

BDL and BFP

Fiber Coupled Diode Laser



FEATURES

5W to 400W

793 nm to 1550 nm

100 to 600 μm

Smallest Footprint

Conduction Cooled

Long Lifetime

Multi-wavelength

Custom Mil Spec Solutions

APPLICATIONS

- » Solid-state Laser Pumping
- » Fiber Laser Pumping
- » Medical Lasers
- » Material Processing
- » Illumination
- » Instrumentation
- » Ranging



BDL

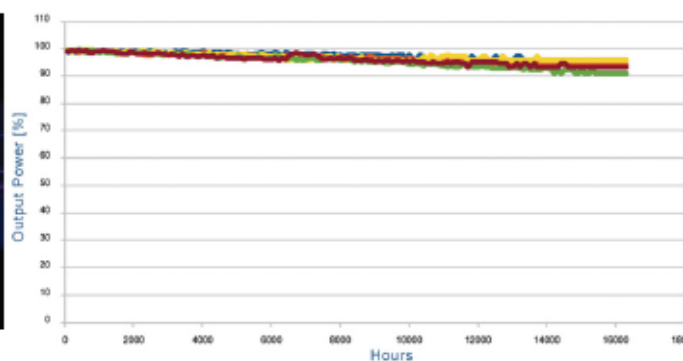
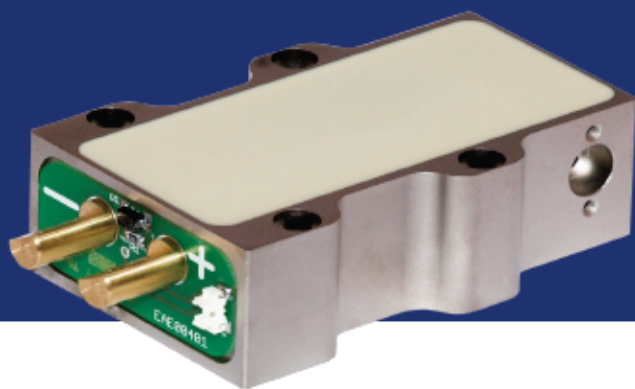
High Power Fiber Coupled Laser Diodes

The BDL line of conduction cooled fiber-coupled diode laser is available in various sizes from 5W to 400W.

The integrated optical design, accurate test and selection of high quality semiconductor materials and efficient thermal management make these devices the ideal choice for applications requiring reliability, long lifetime and simple conductive cooling in a small footprint.

OPTIONS AVAILABLE

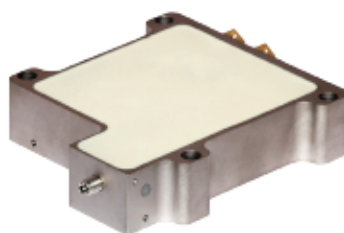
- » Red aiming beam
- » Monitoring photodiode
- » Fiber Sensor
- » Thermistor (NTC- PT100)
- » Integrated TE Coolers
- » Custom Fiber Optics
- » Flat Top Beam Profile
- » Smooth Beam Profile
- » Integrated current and temperature controller
- » Custom Solutions



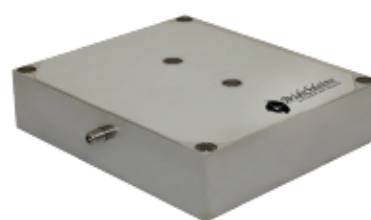
BDL Type D



BDL Type E



BDL Type F



BFP

High Brightness Fiber Coupled Laser Diodes

The BFP line of high power fiber coupled diode lasers is available in different sizes from few Watts to 400W of output power.

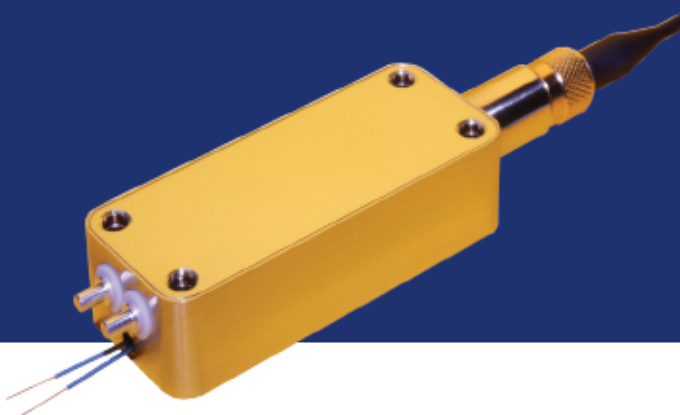
Based on an integrated multi-single emitter design, they are particularly suited for pumping applications, ensuring very long lifetime, low current operation and the highest brightness in a miniaturized package.

BFP packages can be coupled to standard optical connectors like SMA, FC, ST, and can include a variety of accessories from aiming beam to integrated controllers, aimed to medical, industrial, scientific and aerospace direct applications.

Multi-wavelength solutions (MDL) are well suited for a variety of medical applications; up to 4 different wavelengths can be available in one module

OPTIONS AVAILABLE

- » Visible aiming beam
- » Monitoring photodiode
- » Custom fiber optics and connectors
- » Flat-top or smooth beam profile
- » Integrated TE Coolers
- » Extended Temperature Ranges
- » Integrated current and temperature control



BDL and BFP General Specification

CW Output Power	5 to 400	(CW and/or Pulsed)	W
Center Wavelength	793 - 808 - 88X - 915 - 940 - 976 - 980 - 1064 - 1470 - 1550		nm
Central Wavelength Tolerance	1 to 10		nm
Spectral Width (FWHM)	1 to 5		nm
Operating Temperature	15 : 35	(extended range up to -40:+60)	°C
Wavelength Temp. Coefficient	0.3	(temp. stabilized wavelength)	nm / °C
Fiber Connector	SMA 905	(FC-ST- Custom Patch Cable and Pigtail)	
Fiber Core Diameter	100 - 200 - 400 - 600		µm
Fiber NA	0.22 or 0.15		
Built-in Thermistor	NTC - 10kOhm - 25 °C		
Cooling	Conductive	(water cooled option)	
Electro-Optical Efficiency	Up to 45%		
Storage Temperature	-20: 60	(extended range -55: +85)	°C



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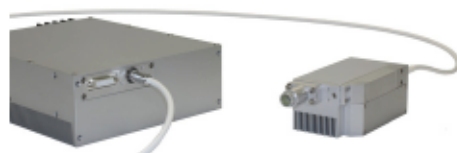
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SOL



LUCE



WEDGE



BDL



BFP