

LD830-MA1W



### Description

The LD830-MA1W 830nm Broad Area (multi-lateral mode) Laser Diode is based on quantum well epitaxial layer growth and a highly reliable waveguide structure. This diode features high optical output power and slope efficiency. The LD830-MA1W (Ø9 mm), a TO-can package discrete laser diode with integrated power monitor photo-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

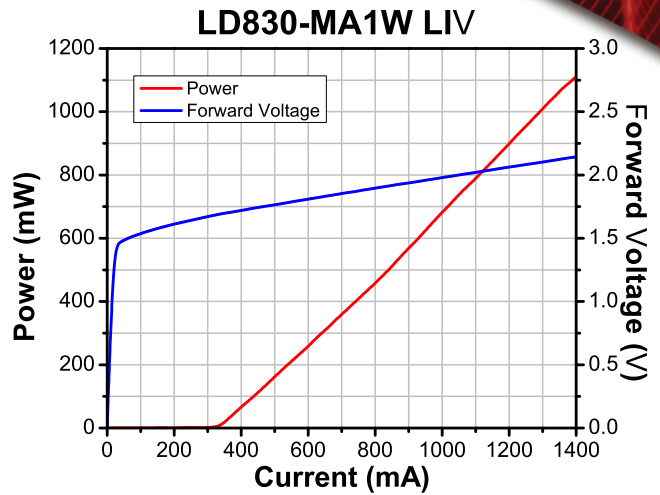
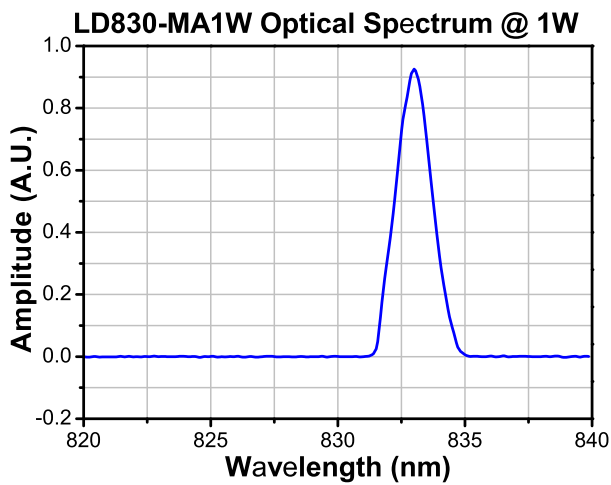
LD830-MA1W	
LD Reverse Voltage (Max)	2 V
PD Reverse Voltage (Max)	30 V
Absolute Max Current	1500 mA
Absolute Max Power	1100 mW
Operating Temperature	-20 to 50 °C
Storage Temperature	-20 to 80 °C
Pin Code	A



$T_{CHIP} = 25\text{ °C}$

LD830-MA1W				
	Symbol	Min	Typical	Max
Center Wavelength	$\lambda_C$	820 nm	830 nm	840 nm
Spectral Bandwidth (RMS)	$\Delta\lambda$	-	1 nm	3 nm
Output Power CW @ $I_{CW}$	$P_{CW}$	1000 mW	-	-
Operating Current CW	$I_{CW}$	-	1330 mA	1450 mA
Threshold Current	$I_{TH}$	-	330 mA	400 mA
Forward Voltage	$V_F$	-	2.1 V	2.5 V
Slope Efficiency	$\Delta P/\Delta I$	-	1 W/A	-
Photodiode Current @ $P_{OP}$	-	-	0.8 mA	-
Transverse Beam Divergence Angle (FWHM)	$\theta_T$	-	24°	30°
Lateral Beam Divergence Angle (FWHM)	$\theta_L$	-	7°	15°

## Typical Performance Plots



## Drawing

