

808 nm Multimode Laser Diode, 500 mW

L808P500MM



Description

This 808 nm, 500 mW discrete laser diode has a multi-transverse-mode output. This compact light source is suited to many applications, including pumping Nd:YAG laser gain media. This laser is fully compatible with our line of laser diode and TEC controllers as well as our selection of laser diode mounts and collimation Solutions. It comes in a $\varnothing 5.6$ mm TO package with an A pin configuration. It is recommended to have the base of the laser diode in good thermal contact with a heat sink.

Specifications

Absolute Maximum Ratings*	
Specification	Maximum
Optical Output Power	500 mW
LD Reverse Voltage	2 V
Operating Case Temperature	-10 to +40 °C
Storage Temperature	-10 to +70 °C

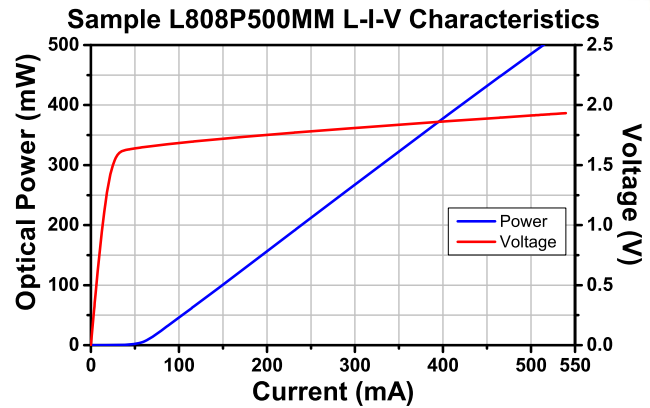
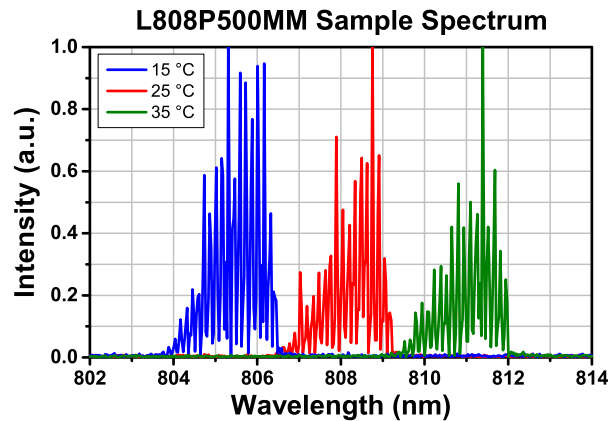
*Absolute Maximum Rating specifications should never be exceeded. Operating at or beyond these conditions can permanently damage the laser.



L808P500MM Specifications				
	Symbol	Min	Typical	Max
Center Wavelength @ P_{op}	λ_o	803 nm	808 nm	813 nm
Optical Output Power (CW)	P_{op}	-	-	500 mW
Threshold Current	I_{TH}	-	50 mA	70 mA
Operating Current @ P_{op}	I_{op}	-	650 mA	700 mA
Operating Voltage @ P_{op}	V_{op}	-	1.8 V	2.1 V
Beam Divergence (Full Angle at $1/e^2$)	Parallel @ P_{op}	$\theta_{//}$	9°	12°
	Perpendicular @ P_{op}	θ_{\perp}	28°	30°

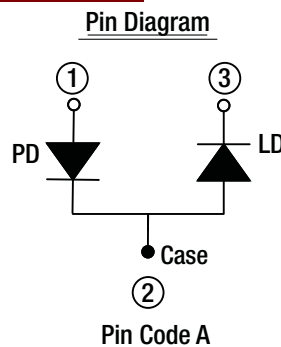
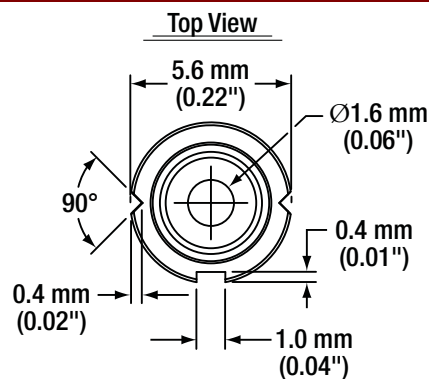
$T_{CASE} = 25^{\circ}C$

Performance Plots



The data presented here is for one particular laser diode. Slight variations in performance data will occur from device to device. The sample spectrum of the L808P500MM laser diode was measured at 15 °C, 25 °C, and 35 °C using a Thorlabs OSA201 Spectrum Analyzer with resolution of 7.5 GHz. The L-I-V characteristics data was taken at 25 °C. Please visit our website for raw spectral data and L-I-V characteristics.

Drawings



Pin	Description
1	Anode
2	Case
3	Cathode

