	mW
Pulse optical output power	$P_{O(pulse)}$	6* ¹	mW
LD reverse voltage	$V_{R(LD)}$	2	V
PD reverse voltage	$V_{R(PD)}$	30	V
Operating temperature	T_{opr}	-10 to +50	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +85	$^\circ\text{C}$

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

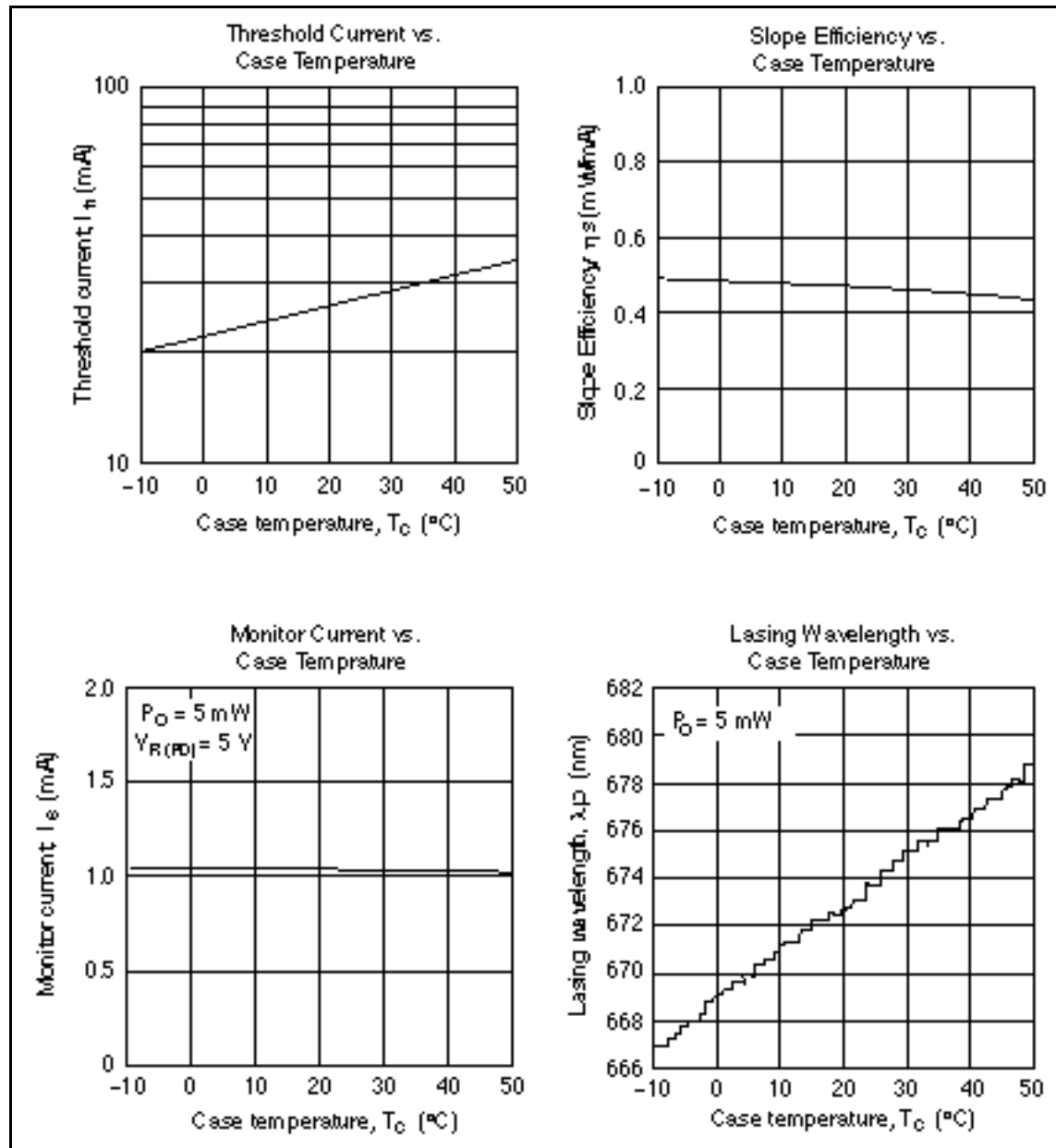
Optical and Electrical Characteristics ($T_C = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical output power	P_O	5	—	—	mW	Kink free
Threshold current	I_{th}	—	25	35	mA	
Operating current	I_{op}	—	35	50	mA	$P_O = 5\text{ mW}$
Operating voltage	V_{op}	—	—	2.7	V	$P_O = 5\text{ mW}$
Lasing wavelength	λ_p	660	670	680	nm	$P_O = 5\text{ mW}$
Beam divergence (parallel)	$q_{//}$	5	8	11	deg.	$P_O = 5\text{ mW}$
Beam divergence (perpendicular)	$q^\perp$	22	30	40	deg.	$P_O = 5\text{ mW}$
Monitor current	I_s	0.4	0.9	2	mA	$P_O = 5\text{ mW}$, $V_{R(PD)} = 5\text{ V}$

Typical Characteristic Curves



Typical Characteristic Curves (cont)



Typical Characteristic Curves (cont)

