



## PL 83/85/98 Series Near IR Laser Diode Modules

PD-LD Inc. offers a variety of packaging options for its' Near Infra Red Series of laser diodes. These units are available in ready-to-use, fiber-coupled packages, including FC, ST, and SC receptacles, as well as fiber-pigtailed units.

The laser diodes offered by PD-LD are of proven design and manufacture; the standard wavelengths are centered at 830nm, 850nm and 980nm. Fiber-coupled CW (continuous-wavelength) output powers range from 0.1 - 10 mW, depending on the fiber type and desired performance level. Devices may be optimized for coupling to sensor or telecommunication size optical fiber, from 5um to 200um core.



### Fiber Size and Coupling Efficiency

- |              |        |
|--------------|--------|
| • 5/125um    | 8~15%  |
| • 9/125um    | 15~20% |
| • 50/125um   | 25~30% |
| • 62.5/125um | 30~40% |
| • 100/140um  | 40~50% |

### Applications

- Fiber optic communications
- Optical Sensing
- Process Control
- Test and Measurement Equipment
- Optical Alignment Systems
- Medical Apparatus
- Imaging and Scanning

PD-LD Part No. <sup>1</sup>	Wavelength (nm) Min. Typ. Max.	Min. Fiber Coupled Power (mW)	Pin-out	Threshold Current (mA) Typ. Max.	Operating Current (mA) Typ. Max.	PD Current (mA) Min. Typ.
Continuous Wavelength Lasers @ 25C 5.6mm Diameter To can						
PL83H020ST73-S-0	820 830 840	20mW 62.5um MMF	P	20 35	75 100	0.1 0.25
PL85B0023FCA-0-0-01	830 850 870	2mW 62.5/125um MMF	P	5 20	30 45	0.2 0.6
PL85E0037FCA-0-0-01	845 855 865	3mW 5/125um SMF	P	30 50	75 110	0.05 0.4
PL90A0028STA-0-0-01	890 905 920	2mW 7/125um SMF	P	15 25	40 60	0.1 0.4
PL98A0048FAA-0-0-01	960 980 995	4 mW 7/125 SMF	N	12 20	44 70	0.05 0.1

<sup>1</sup>Examples only; most device/packaging combinations available.

Changes to specifications may be made without notice.

03-11 NIRSeries .Rev A

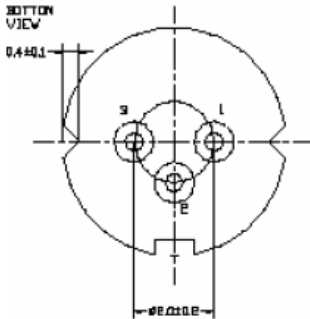


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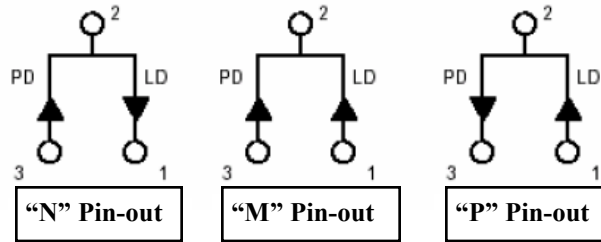
**Packaging Options:** Optional board- or panel -mount flanges are available for pigtailed devices; contact PD-LD Sales. Also, PD-LD Inc. will package non-standard lasers or parts specified by a customer using standard or custom receptacle or pigtailling techniques. Both receptacle and pigtail packages are made using an active micro-positioning system and proven packaging techniques. Reliable and efficient devices are produced.

In many cases several different pin-out options are available for similar wavelength lasers.

## Bottom View



“N” Pin-out	Laser Diode Anode + Photodiode Cathode
“M” Pin-out	Laser Diode Cathode + Photodiode Cathode
“P” Pin-out	Laser Diode Cathode + Photodiode Anode



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Near IR Laser Diodes Available from Stock				
PD-LD Laser Code	Nominal Wavelength (nm)	TO Package Size	Laser Pinning	Maximum Total Power (mW)*
83C	830 +/- 10nm	5.6mm	N	50
83H	830+/-10nm	5.6mm	P	50
85A*	850+/-5nm	5.6mm	Internal Driver	5
85B	850-/+20nm	5.6mm	P	5.0
85C	850-/+20nm	5.6mm	M	5.0
85D	850-/+20nm	5.6mm	N	5.0
85E	855+/-10nm	5.6mm	P	40.0
90A	905+/-15nm	5.6mm	N	10.0
98E	975-/+15nm	5.6mm	N	25.0
98G	975-/+15nm	5.6mm	N	350.0

<sup>1</sup>Examples only; most device/packaging combinations available.

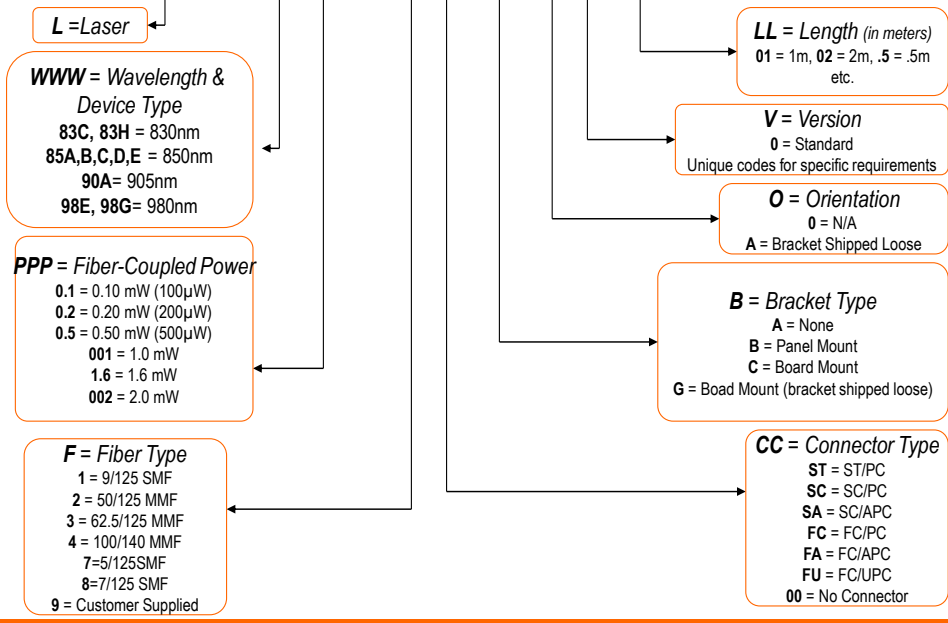
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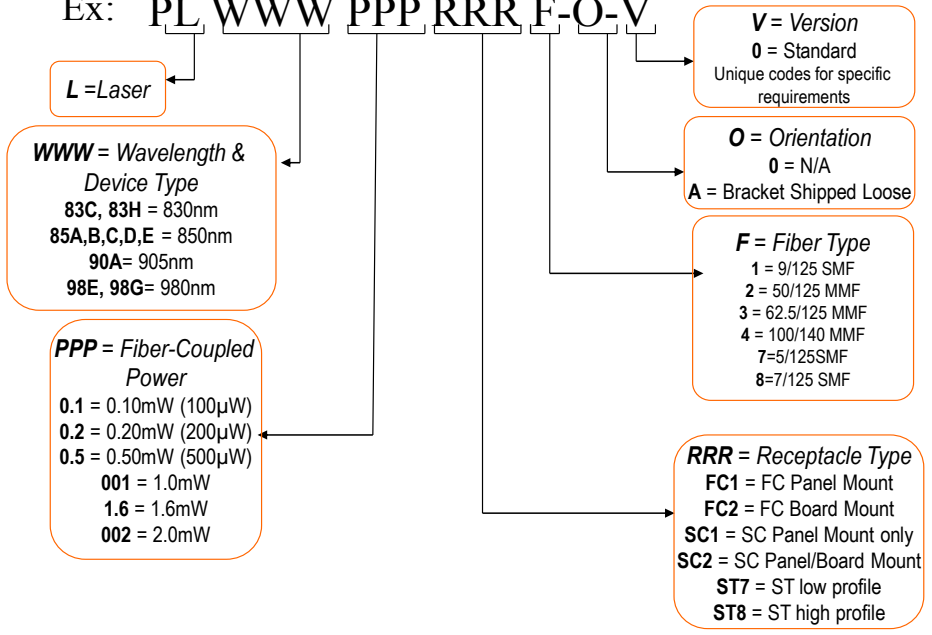
## Data Legend: Pigtailed NIR Lasers

PL WWW PPP F CC B-O-V-LL



## Data Legend: Receptacle NIR Laser Diodes

Ex: PL WWW PPP RRR F-O-V



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