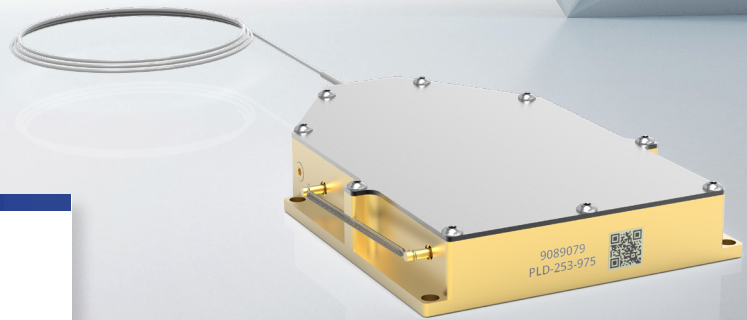
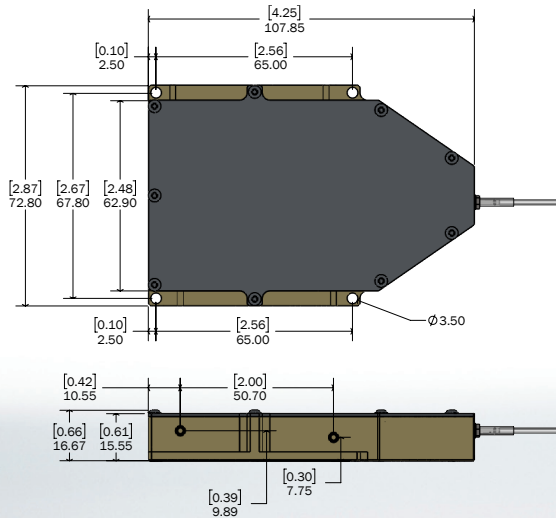


PLD-253-970-CHL, 200 W

Multi-mode Fiber-coupled Packaged Diodes



FEATURES

- ▶ 970 nm Center Wavelength
- ▶ Wavelength Stabilization and Dichroic Options
- ▶ 200 W Output Power
- ▶ 0.175 NA into 110 μm Fiber Core Diameter
- ▶ High Reliability
- ▶ Robust Compact Package

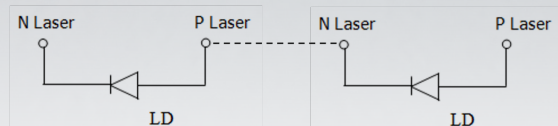


APPLICATIONS

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

PLD-253-970-CHL fiber-coupled packaged diodes provide up to 200 W of output power within 0.175 NA. PLD-253 diode features include a 110 μm fiber core diameter and 970 nm center wavelength. Wavelength stabilization and dichroic options are also available.

IPG best-in-class diode technology offers an ideal combination of power, reliability and form factor. 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-253 packaged diodes are preferred for fiber amplifier and laser pumping, material processing and direct diode applications.



PLD-253-970-CHL, 200 W

Multi-mode Fiber-coupled Packaged Diodes

Optical and Electrical Characteristics*	PLD-253-970-CHL
Center Wavelength, nm	968.5
Center Wavelength Tolerance, nm	±5.5
Output Power, W (Typ./Min)	200/190
Wavelength Shift in Current Range 14 - 18 A, nm/A	0.55
Power Shift in Current Range 14 - 18 A, W/A	15.5
Spectral Width, nm	4±2
Threshold Current (I_{TH}), A	1.7
Operating Current (I_{OP}), A	14
Forward Voltage, V**	<27, connected in series
Recommended Case Temperature, °C	25

* Typical performance data measured at 14 A, 25°C

** 27 V maximum spec applies when diode banks are connected in electrical series. Customer may choose to operate each diode bank independently using separate drivers.

Fiber Characteristics

Fiber Core Diameter, μm	110
Fiber Cladding Diameter, μm	125
Fiber Buffer Diameter, μm	230
Typ./Max Beam Numerical Aperture (90% power)	0.175/0.20
Fiber Length, m	1.9
Minimum Fiber Bend Radius, mm	30

Maximum Ratings

Operating Current (I_{OP}), A	18
Reverse Voltage, V	2.5
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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