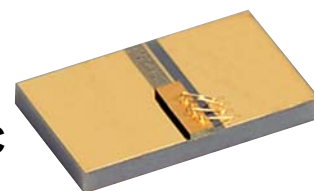


FPL785C



Description

The FPL785C 785 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 FPL785C is a chip on submount measuring 3 mm x 5 mm and is ideal for incorporation into OEM solutions.

Specifications

Absolute Maximum Rating

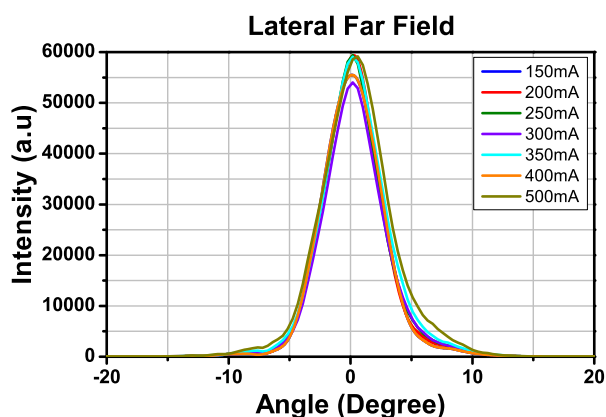
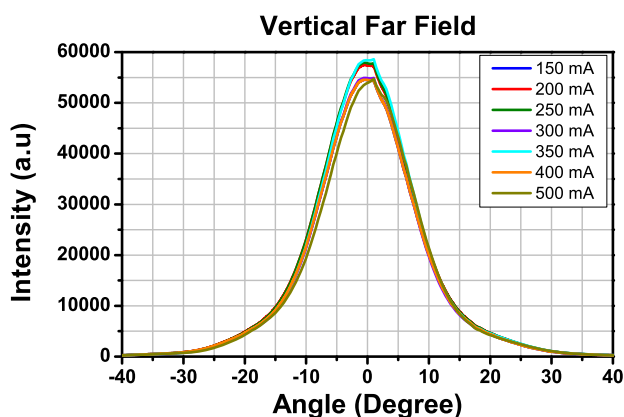
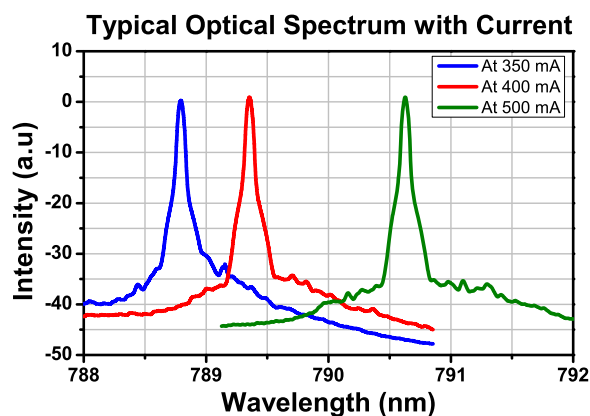
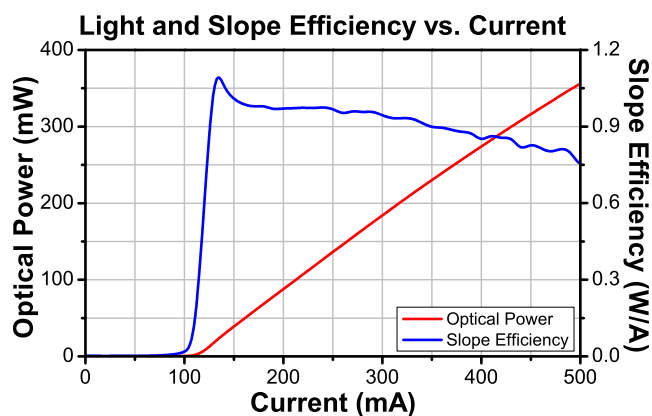
FPL785C	
LD Reverse Voltage (Max)	2 V
Absolute Max Current	500 mA
Absolute Max Power	350 mW
Operating Temperature	20 to 50 °C
Storage Temperature	Non-condensing



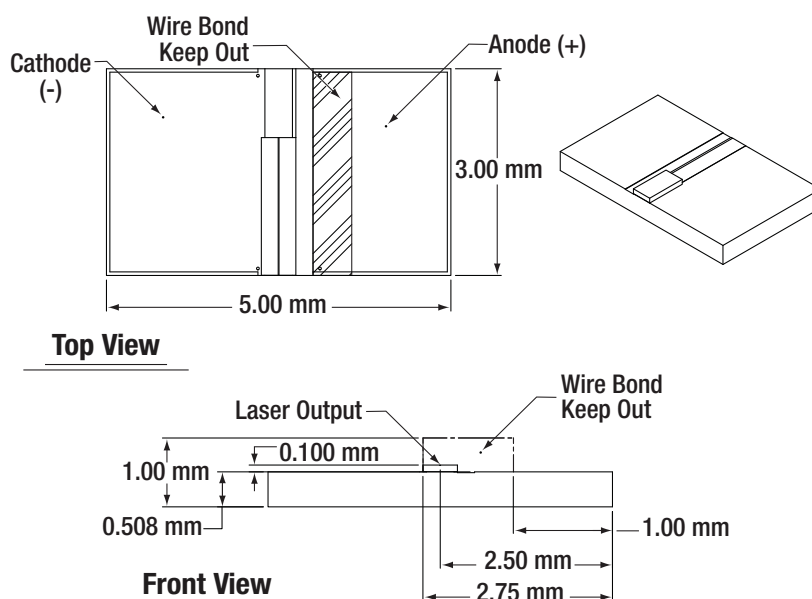
$T_{CHIP} = 25\text{ °C}$

FPL785C				
	Symbol	Min	Typical	Max
Center Wavelength	λ_c	775 nm	785 nm	795 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	0.5 nm	2 nm
Output Power CW @ I_{CW}	P_{CW}	250 mW	300 mW	-
Operating Current CW	I_{CW}	-	400 mA	450 mA
Threshold Current	I_{TH}	-	90 mA	120 mA
Forward Voltage	V_F	-	2.0 V	2.8 V
Slope Efficiency	$\Delta P/\Delta I$		0.95 W/A	
Transverse Beam Divergence Angle (FWHM) [CW @ 400 mA]	θ_T	-	18°	22°
Lateral Beam Divergence Angle (FWHM) [CW @ 400 mA]	θ_L	-	7°	10°

Typical Performance Plots



Drawing



May 4, 2012

23764-S01, Rev A