

HL6553FG

Visible High Power Laser Diode

ODE-208-016C (Z) Rev.3 Aug. 29, 2006

Description

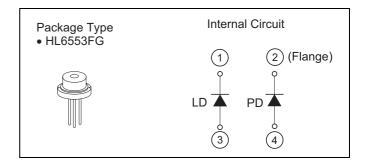
The HL6553FG is a 0.65 μ m band AlGalnP laser diode (LD) with a multi-quantum well (MQW) structure. It is suitable as a light source for measurement, and various other types of optical equipment.

Features

• Optical output power : 120 mW CW operation

• Single longitudinal mode.

• Visible light output : $\lambda p = 660 \text{ nm Typ}$



Absolute Maximum Ratings

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

Item	Symbol Ratings		Unit
Optical output power	Po	130	mW
LD reverse voltage	$V_{R(LD)}$	2	V
PD reverse voltage	V _{R(PD)}	30	V
Operating temperature	Topr	-10 to +60	°C
Storage temperature	Tstg	-40 to +85	°C

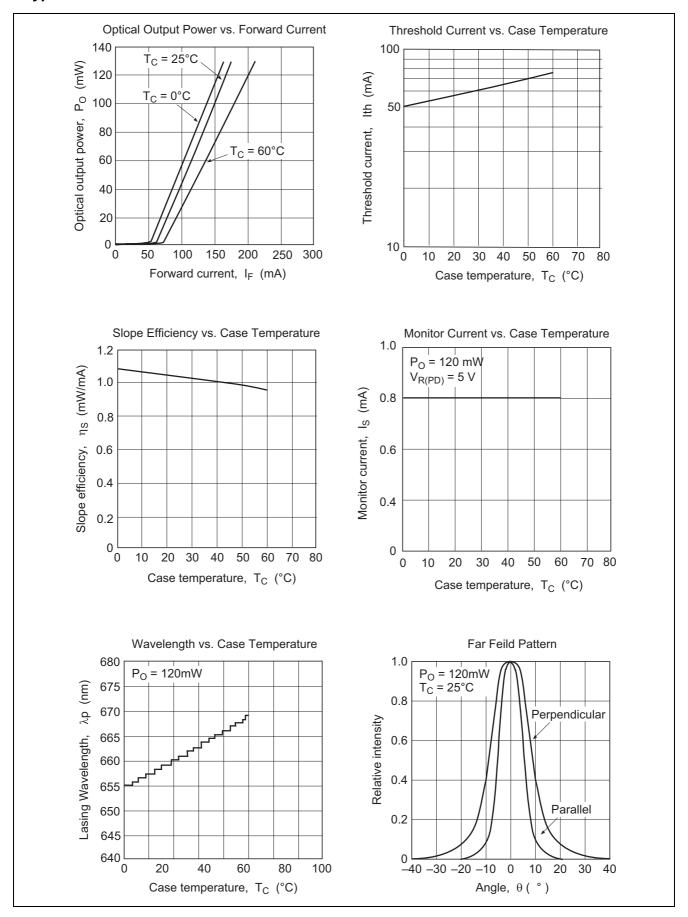
Optical and Electrical Characteristics

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

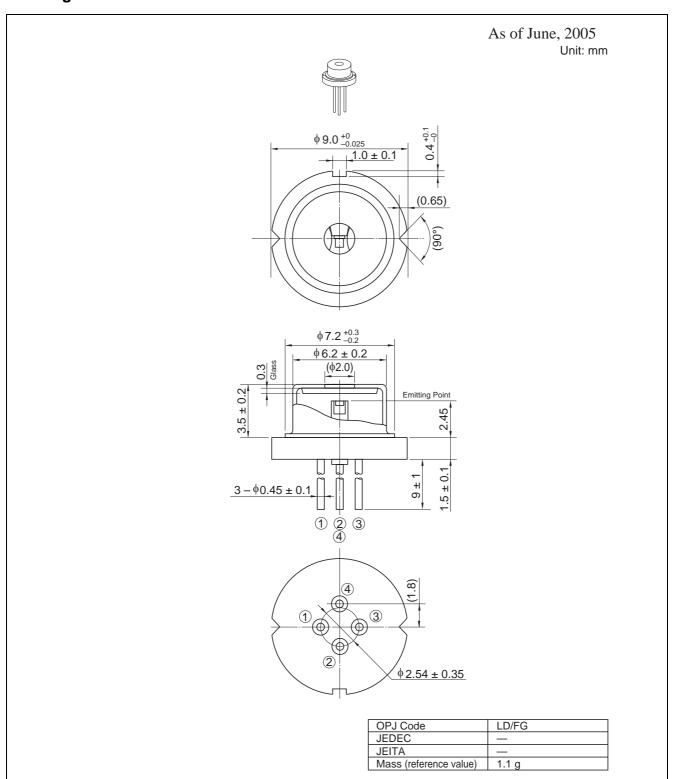
Item	Symbol	Min	Тур	Max	Unit	Test Conditions
Threshold current	Ith	1	55	70	mA	_
Operating current	I _{OP}	1	175	210	mA	P _O = 120 mW
Operating voltage	V _{OP}	1	2.6	3.0	V	P _O = 120 mW
Lasing wavelength	λρ	654	660	665	nm	P _O = 120 mW
Beam divergence parallel to the junction	θ//	7	10	13	0	P _O = 120 mW
Beam divergence perpendicular to the junction	θΤ	15	17	20	0	P _O = 120 mW
Monitor current	Is	0.4	0.8	1.6	mA	$P_O = 120 \text{ mW},$ $V_{R(PD)} = 5V$



Typical Characteristic Curves



Package Dimensions





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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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