1064 nm Fabry-Perot Laser Diode, 450 mW

L1064H2

Description

The L1064H2 1064 nm Fabry-Perot single spatial mode laser diode is based on quantum well epitaxial layer growth and a highly reliable ridge waveguide structure. This diode features high optical output power and slope efficiency. The L1064H2 Ø9 mm TO-can package discrete laser diode is a compact light source suited to many applications.

Specifications

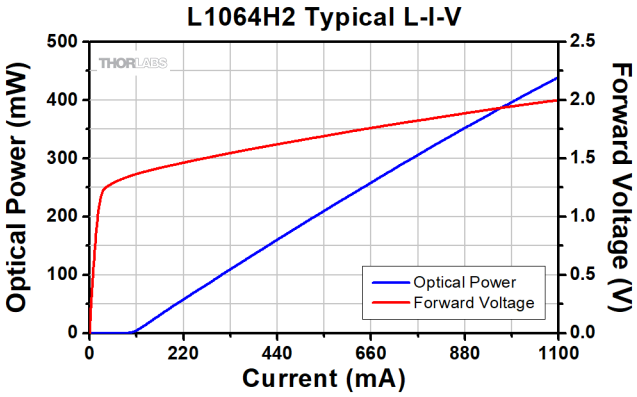
Absolute Maximum Ratings[a]	
LD Reverse Voltage (Max)	2 V
Absolute Max Current	1200 mA
Absolute Max Power	460 mW
Operating Case Temperature	20 to 50 °C
Storage Temperature	-10 to 65 °C
Pin Code	E

a. Please note that exceeding the absolute maximum ratings above may cause damage to the device.

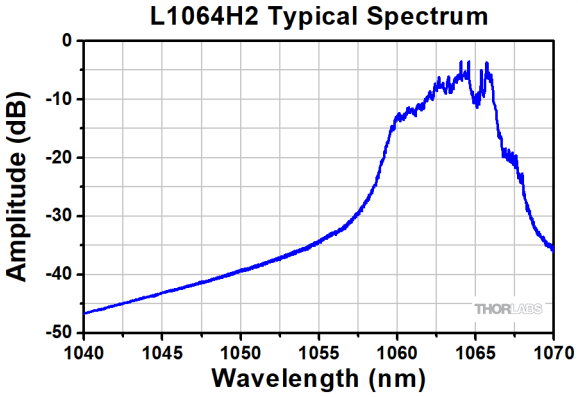
L1064H2[a]				
	Symbol	**Min**	**Typical**	**Max**
Center Wavelength	λ_C	1054 nm	1064 nm	1074 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	2 nm	5 nm
Output Power CW @ I_{OP}	P_{CW}	-	450 mW	-
Threshold Current	I_{TH}	-	100 mA	130 mA
Operating Current CW	I_{OP}	-	1100 mA	1200 mA
Slope Efficiency	$\Delta P/\Delta I$	-	0.46 W/A	-
Forward Voltage	V_F	-	1.92 V	2.50 V
Vertical Beam Divergence Angle (FWHM)[b]	θ_V	-	13.5°	22.0°
Lateral Beam Divergence Angle (FWHM)[b]	θ_L	-	7.6°	13.0°

a. T_{case} = 25°C
b. CW at 1000 mA

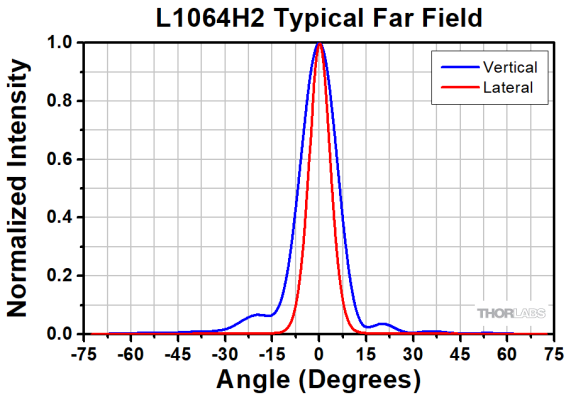
Typical Performance Plots



Typical L-I-V at 25 °C

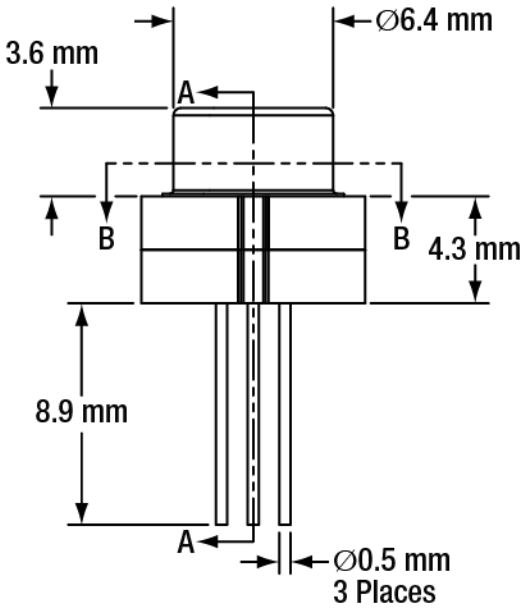


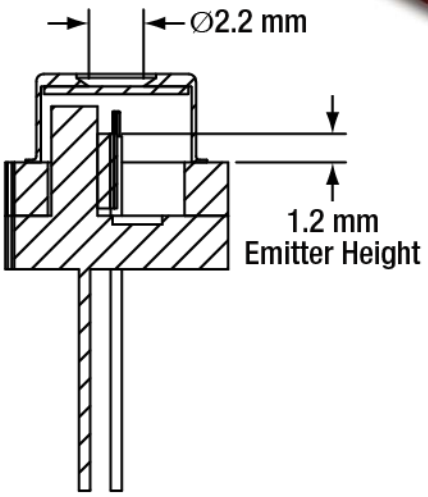
Typical Optical Spectrum at I = 1000 mA



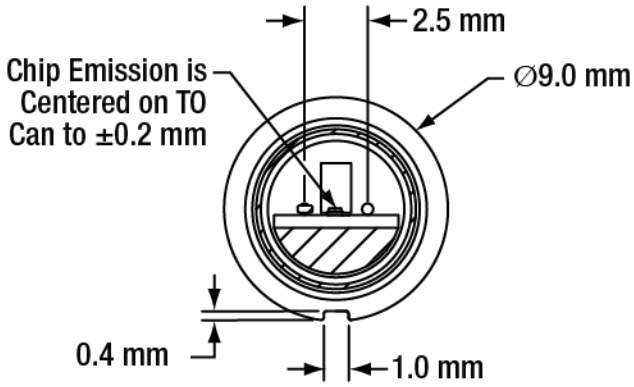
L1064H2 Typical Far Field Pattern at I = 1000 mA

Drawing

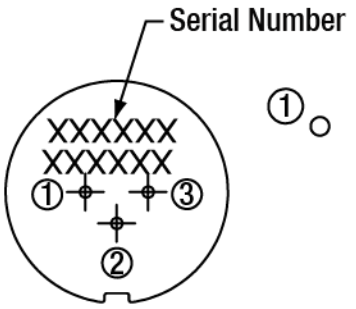




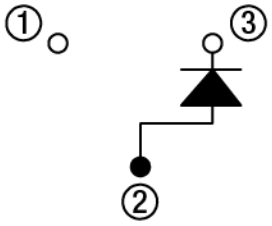
Section A-A



Section B-B



Bottom View



Pin Code E