

808 nm Fabry-Perot Laser Diode, 500 mW

LD808-SE500



Description

The LD808-SE500 808 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 LD808-SE500 (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



LD808-SE500	
LD Reverse Voltage (Max)	2 V
Absolute Max Current	800 mA
Absolute Max Power	510 mW
Operating Temperature	-20 to 50 °C
Storage Temperature	-20 to 80 °C
Pin Code	E

$T_{CHIP} = 25\text{ °C}$

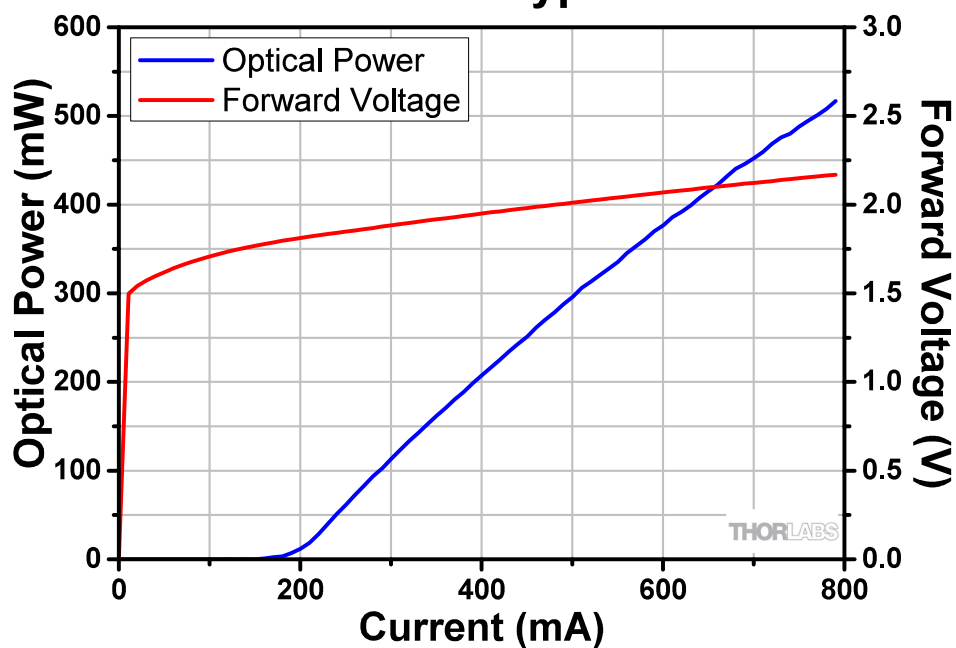
LD808-SE500				
	Symbol	Min	Typical	Max
Center Wavelength	λ	798 nm	808 nm	818 nm
Spectral Bandwidth	$\Delta\lambda$	-	0.5 nm	-
Output Power CW @ I_{CW}	P_{CW}	450 mW	500 mW	-
Operating Current CW	I_{CW}	-	750 mA	800 mA
Threshold Current	I_{TH}	-	230 mA	280 mA
Forward Voltage	V_F	-	2.2 V	2.8 V
Slope Efficiency	$\Delta P / \Delta I$	-	0.9 W/A	-
Perpendicular Beam Divergence Angle (FWHM)	Θ_T	-	14°	16°
Parallel Beam Divergence Angle (FWHM)	Θ_L	-	7°	10°

March 2, 2020

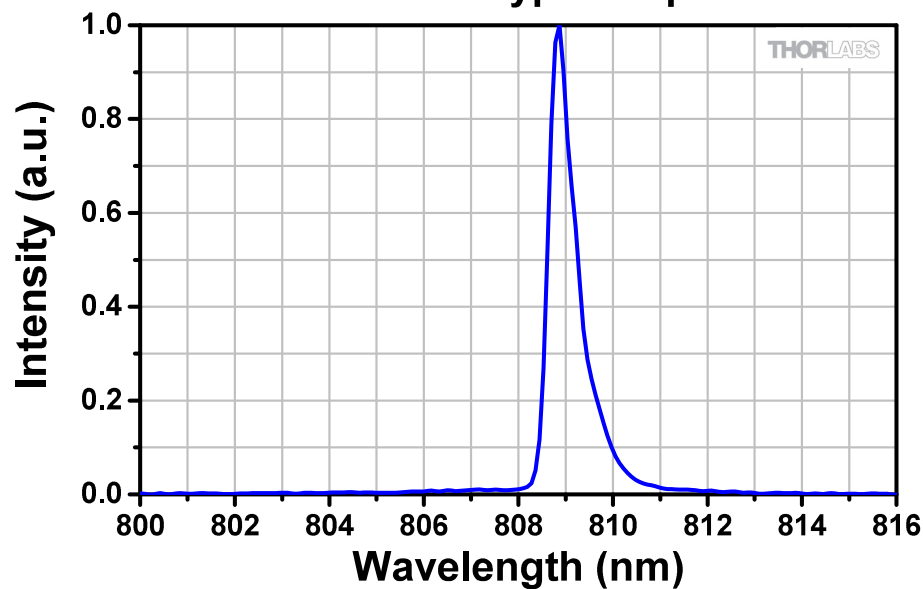
QTN010873-S01, Rev C

Typical Performance Plots

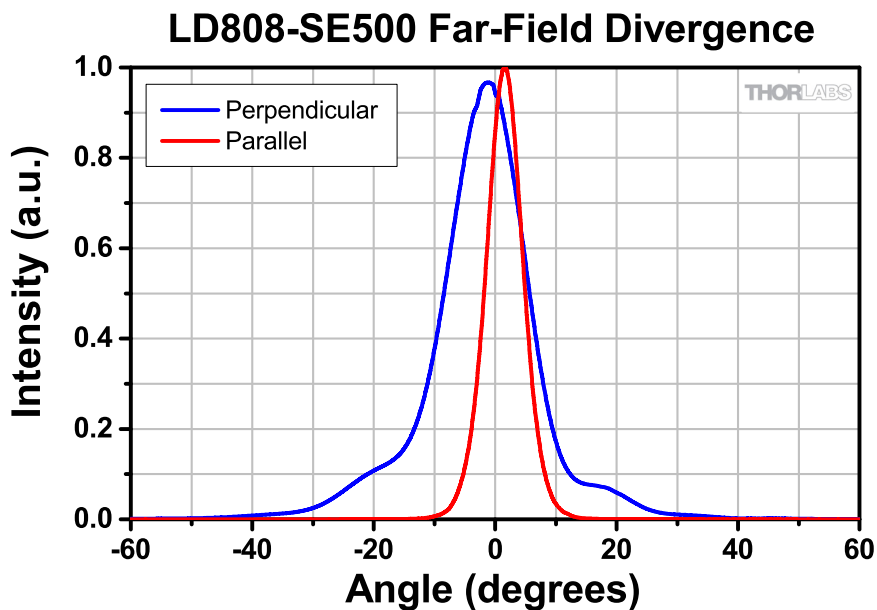
LD808-SE500 Typical LIV



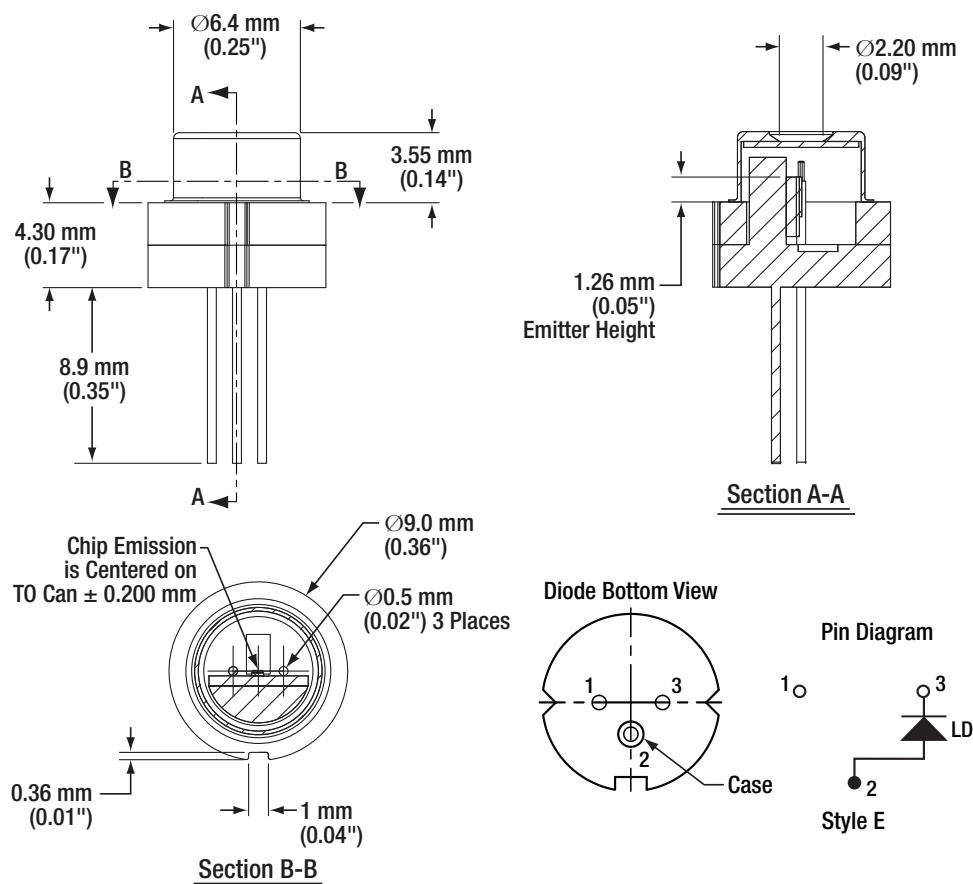
LD808-SE500 Typical Spectrum



Typical Performance Plots (Cont.)



Drawing



March 2, 2020

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