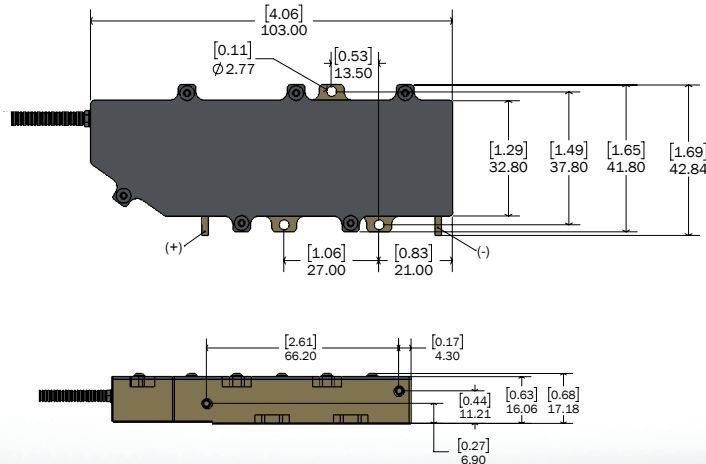


PLD-224-200-970-CHL, 180 W

Multi-mode Fiber-coupled Packaged Diodes



FEATURES

- ▶ 970 nm Center Wavelength
- ▶ Up to 180 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-224-200-970-CHL** fiber-coupled packaged diodes provide 180 W of output power at 20 Amps. The PLD-224 features a 200 μm fiber core diameter and a 970 nm center wavelength. Wavelength stabilization and dichroic options are available.

IPG'S 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-224 packaged diodes are the preferred solution for fiber amplifier and laser pumping, material processing and direct diode applications.

PLD-224-200-970-CHL, 180 W

Multi-mode Fiber-coupled Packaged Diodes

| Optical and Electrical Characteristics* | |
|--|-----------|
| Center Wavelength, nm | 970 |
| Center Wavelength Tolerance, nm | +/- 5 |
| Output Power, W | Up to 180 |
| Spectral Width (FWHM), nm | <0.3 |
| Slope Efficiency, W/A | 9 |
| Efficiency, % | >50 |
| Threshold Current (I_{TH}), A | 20 |
| Operating Current (I_{OP}), A | Up to 30 |
| Forward Voltage, V | <20 |
| Recommended Case Temperature, °C | 25 |
| Wavelength Shift with Temperature, nm/°C | 0.35 |

*Typical performance data measured at 20 A, 25°C.

| 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, °C | 5 - 70 |
| Storage Temperature, °C | -20 to 60 |
| Lead Soldering Temperature (10 s max) °C | 300 |
| Relative Humidity, % | 85 |



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[IPGPhotonics.com/contact](https://www.ipgphotonics.com/contact)

www.ipgphotonics.com

MAX. AVERAGE OUTPUT POWER: 360 W
WAVELENGTH RANGE: 900-1000 nm

DANGER - INVISIBLE LASER
RADIATION AVOID EYE OR SKIN
EXPOSURE TO DIRECT OR
SCATTERED RADIATION
CLASS 4 LASER PRODUCT

IEC 60825-1:2014

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