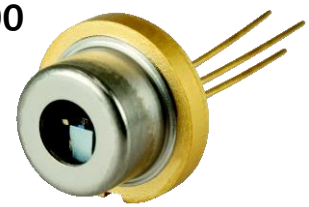
785 nm Fabry-Perot Laser Diode, 300 mW

LD785-SH300

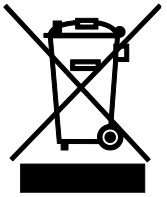


Description

The LD785-SH300 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-SH300 (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

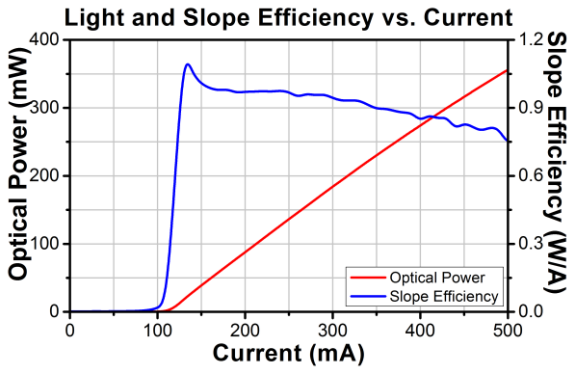
LD785-SH300	
LD Reverse Voltage (Max)	2 V
Absolute Max Current	500 mA
Absolute Max Power	350 mW
Operating Temperature	20 to 50 °C
Storage Temperature	-10 to 65 °C
Pin Code	H

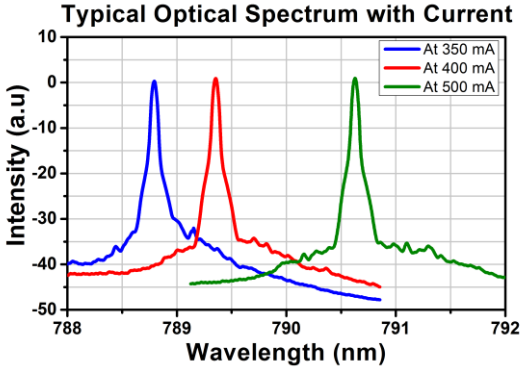


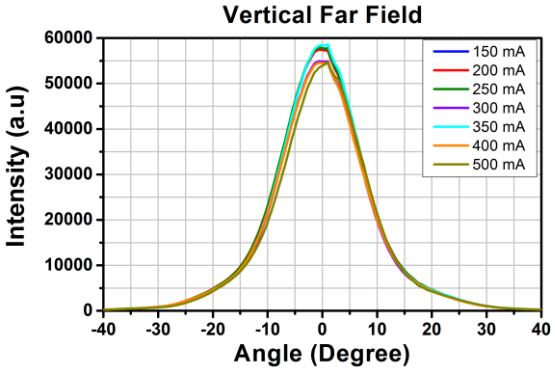
LD785-SH300[a]				
	Symbol	**Min**	**Typical**	**Max**
Center Wavelength	**λC**	775 nm	785 nm	795 nm
Spectral Bandwidth (RMS)	**Δλ**	-	0.5 nm	2 nm
Output Power CW @ ICW	**PCW**	250 mW	300 mW	-
Operating Current CW	**ICW**	-	400 mA	450 mA
Threshold Current	**ITH**	-	90 mA	120 mA
Forward Voltage	**VF**	-	2.0 V	2.8 V
Slope Efficiency	**ΔP/ΔI**		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°

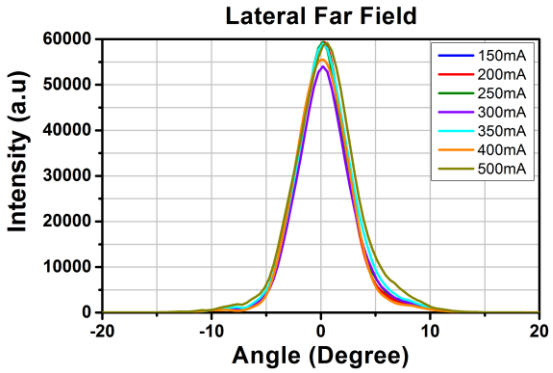
a. T_{CHIP} = 25 °C

Typical Performance Plots

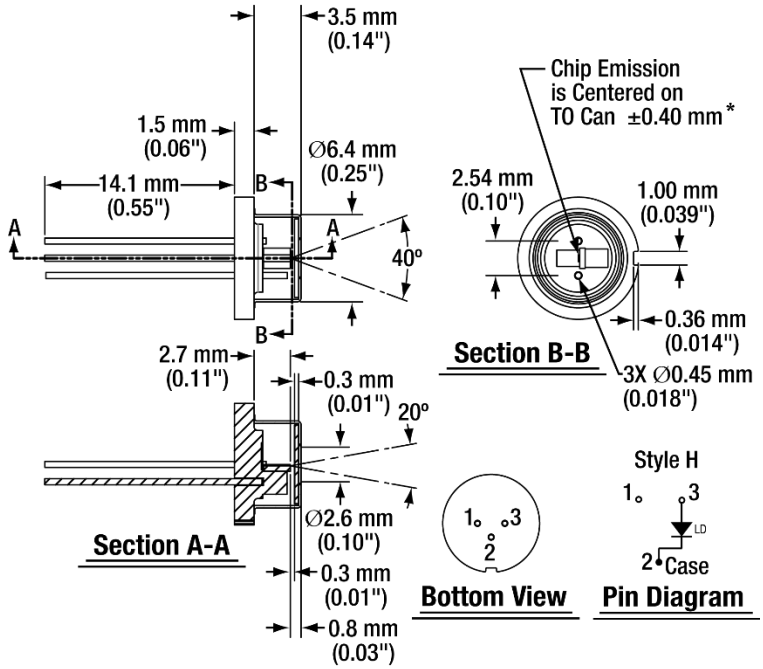








Drawing



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