

PD-LD Inc. now offers a choice of packaging options for its' Pulsed 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.

These Pulsed InGaAsP laser diodes offered by PD-LD are of proven design and manufacture; the standard wavelengths are centered at 1310 and 1550nm. Fiber-coupled Pulsed (duty cycle=1%, pulse width=10ns) output powers range from 60 to 120 mW, depending on wavelength and desired performance level. These semiconductor lasers have low threshold and operating currents that help to ensure high reliability and long operating life.

Optional board- or panel-mount flanges are available for pigtailed devices; contact PD-LD Sales. Fiber Pigtailed devices are made using an active micro-positioning system and YAG Laser welding system ensuring high reliability and coupling efficiency.

High power pulsed lasers have a 4 pin configuration and do not have a rear facet monitor detector.



Features

- High Power (Pulse 60 to 120mW)
- Compact, reliable receptacle & coax fiber-coupled package
- Stable single transverse mode oscillation
- MQW (Multiple Quantum Well)

Applications

- Fiberoptic Test Equipment
- Optical Time Domain Reflectometers

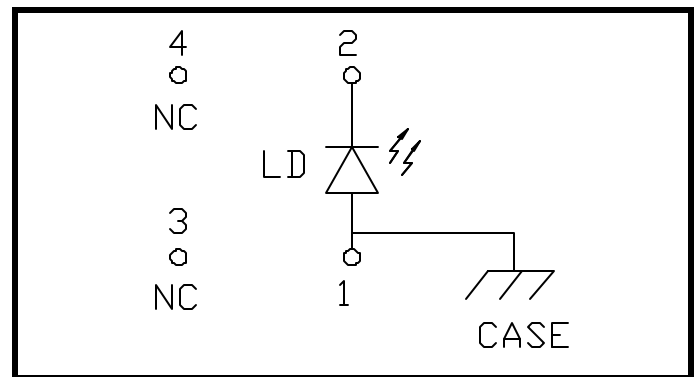
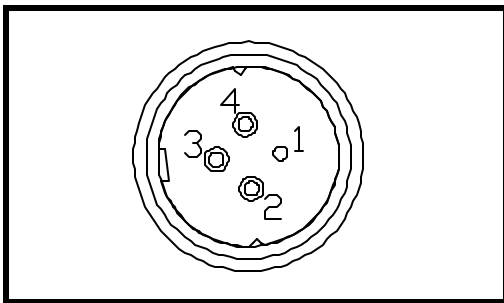
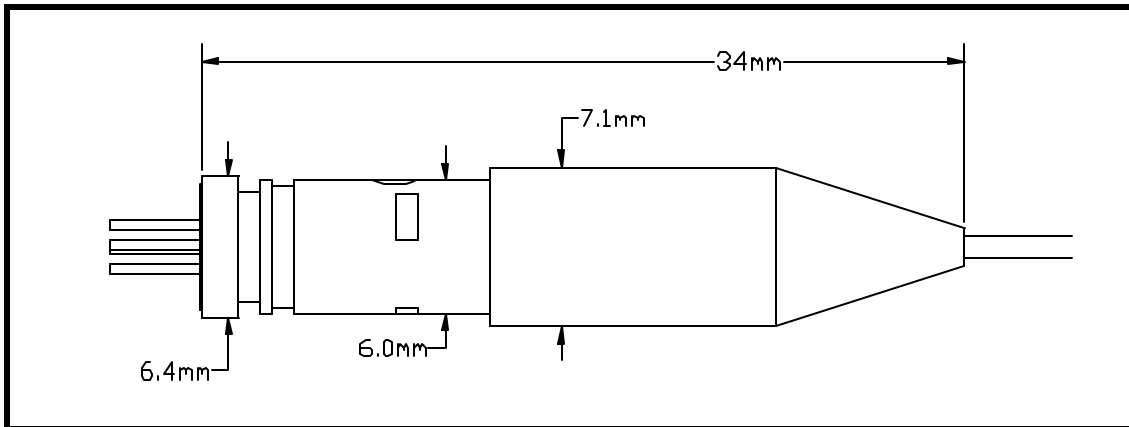
Performance Specifications

Parameter	Symbol	Test Condition	PL13H120100A-0-P-01			PL15H100100A-0-P-01			Units
			Min	Typ	Max	Min	Typ	Max	
Central Wavelength	λ_c	$I_f = I_{op}$ Pulse $I_f = 700mA$	1285	1310	1335	1520	1550	1580	nm
Spectral Width	$\Delta\lambda$	$I_f = I_{op}$ Pulse $I_f = 700mA$	-	7	10	-	7	10	nm
Threshold Current	I_{th}	-	-	20	50	-	30	50	mA
Operating Current	I_{op}	CW, $P_o = 5mW$	-	30	120	-	50	180	mA
Operating Voltage	V_{op}	$I_f = I_{op}$ Pulse $I_f = 700mA$	-	3	4.5	-	3	4.5	V
Pulse Light Output	P	$I_f = I_{op}$ Pulse $I_f = 700mA$	100	120	-	60	100	-	mW
Rise & Fall Time	T_r, T_f	$I_f = I_{th}$ 10~90%	-	1	2	-	1	2	ns

Above specifications at 25°C . Specifications subject to change.

01-10 Pulsed.Rev0

Physical Dimensions (mm) & Pin Connection



Pigtails Lasers Ordering Information

PLWWHPPPFCCB-0-V-LL

L = Laser
WWW = Wavelength
 13 = 1310nm
 15 = 1550nm

H = Pin Out
 4pin Laser without Monitor Photodiode

PPP = Fiber-Coupled Power
 060= 60mW
 080= 80mW
 100= 100mW
 120= 120mW

F = Fiber Type
 1 = 9/125 SMF
 2 = 50/125 MMF
 3 = 62.5/125 MMF
 4 = 100/140 MMF
 9 = Customer Supplied

C=Connector Type
 OO= No Connector
 FC=FC/PC
 FA=FC/APC
 SC=SC/PC
 SA=SC/APC
 ST=ST/PC

B=Bracket Type
 A=No Bracket
 B=Panel Mount
 C=Board Mount

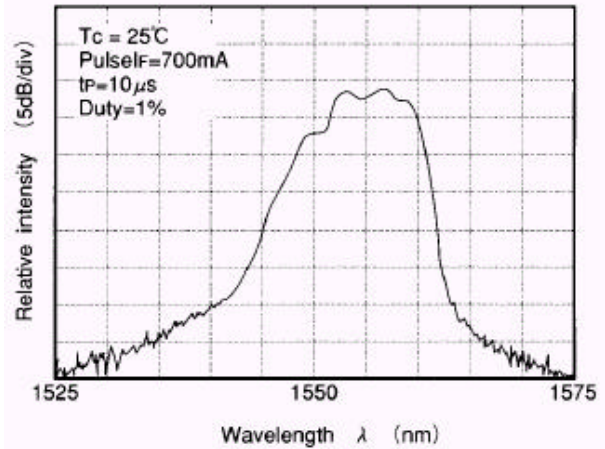
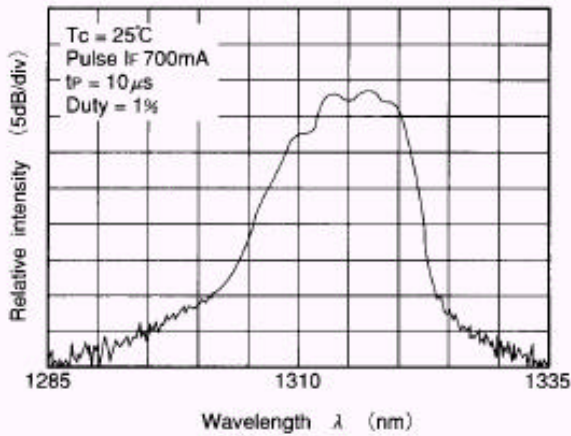
O= Lead Orientation
 0=N/A
 Specified by customer

V= Version

All pulsed lasers are referred by "P" version

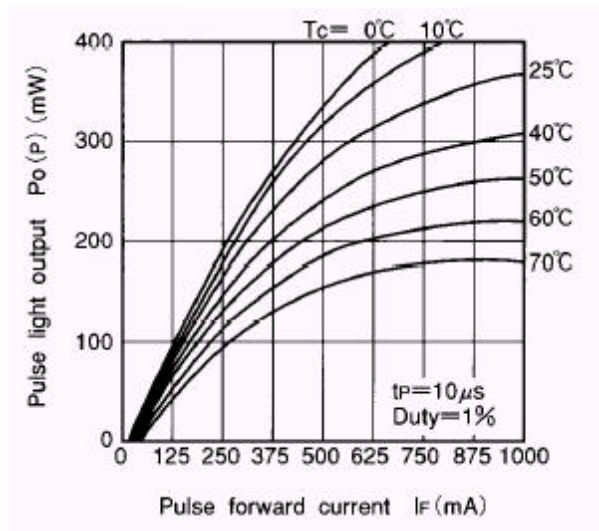
LL = Length in meters for pigtailed devices(01,02,0.5 ect.)

Pulsed Laser Diode Spectral Characteristics



Light vs Current Plots for Pulsed Lasers at Semiconductor Level
(*Note that typical coupling efficiency into 9/125um fiber is 30~50%)

1310nm



1550nm

