

852 nm Fabry-Perot Laser Diode, 600 mW

LD852-SE600



Description

The LD852-SE600 852nm 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 LD852-SE600 (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



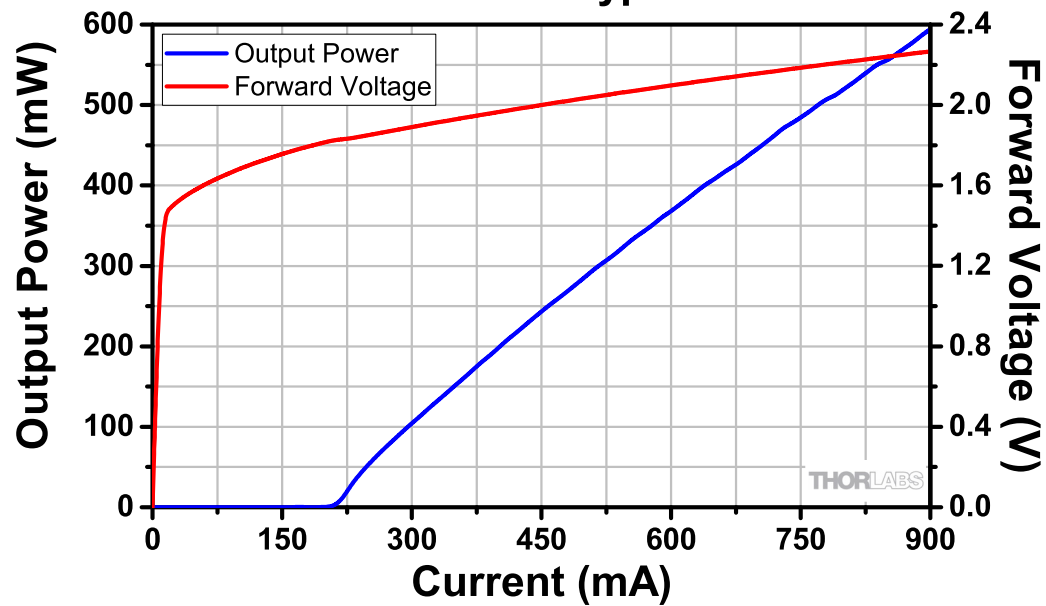
LD852-SE600	
LD Reverse Voltage (Max)	2 V
Absolute Max Current	1050 mA
Absolute Max Power	610 mW
Operating Temperature	-20 to 50 °C
Storage Temperature	-20 to 80 °C
Pin Code	E

T_{CHIP} = 25 °C

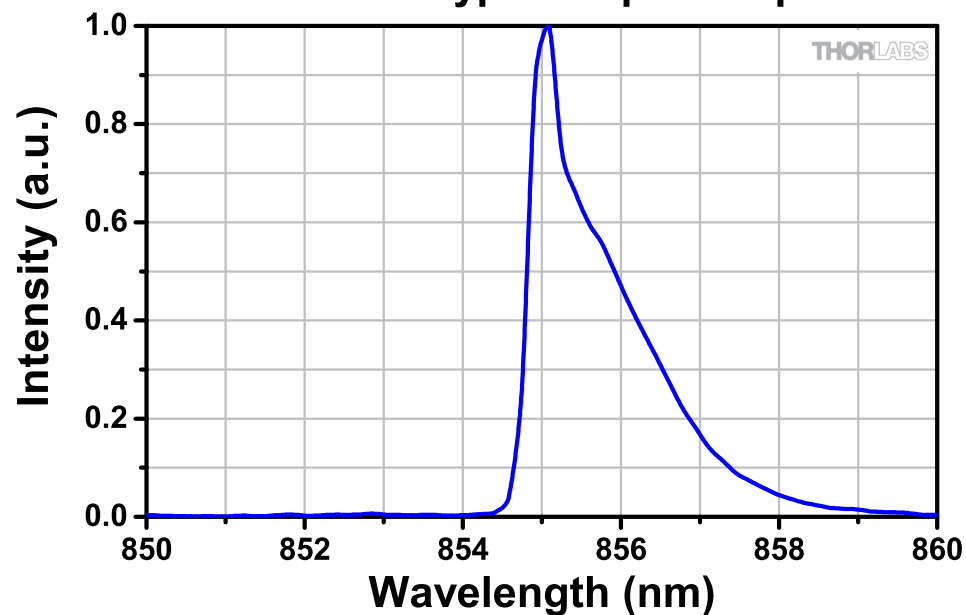
LD852-SE600				
	Symbol	Min	Typical	Max
Center Wavelength	λ	842 nm	852 nm	862 nm
Spectral Bandwidth	$\Delta\lambda$	-	0.5 nm	-
Output Power CW @ I _{CW}	P _{CW}	550 mW	600 mW	-
Operating Current CW	I _{CW}	-	950 mA	1050 mA
Threshold Current	I _{TH}	-	250 mA	300 mA
Forward Voltage	V _F	-	2.3 V	2.8 V
Slope Efficiency	$\Delta P/\Delta I$		0.9 W/A	
Transverse Beam Divergence Angle (FWHM)	Θ_T	-	13°	16°
Lateral Beam Divergence Angle (FWHM)	Θ_L	-	7°	10°

Typical Performance Plots

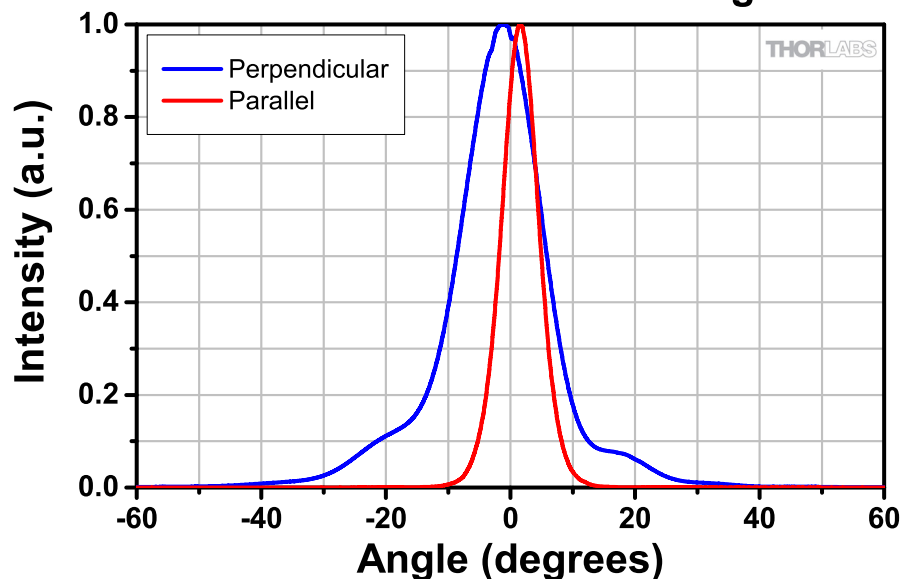
LD852-SE600 Typical LIV



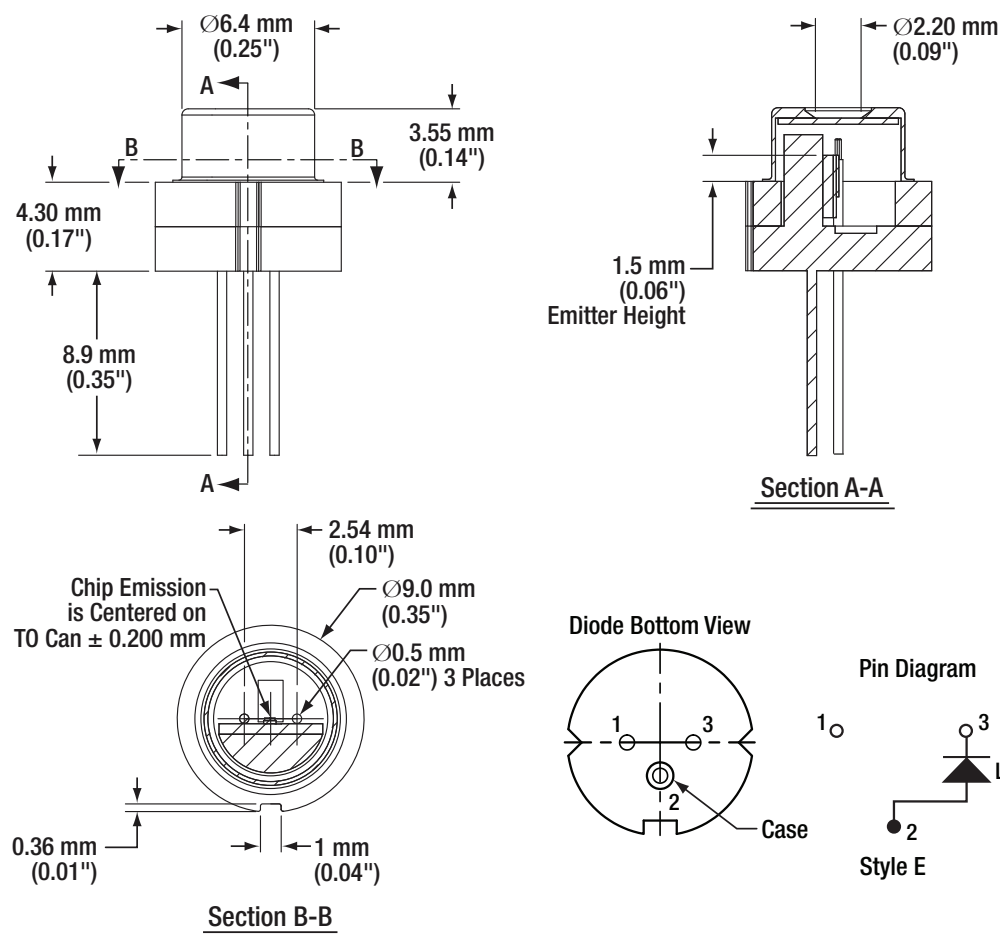
LD852-SE600 Typical Optical Spectrum



LD852-SE600 Far-Field Divergence



Drawing



September 27, 2016

QTN015677, Rev B