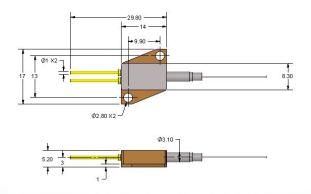


PLD-10 SERIES: 915-975 nm, 10 W

Multi-mode Fiber-coupled Packaged Diodes





FEATURES

- ▶ 915, 940, 975 nm Center Wavelengths
- ▶ 10 W Output Power
- ▶ 0.13 NA into 105 or 110 µm Fiber Core Diameter
- ▶ High Reliability
- ▶ Robust Compact Package



APPLICATIONS

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



IPG Photonics' **PLD-10 Series** fiber-coupled packaged diodes provide up to 10 W of output power within 0.13 NA. PLD-10 diode options include 105 μ m or 110 μ m fiber core diameter, and center wavelength at 915 nm, 940 nm or 975 nm.

IPG's best-in-class diode technology offers an ideal combination of power, reliability and form factor. The diodes leverage our vast telecommunication industry experience and technology investment. 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-10 packaged diodes are preferred for fiber amplifier and laser pumping, material processing and direct diode applications.

PLD-10 SERIES: 915-975 nm, 10 W

Multi-mode Fiber-coupled Packaged Diodes

Optical and Electrical Characteristics*	
Center Wavelength, nm	915, 940, 975
Center Wavelength Tolerance, nm	± 3
Output Power, W	10
Spectral Width (FWHM), nm	5
Slope Efficiency, W/A	0.7
Conversion Efficiency, %	48
Threshold Current (I _{TH}), A	0.6
Operating Current (I _{op}), A	12
Forward Voltage, V	1.7
Recommended Case Temperature, °C	25
Wavelength Shift with Temperature, nm/°C	0.35
Wavelength Shift with Operating Current, nm/A	< 2.4

Fiber Characteristics	
Fiber Core Diameter, μm	105 or 110 options available
Fiber Cladding Diameter, μm	125
Fiber Buffer Diameter, µm	250
Beam Numerical Aperture (90% power)	0.13
Fiber Length, m	0.75 - 1.2
Minimum Fiber Bend Radius, mm	30

Maximum Ratings	
Operating Current (I _{OP}), A	14
Reverse Voltage, V	2.5
Case Temperature, °C	5 to 70
Storage Temperature, ⁰C	-30 to 80
Lead Soldering Temperature (10 s max), °C	300
Relative Humidity, %	85



+1 (508) 373-1100;

*Typical performance data measured at 12A, 25°C.

IPGPhotonics.com/contact

www.ipgphotonics.com

MAX. AVERAGE OUTPUT POWER: 20 W WAVELENGTH RANGE: 900-1000 nm DANGER - INVISIBLE LASER
RADIATION AVOID EVE OR SKIN
EXPOSURE TO DIRECT OR
SCATTERED RADIATION
CLASS 4 LASER PRODUCT
IEC 60825-1:2014