

## AlGaInP Laser Diode

670nm/15mW

Technical drawing of the 100W LED lamp head showing three views: top, side, and bottom. The top view shows a circular base with a central hole of diameter  $\phi 5.6^{+0}_{-0.025}$  and a mounting hole of diameter  $\phi 1.6 \pm 0.2$ . The side view shows a height of  $2.3 \pm 0.2$  and a base diameter of  $\phi 4.1 \pm 0.3$ . The bottom view shows a circular base with a diameter of  $\phi 2.0 \pm 0.2$  and four mounting holes labeled 1, 2, 3, and 4. The drawing also indicates a 90-degree angle and a 0.25mm gap.

- Optical output power: 15mW (CW)
- Visible light output: 670nm Typ.
- Single transverse mode
- Low operation current: 35mA Typ.
- Low operation voltage: 2.3V Typ
- TE mode oscillation
- Built-in monitor photodiode

- Measurement
- Laser module
- Sensing

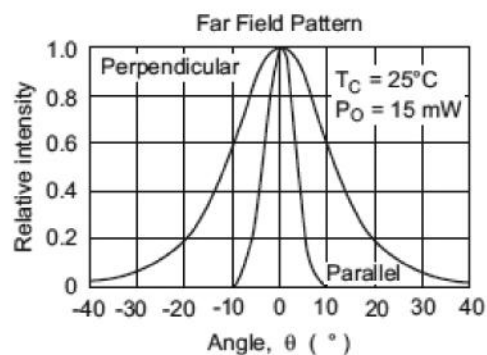
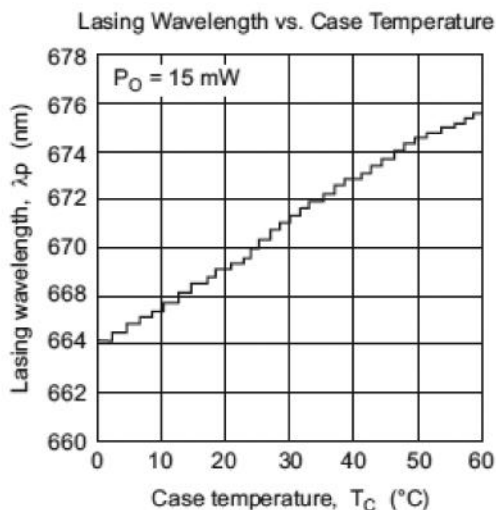
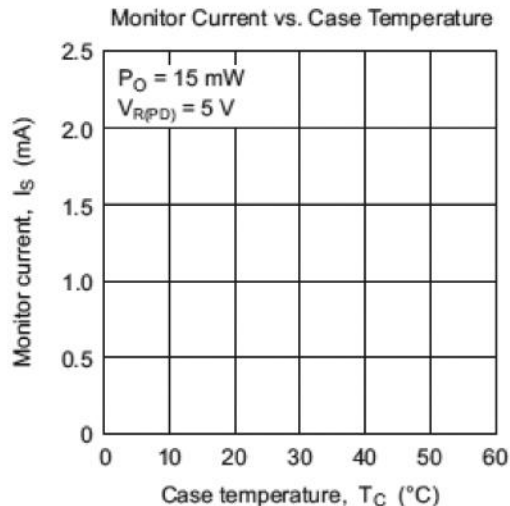
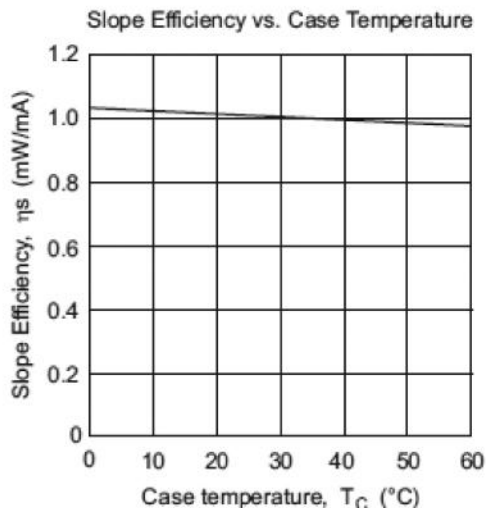
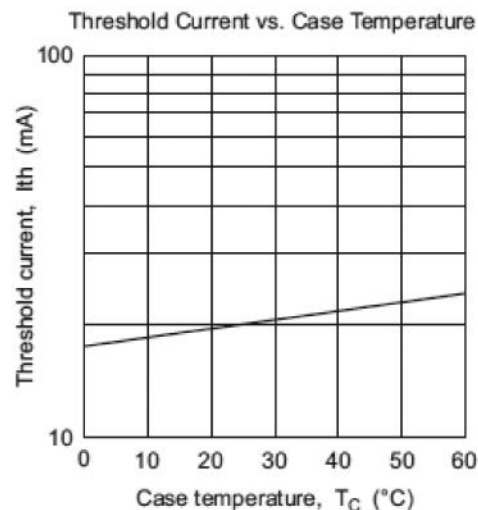
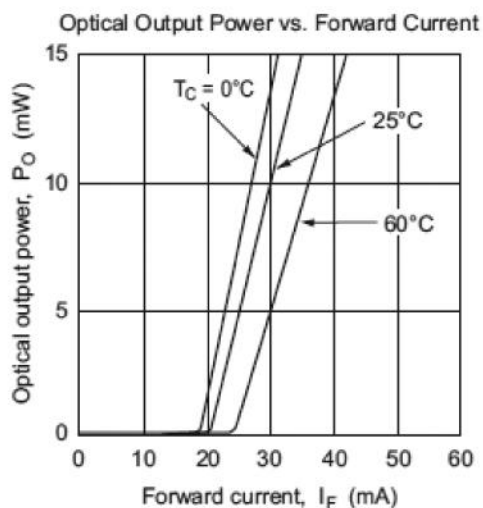
Absolute Maximum Ratings (T<sub>c</sub>=25°C)

Item	Symbol	Ratings	Unit
Optical output power	P <sub>o</sub>	15	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	20	V
Operating Temperature	T <sub>opr</sub>	-10 ~ +60	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C

Optical and Electrical Characteristics (T<sub>c</sub>=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Threshold current	I <sub>th</sub>	-	20	30	mA	-
Operating current	I <sub>op</sub>	-	35	45	mA	P <sub>o</sub> =15mW
Operating voltage	V <sub>op</sub>	-	2.3	2.7	V	P <sub>o</sub> =15mW
Beam divergence Parallel to the junction	θ <sub>//</sub>	5	8	11	°	P <sub>o</sub> =15mW, FWHM
Beam divergence Perpendicular to the junction	θ <sub>⊥</sub>	20	24	28	°	P <sub>o</sub> =15mW, FWHM
Lasing Wavelength	λ <sub>p</sub>	660	670	680	nm	P <sub>o</sub> =15mW
Monitor current	I <sub>s</sub>	0.5	1.5	2.5	mA	P <sub>o</sub> =15mW, V <sub>R(PD)</sub> =5V

## Typical Characteristic Curves



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## Contact Information

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