

BDL and BFP

Fiber Coupled Diode Laser



FEATURES

5W to 400W CW

Up to 2 kW Pulsed Operation

100 to 600 μm

Smallest Footprint

Conduction Cooled

Long Lifetime

Multi-wavelength

Custom Mil Spec Solutions

APPLICATIONS

» Solid-state Laser Pumping

» Fiber Laser Pumping

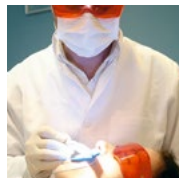
» Medical Lasers

» Material Processing

» Illumination

» Instrumentation

» Ranging



BDL

High Power Fiber Coupled Laser Diodes

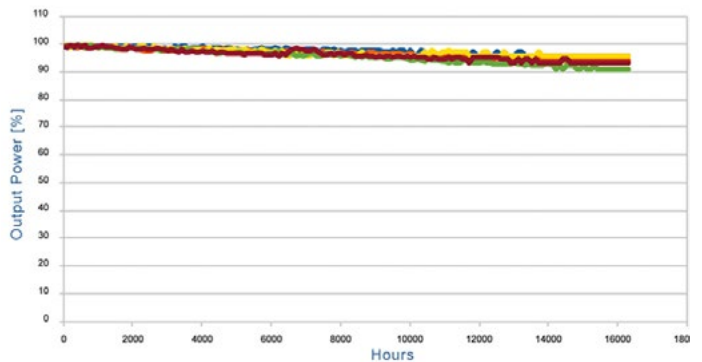
The BDL conduction cooled fiber coupled diode lasers are available in various sizes from 5W to 400W.

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.

BDL packages are coupled to standard SMA patch cables. Custom pig-tailing or free space collimated output are also available.

OPTIONS AVAILABLE

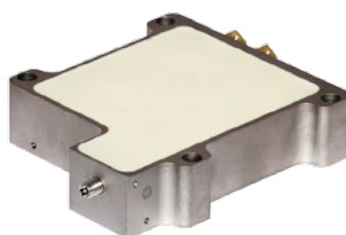
- » Red aiming beam
- » Monitoring photodiode
- » Fiber Sensor
- » Thermistor (NTC- PT100)
- » Integrated TE Coolers
- » Custom Fiber Optics
- » Flat Top Beam Profile
- » Smooth Beam Profile
- » Integrated current and temperature controller
- » Custom Solutions



BDL Type D



BDL Type E



BDL Type F



BFP

High Brightness Fiber Coupled Laser Diodes

The BFP high power fiber coupled diode lasers are available in different sizes from few Watts to 400W of CW power. Pulsed models feature up to 2000W of peak 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.

Customized Mil spec models can be designed, manufactured and qualified. Multi-wavelength solutions (MDL) are well suited for a variety of medical applications; up to 4 different wavelengths can be available in one module. Models with free-space collimated or line-shaped output are also available.

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 2000	(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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Sol



Luce



Wedge



BDL & BFP

