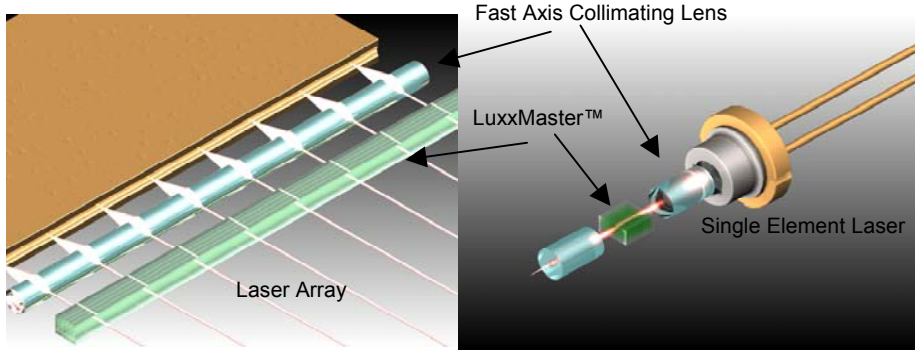


LuxxMaster™ Wavelength Stabilizer Elements for High Power Lasers and Laser Arrays.

Based on proprietary volume Bragg grating™ technology for stabilizing and shaping the emission spectra of high power laser diodes.



Optical Specification

Parameters	Units	Specification		
		Min.	Typ.	Max.
Center Wavelength Accuracy	nm		0.2	0.5
FWHM	nm		0.2	0.5
Loss	%			5
Wavelength Drift over temp.	nm/°C		0.01	
Damage Threshold Density ¹	W/cm ²			>10 ⁶
Polarization Dependent Loss	dB			0.1
Operating Temperature	°C	0		+70
Storage Temperature	°C	-40		+85
Horizontal Divergence Angle	Degrees		10	
Vertical Divergence Angle	Degrees		<1	
Dimensions				
Type A	mm	1.5 X 2.0		
Type B	mm	1.5 X 15.0		

¹ Verified with 30µSec pulse @ 1064 nm with no damage.

Performance Advantage:

- ☐ $\lambda_c = \pm 0.5$ nm
- ☐ Line Width <0.5nm (FWHM)
- ☐ Temp. Drift = 0.01 nm/°C
- ☐ > 90% Power locked

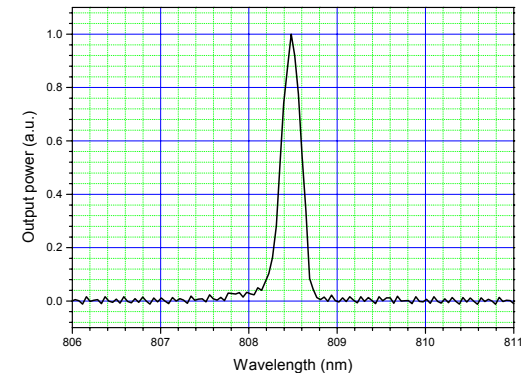
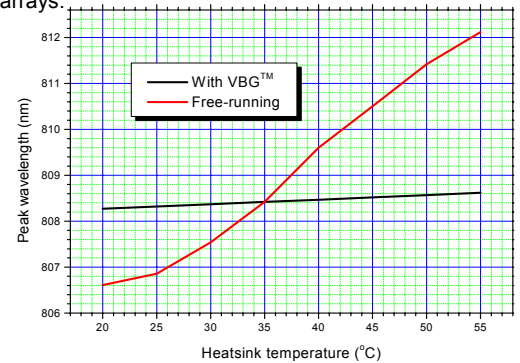
Advantages:

- ☐ Simple and compact
- ☐ Economical
- ☐ Lowers "Red Shift"
- ☐ Collimated Beam

Applications:

- ☐ DPSS Lasers
- ☐ Sensing
- ☐ Spectroscopy
- ☐ Medical
- ☐ Military

PD-LD, Inc. will align and attach the LuxxMaster™ and Fast Axis Collimating lens on customer supplied lasers and arrays.



10/03 Rev 1.

Standard Wavelengths: 785 nm, 808 nm, 976 nm, custom wavelengths between 400 nm and 2500 nm available upon request.

Part Number System:

LMS - . - **XX**

Wavelength Dimension Customer Specific Reference

E = Single Emitter 1.5 mm X 2.0 mm
B = Diode Bar 1.5 mm X 15 mm
S = 2D array 15 mm X 20 mm

Example: LMS-808.7E-XX This is a LuxxMaster™ Element for single emitter laser with a center wavelength of 808.7 nm

Specification Subject to Change