1550 nm Fabry-Perot Laser Diode

FPL1055T

Description

The FPL1055T 1550 nm Fabry-Perot 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 FPL1055T TO-56 header option is a Ø5.6 mm header, featuring an anode pin, cathode pin, and an unused pin.

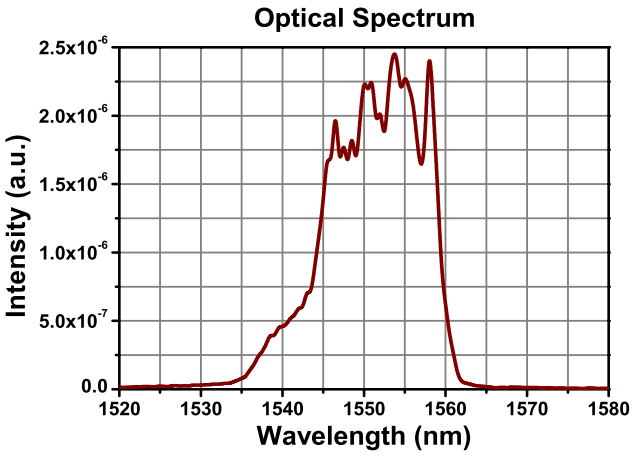
Specifications

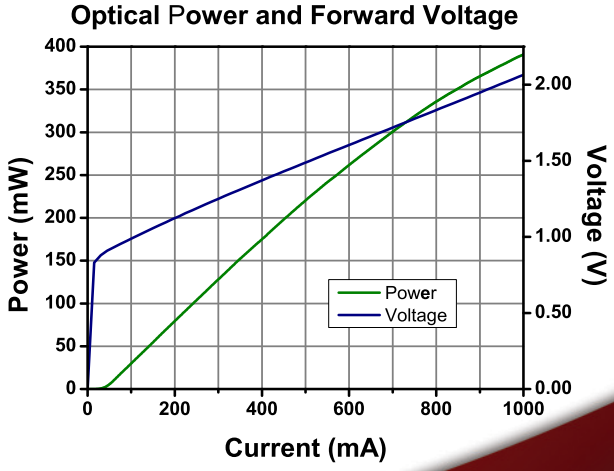
T_{CHIP} = 25 °C

FPL1055T				
	Symbol	Min	Typical	Max
Center Wavelength	λ_C	1530 nm	1550 nm	1570 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	6 nm	10 nm
Output Power Pulsed @ I_{PULSE}	P_{PULSED}	300 mW	-	-
Output Power CW @ I_{CW}	P_{CW}	140 mW	-	-
Operating Current Pulsed*	I_{PULSE}	-	750 mA	1000 mA
Operating Current CW	I_{CW}	-	400 mA	500 mA
Threshold Current	I_{TH}	-	40 mA	50 mA
Forward Voltage	V_F	-	2.0 V	3.0 V
Transverse Beam Divergence Angle (FWHM) [CW at 400 mA]	θ_T	-	28°	37°
Lateral Beam Divergence Angle (FWHM) [CW at 400 mA]	θ_L	-	15°	23°

*QCW (Current Pulse Width = 10 µs; Duty Cycle = 1%); T_{CHIP} = 25 °C

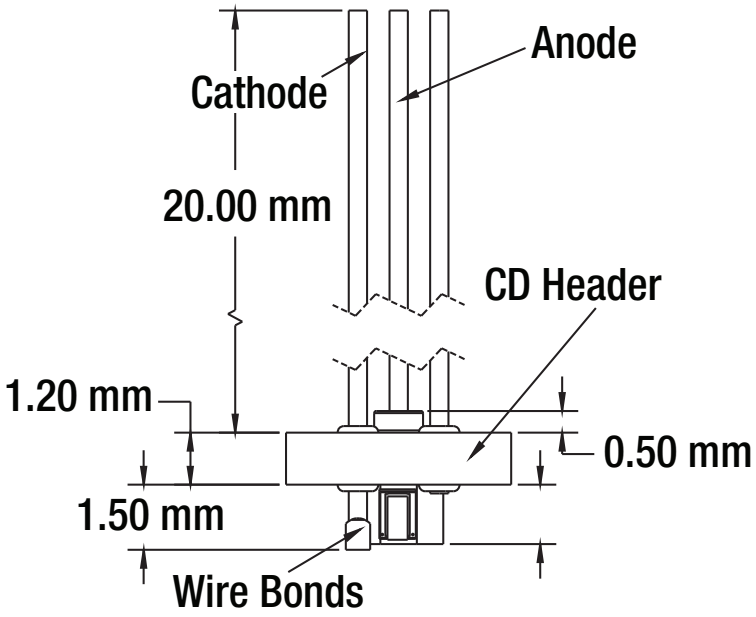
Performance Plots



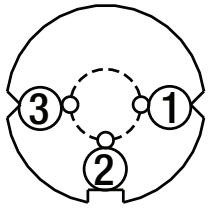


Drawing

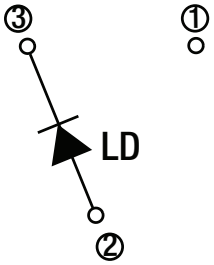
Side View



Top View



Pin Diagram



PIN CODE E