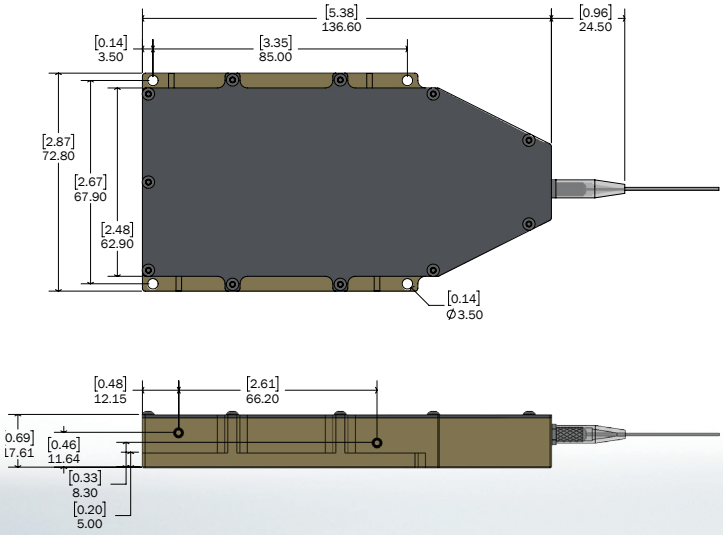
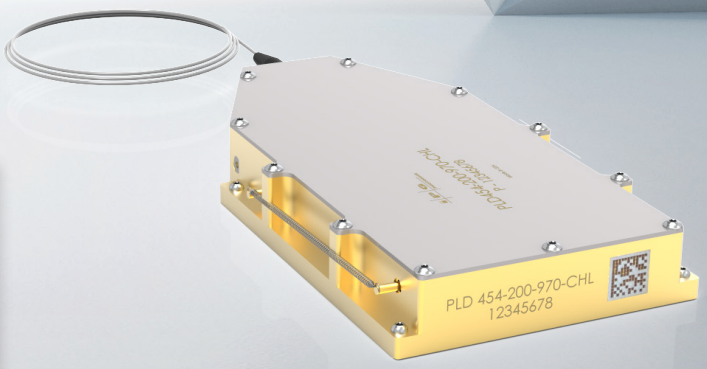
PLD-454-200-970-CHL

Multi-mode Fiber-coupled Packaged Diodes





FEATURES

- 970 nm Center Wavelength
- 380 W Output Power
- >50% Typical Wall-plug Efficiency
- Robust Compact Package
- Wavelength Stabilization and Dichroic Options
- 200 µm Core Fiber Diameter

APPLICATIONS

- Amplifier Pumping
- Direct Diode Lasers
- Laser Pumping
- Material Processing
- Graphic Arts / Printing
- Medical & Dental
- Illumination
- Photovoltaics

IPG Photonics **PLD-454-200-970-CHL** fiber-coupled packaged diodes provide 380 W of output power at 20 A. The PLD-454 features a 200 µm fiber core diameter and a 970 nm center wavelength. Wavelength stabilization and dichroic options are available.

IPG best-in-class diode technology offers an ideal combination of power, reliability and form factor. At IPG, we manufacture to rigorous telecom-grade standards in the world's largest high power diode fab. Each wafer is individually qualified, which sets IPG apart from alternative industrial pump products using short-lived diode bars and bar-stack technologies.PLD-454 packaged diodes are the preferred solution for fiber amplifier and laser pumping, material processing and direct diode applications.

PLD-454-200-970-CHL

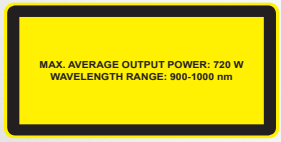
Multi-mode Fiber-coupled Packaged Diodes

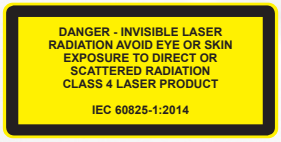
Optical and Electrical Characteristics*	
Center Wavelength, nm	970
Center Wavelength Tolerance, nm	+/- 5
Output Power, W	380
Spectral Width (FWHM), nm	<0.3
Slope Efficiency, W/A	9
Efficiency, %	>50
Threshold Current (I_{TH}), A	2
Operating Current (I_{OP}), A	20
Forward Voltage, V	Up to 36.7
Recommended Case Temperature, ºC	25
Wavelength Shift with Temperature, nm/ºC	0.35

*Typical performance data measured at 20 A, 25ºC.

Fiber Characteristics	
Fiber Core Diameter, µm	200
Fiber Cladding Diameter, µm	227
Fiber Buffer Diameter, µm	900
Beam Numerical Aperture (90% power)	<0.2
Fiber Length, m	2
Minimum Fiber Bend Radius, mm	35

Maximum Ratings	
Operating Current (I_{OP}), A	30
Reverse Voltage, V	7.5
Case Temperature, ºC	5 - 70
Storage Temperature, ºC	-20 to 60
Lead Soldering Temperature (10 s max) ºC	300
Relative Humidity, %	85





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