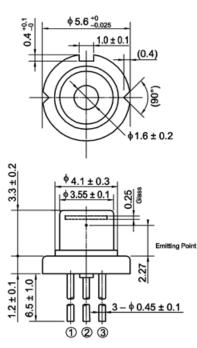
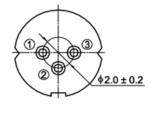


# HL63163DG

# 633nm/100mW AlGaInP Laser Diode

### Outline





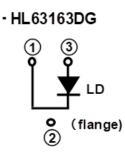
(Unit: mm)

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#### **Features**

- Shorter wavelength: 633nm Typ.
- High optical output power: 100mW
- Low operating current: 170mA Typ.
- Small package: φ5.6mm
- Single transverse mode
- TE mode oscillation

# **Internal Circuit**



### **Application**

- Medical
- Industry
- Light source of optical equipment

# Absolute Maximum Ratings (Tc=25°C)

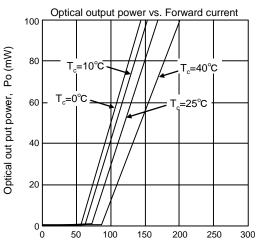
Item	Symbol	Ratings	Unit
Optical output power	Ро	100	mW
LD Reverse Voltage	VR(LD)	2	V
Operating Temperature	Topr	-10 ~ +40	°C
Storage Temperature	Tstg	-40 ~ +85	°C

# **Optical and Electrical Characteristics (Tc=25°C)**

Parameter	Symbol	Min	Тур	Мах	Unit	Test Condition
Threshold current	lth	-	70	100	mA	-
Operating current	Іор	-	170	230	mA	Po=100mW
Operating voltage	Vop	-	2.6	3.0	V	Po=100mW
Beam divergence Parallel to the junction	θ//	5	8.5	13	0	Po=100mW, FWHM
Beam divergence Perpendicular to the junction	θ⊥	13	18	23	0	Po=100mW, FWHM
Lasing Wavelength	λρ	630	633	636	nm	Po=100mW

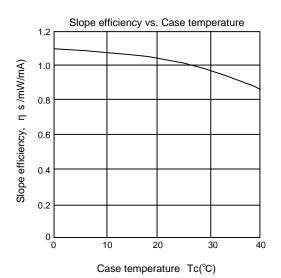
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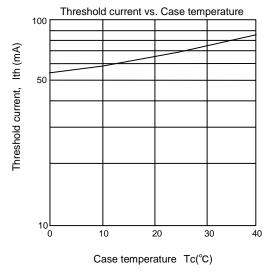
# HL63163DG Data Sheet

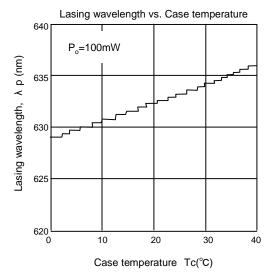


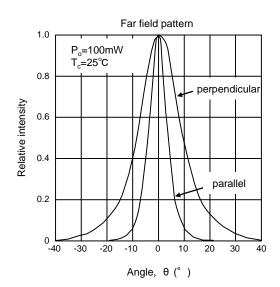
# **Typical Characteristic Curves**

Forward current IF(mA)









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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.

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