

1064 nm Fabry-Perot Laser Diode, 300 mW

L1064H1



Description

The L1064H1 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 L1064H1 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	900 mA
Absolute Max Power	310 mW
Operating Case Temperature	20 to 50 °C
Storage Temperature	-10 to 65 °C
Pin Code	H

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

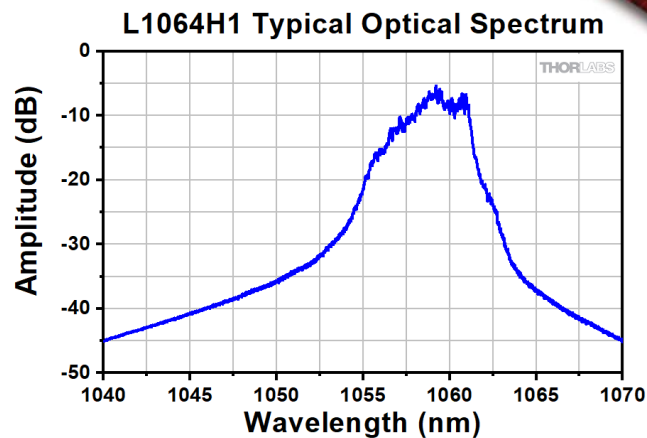
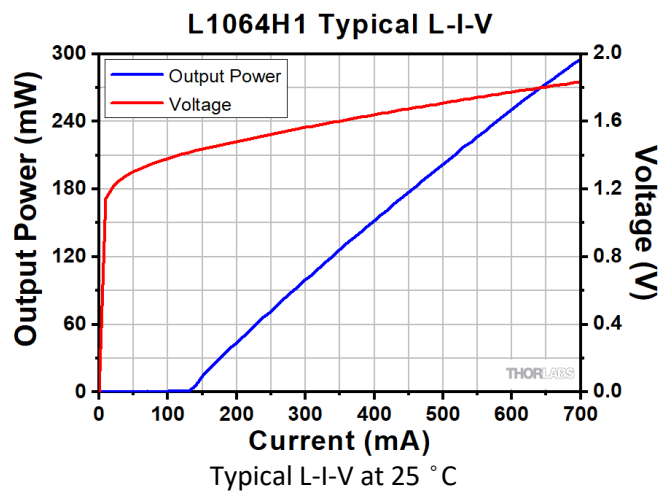


L1064H1 ^a				
	Symbol	Min	Typical	Max
Center Wavelength	λ_c	1054 nm	1064 nm	1074 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	2 nm	5 nm
Output Power CW @ I_{OP}	P_{CW}	-	300 mW	-
Threshold Current	I_{TH}	-	100 mA	130 mA
Operating Current CW	I_{OP}	-	700 mA	900 mA
Slope Efficiency	$\Delta P / \Delta I$	-	0.40 W/A	-
Forward Voltage	V_F	-	1.92 V	2.5 V
Vertical Beam Divergence Angle (FWHM) ^b	θ_V	-	13.5°	22°
Lateral Beam Divergence Angle (FWHM) ^b	θ_L	-	7.6°	13°

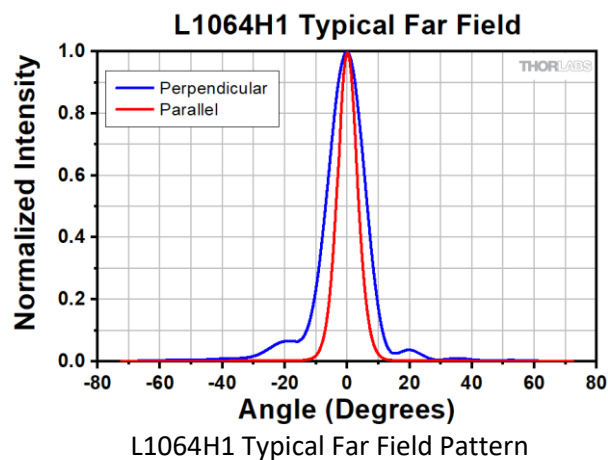
a. $T_{case} = 25^\circ\text{C}$

b. CW at 700 mA

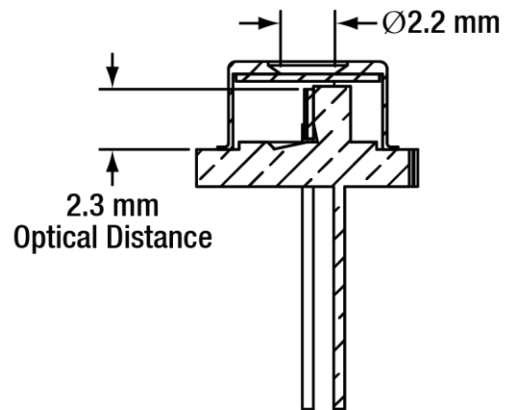
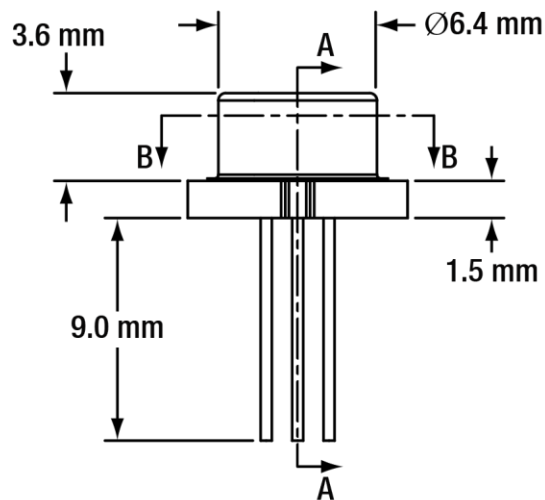
Typical Performance Plots



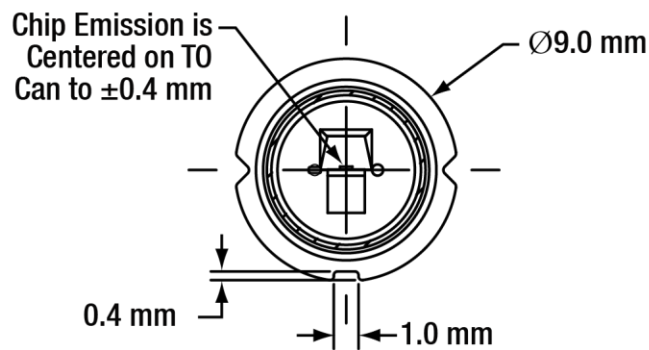
Typical Optical Spectrum at I = 700 mA



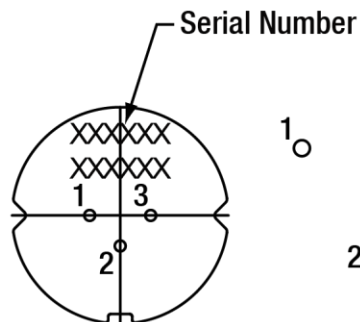
Drawing



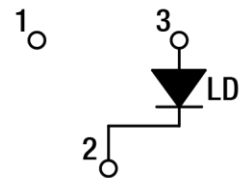
Section A-A



Section B-B



Bottom View



Pin Code H