785 nm Fabry-Perot Laser Diode, 400 mW

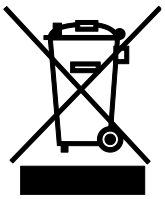
LD785-SE400

Description

The LD785-SE400 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 LD785-SE400 (Ø9 mm), a TO-can package discrete laser diode, is a compact light source suited to many applications. TO-can packaged lasers are fully compatible with Thorlabs' entire line of Laser Diode and TEC Controllers as well as our Thorlabs' Laser Diode Mounts and Collimation Solutions.

Specifications

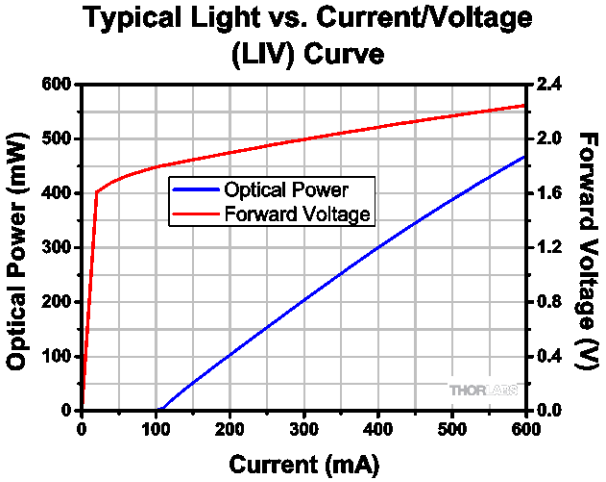
LD785-SE400	
LD Reverse Voltage (Max)	2 V
Absolute Max Current	600 mA
Absolute Max Power	430 mW
Operating Temperature	0 to 40 °C
Storage Temperature	-10 to 65 °C
Pin Code	E

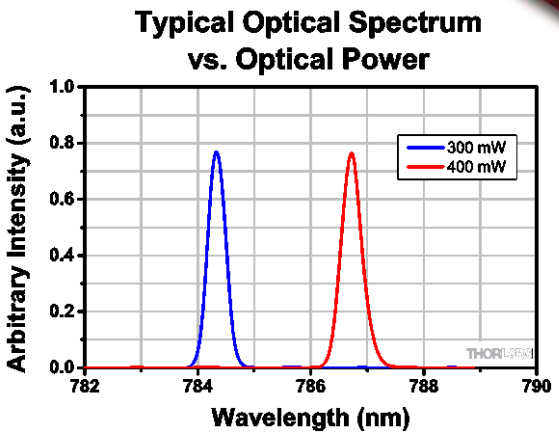


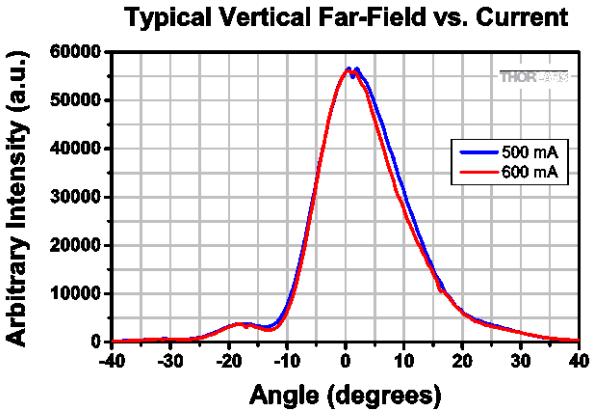
T_{CHIP} = 25 °C

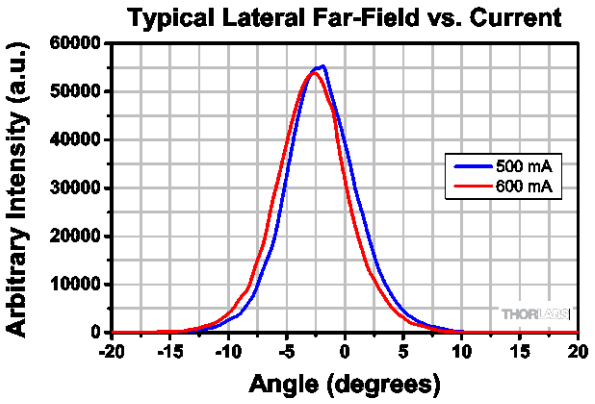
LD785-SE400				
	Symbol	**Min**	**Typical**	**Max**
Center Wavelength	λ_C	775 nm	785 nm	795 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	0.5 nm	2 nm
Output Power CW @ I_{CW}	P_{CW}	400 mW	-	430 mW
Operating Current CW	I_{CW}	-	550 mA	600 mA
Threshold Current	I_{TH}	-	110 mA	140 mA
Forward Voltage	V_F	-	2.0 V	2.8 V
Slope Efficiency	$\Delta P/\Delta I$		0.85 W/A	
Transverse Beam Divergence Angle (FWHM)	θ_T	-	16°	20°
Lateral Beam Divergence Angle (FWHM)	θ_L	-	7°	10°

Typical Performance Plots

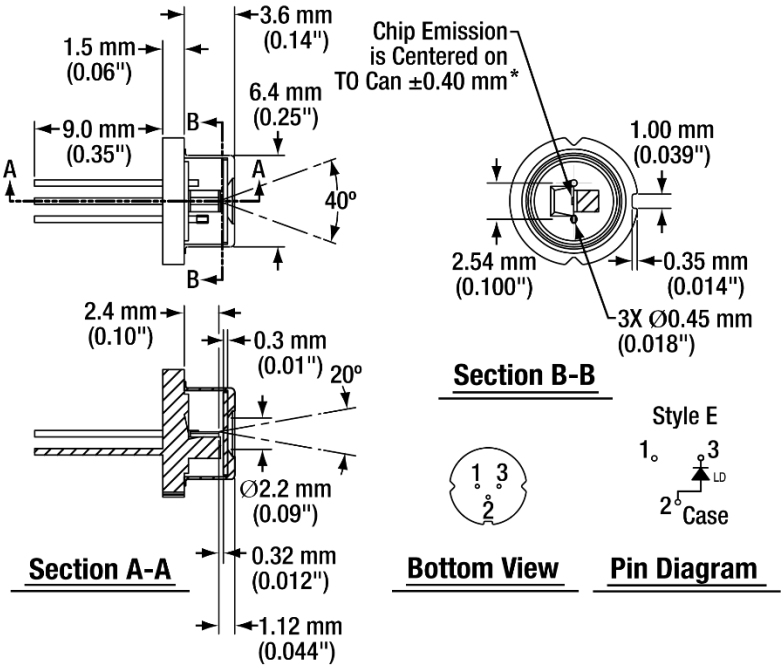








Drawing



*Note: Tighter tolerances are available at request with adjusted prices. Please contact techsupport@thorlabs.com.