808 nm Multimode Laser Diode, 1000 mW

L808P1000MM

Description

This 808 nm, 1000 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 ∅9 mm TO package with an E pin configuration. It is recommended to have the base of the laser diode in good thermal contact with a heat sink.

Specifications

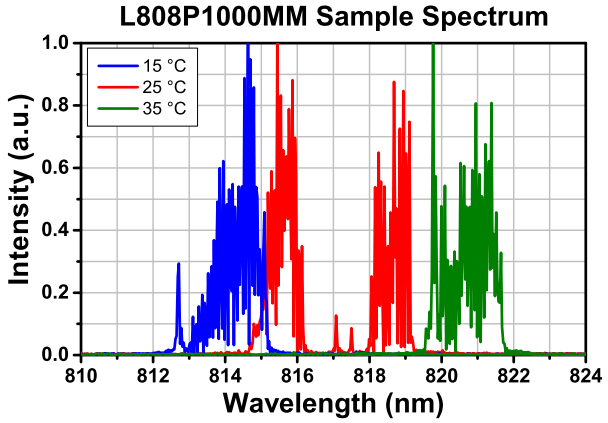
Absolute Maximum Ratings*	
Specification	**Maximum**
Optical Output Power	1000 mW
LD Reverse Voltage	2 V
Operating Case Temperature	-10 to +40 °C
Storage Temperature	-10 to +70 °C

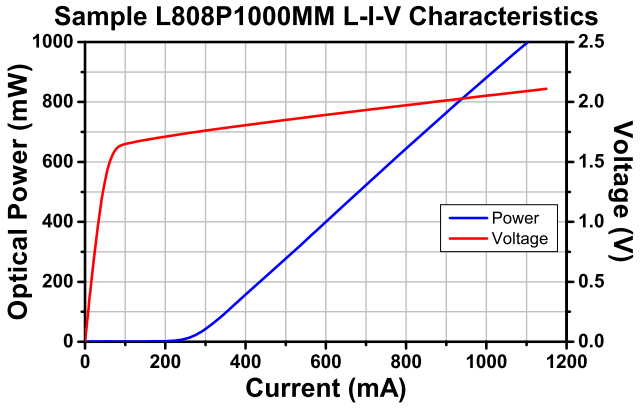
*Absolute Maximum Rating specifications should never be exceeded.
Operating at or beyond these conditions can permanently damage the laser.

L808P1000MM Specifications					
		Symbol	**Min**	**Typical**	**Max**
Center Wavelength @ P_{op}		λ_o	798 nm	808 nm	818 nm
Optical Output Power (CW)		P_{op}	-	-	1000 mW
Threshold Current		I_{TH}	-	250 mA	300 mA
Operating Current @ P_{op}		I_{op}	-	1100 mA	1500 mA
Operating Voltage @ P_{op}		V_{op}	-	2 V	2.5 V
Beam Divergence (Full Angle at $1/e^2$)	**Parallel @ P_{op}**	$\theta_{//}$	-	9°	12°
	Perpendicular @ P_{op}	$\theta_{\perp}$	-	30°	40°

T_{CASE} = 25 °C

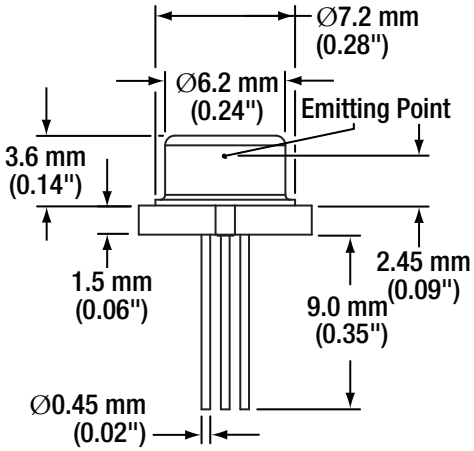
Performance Plots

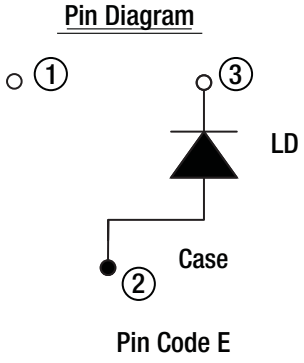




The data presented here is for one particular laser diode. Slight variations in performance data will occur from device to device. The sample spectrum of the L808P1000MM laser diode was measured at 15 °C, 25 °C, and 35 °C using a Thorlabs OSA201 Spectrum Analyzer with resolution of 7.5 GHz. The L-I-V characteristics data was taken at 25 °C. Please visit our website for raw spectral data and L-I-V characteristics.

Drawings





Pin	Description
1	-
2	Anode
3	Cathode