



HL8338MG

Description

HL8338MG is a GaAlAs laser diode by Ushio. It is packaged in an Ø5.6 mm TO can with a C pin configuration. This laser is compatible with our line of laser diode and TEC controllers as well as our selection of laser diode mounts and collimation packages.

Specifications

Absolute Maximum Ratings ^a		
Specification	Symbol	Maximum
Output Power, CW	P_{max}	50 mW
LD Reverse Voltage	$V_{R(LD)}$	2.0 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operating Case Temperature	T_{op}	-10 to 60 °C
Storage Temperature	T_{stor}	-40 to 85 °C

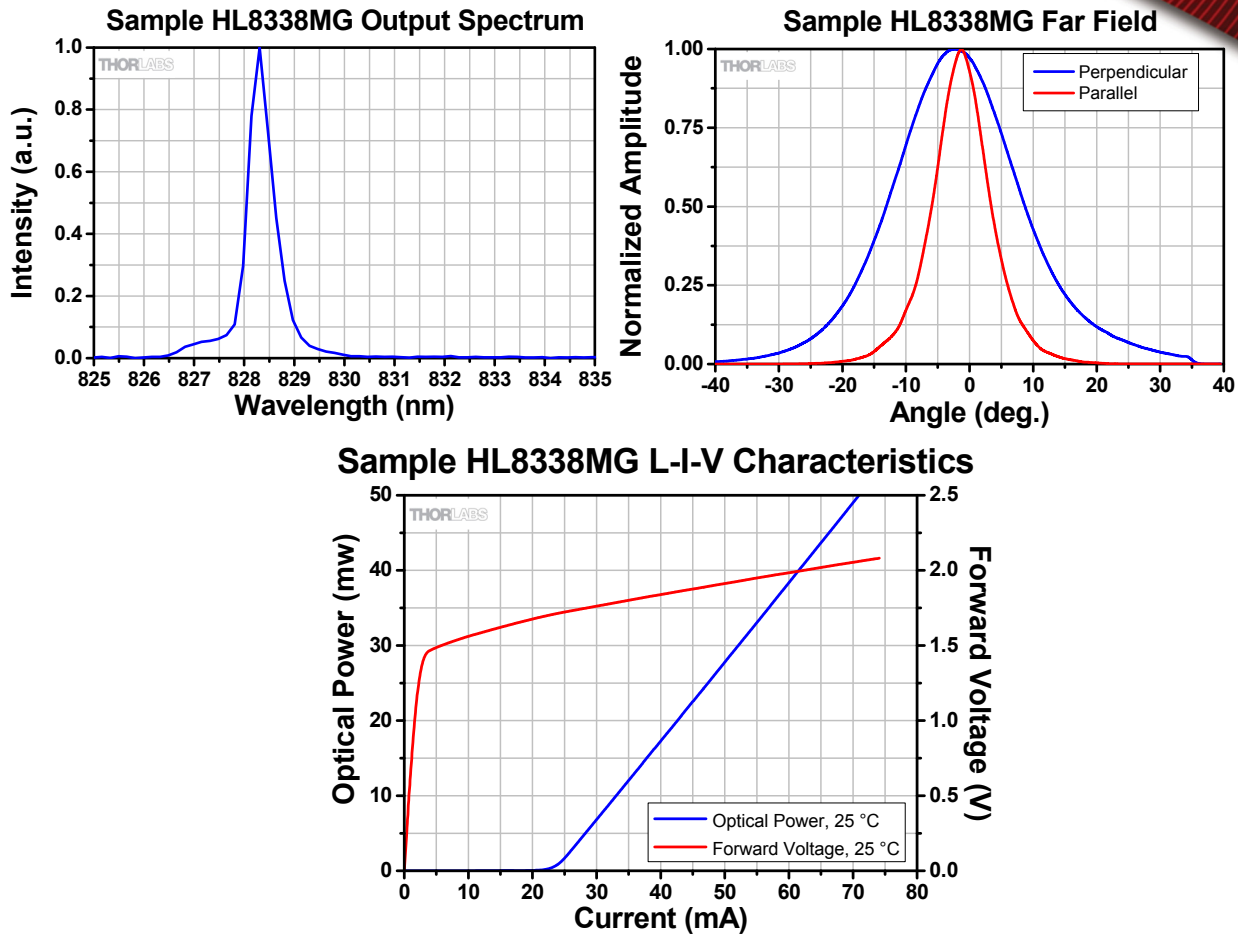


- a. Absolute Maximum Rating specifications should never be exceeded. Operating at or beyond these conditions can permanently damage the laser.

HL8338MG Specifications ^b					
Specification	Symbol	Min	Typical	Max	
Center Wavelength @ P_{op}	λ_o	820 nm	830 nm	840 nm	
Output Power, CW	P_{op}	-	50 mW	-	
Threshold Current	I_{TH}	-	20 mA	40 mA	
Operating Current CW @ P_{op}	I_{op}	-	75 mA	100 mA	
Operating Voltage @ P_{op}	V_{op}	-	1.9 V	2.4 V	
Slope Efficiency	H	0.7 mW/mA	0.9 mW/mA	-	
Monitor Current @ P_{op}	I_{PD}	0.10 mA	0.25 mA	0.50 mA	
Beam Divergence (FWHM) @ P_{op}	Parallel	$\theta_{ }$	6°	9°	12°
	Perpendicular	θ_{\perp}	18°	22°	26°

- b. $T_{CASE} = 25$ °C, CW

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 and L-I-V spectrum of the HL8338MG laser diode was taken at 25°C. The far field was measured at a distance of 7" from the diode.

Drawings

