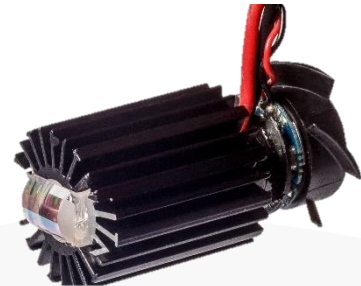


High Power Laser Diode Laser Engine-Q Package



Part Number: LEQ-126

High Power Laser Engine-Q Package
Multi-Mode Fabry-Perot Laser Diode
Wavelength at 1450nm



Features

- High Output Power
- High Dynamic Range
- High Efficiency
- Laser Engine-Q Package
- Cost Effective

Application

- Home Medical



SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary, we will further optimize the design of our InP & GaSb laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.

High Power Laser Diode Laser Engine-Q Package



Specification

LEQ-126



Optical	Symbol	Typ.	Units
Center Wavelength	λ_c	1450	nm (± 20)
Output Power (CW)*	P_{out}	1.6	watts ($\pm 10\%$)
Spectral Width	$\delta\lambda$	10	nm 3dB
Fast Axis Div.	Θ_{\perp}	10	deg FMHW
Slow Axis Div.	Θ_{\parallel}	2	deg FWHM
Electrical	Symbol		Units
Power Conversion Eff.	η	21	%
Operating Current	I_{op}	0.5	A
Threshold Current	I_{TH}	7	A
Operating Voltage	V_{op}	1.4	V
Fan	Symbol		Units
Voltage (DC)	VDC	5	VDC
Power	watts	0.4	W
Air Flow	CFM	3	cubic feet/minute
		Range	
Operating Temp.**		-40 to 60	$^{\circ}\text{C}$
Storage Temp.		-40 to 80	$^{\circ}\text{C}$

*Specified values are rated at a constant heat sink temperature of 20 $^{\circ}\text{C}$.

**High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.

* Available Lenses

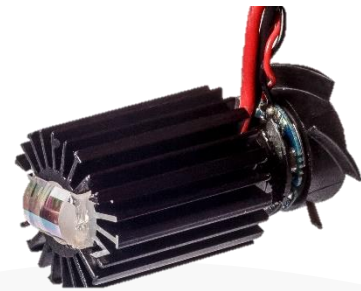
Suffix	Description
-172	Lens, Cylindrical, f=7.7mm, 9mm Lg, Collimated FAC
-178	Lens SA Matched f=-1.36mm

High Power Laser Diode Laser Engine-Q Package

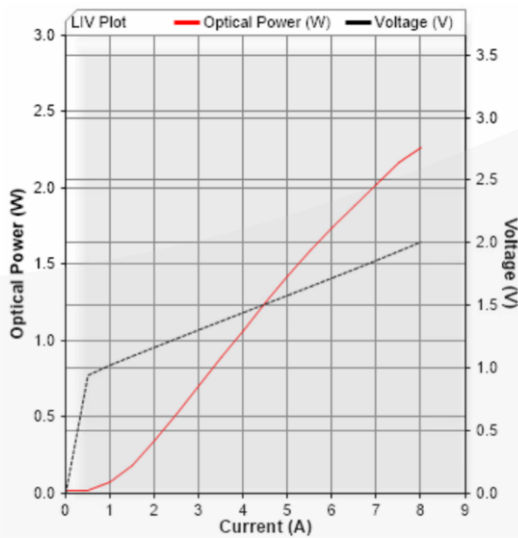


SemiNex Laser Diodes LEQ-126

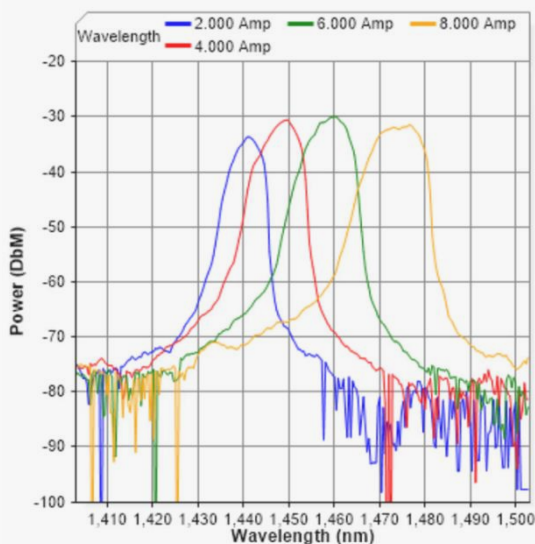
Graphs & Data



Typical LEQ L-I-V Characteristics



Typical LEQ Output Spectrum

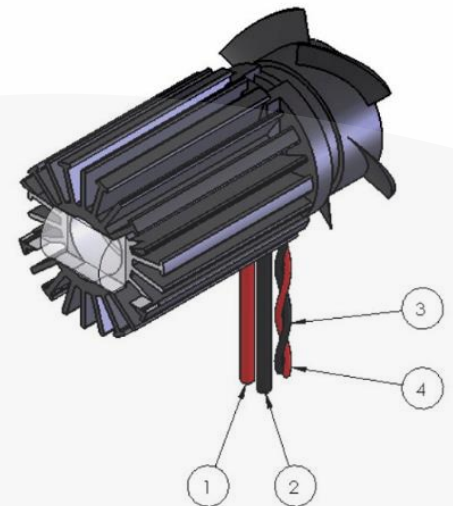
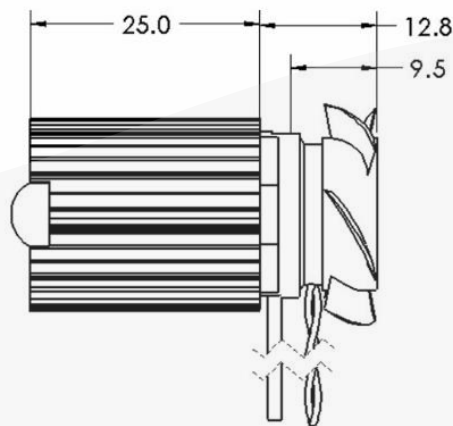
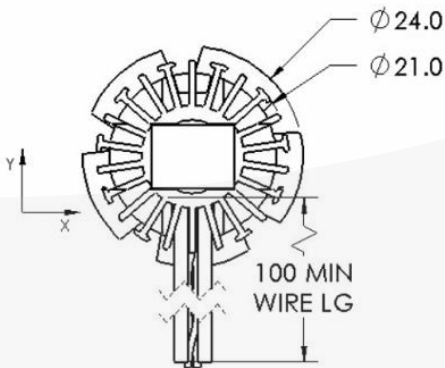


Site 201, Danvers, MA 01923 • 978-326-7700 • sales@seminex.com

High Power Laser Diode Laser Engine-Q Package



Mechanical Drawing



PIN OUT:

1. LD ANODE (+), #20AWG
2. LD CATHODE (-), #20AWG
3. FAN (+5V), #28AWG
4. FAN (-), #28AWG

All statements, technical information and recommendations related to the product herein are based upon information believed to be reliable or accurate. The accuracy or completeness herein is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. SemiNex Corporation reserves the right to change at any time without notice the design, specification, deduction, fit or form of its described herein, including withdrawal at any time of a product offered for sale herein. Users are encouraged to visit www.seminex.com for the latest data. SemiNex Corporation makes no representations that the products herein are free from any intellectual property claims of others. Please contact SemiNex for more information. 2016 SemiNex Corporation

