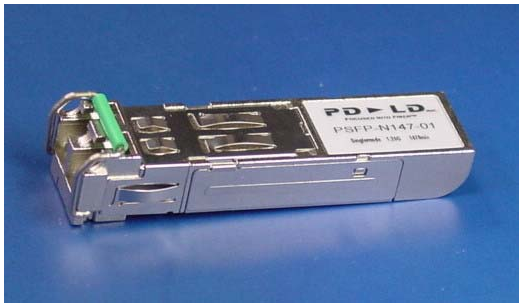
Features



- RoHS compliant
- 155Mbps, and 1.25Gbps data rate operation
- Dual-Fiber or Single Bi-direction Fiber connections
- Meets Bellcore Reliability Practices
- Compliant with SFF-8472 diagnostic monitoring interface
- Compliant with SFP MSA duplex LC connector
- Differential LVPECL inputs and outputs
- Single power supply 3.3V
- TTL signal detect indicator

PD-LD Inc. offers laser diode based fiber optic transceiver modules in convenient industry standard Small-Form-factor-Pluggable (SFP) packages. The PSFPxxx series modules are designed for 155 Mbps and 1.25 Gbps data rate applications, including SONET OC-3, SDH STM-1, Fiber Channel, Fast Ethernet, and Gigabit Ethernet over either multimode or 9/125um single mode optical fiber.

The transmitter section consists of a FP or DFB laser in an eye safe optical subassembly (OSA) which mates to the fiber cable. A LD driver IC that converts differential input LVPECL logic signals into an analog laser driving current drives the laser of OSA. The receiver utilizes a PIN photodiode mounted together with a trans-impedance preamplifier IC in an OSA. This OSA is connected to a circuit providing post-amplification quantization, and optical signal detection

For single-fiber models, the laser diode and the InGaAs PIN photodiode are integrated with a WDM filter to form a bi-directional single fiber optical subassembly (BOSA) to provide the single fiber connection.

TX_FAULT - When an improper power level in the laser driver is detected, the SFP sets TX_FAULT high and turns off the Laser. This signal can be reset with the setting the TX_DISABLE line. The signal is a TTL level signal.

TX_DISABLE – Setting the TX_DISABLE signal high (TTL logic “1”) disable the output of the laser.

Receive Loss (RX_LOS) - The RX_LOS is set high (logic “1”) when the receiver receives no optical signal. This signal is normally used for diagnostic purpose. The signal is a TTL level signal.

Ordering Information

Dual-Fiber Models:

Part Number	Data Rate	TX Output Power	RX Sensitivity	Temperature
PSFP155-M01	155 Mbps	850 nm VCSEL, -8 to -15 dBm (into 50/125 MMF)	850 nm, -34 dBm	0°C to 70°C
PSFP155-M02				-20°C to 85°C
PSFP155-S01		1310 nm FP, -8 to -15 dBm	1310 nm, -34 dBm	0°C to 70°C
PSFP155-S02				-40°C to 85°C
PSFP155-L01		1310 nm FP, 0 to -5 dBm	1310 nm, -34 dBm	0°C to 70°C
PSFP155-L02				-40°C to 85°C
PSFP155-X01		1550 nm DFB, 0 to -5 dBm	1550 nm, -34 dBm	0°C to 70°C
PSFP155-X02				-40°C to 85°C

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Part Number	Data Rate	TX Output Power	RX Sensitivity	Temperature
PSFP1.2-M01	1.25 Gbps	850 nm VCSEL, -4 to -10 dBm (into 62.5/125 MMF)	850 nm, -18 dBm	0°C to 70°C
PSFP1.2-M02				-20°C to 85°C
PSFP1.2-S01		1310 nm FP, -3 to -9 dBm	1310 nm, -20 dBm	0°C to 70°C
PSFP1.2-S02				-40°C to 85°C
PSFP1.2-L01		1310 nm DFB, 0 to -4 dBm	1310 nm, -24 dBm	0°C to 70°C
PSFP1.2-L02				-40°C to 85°C
PSFP1.2-X01		1550 nm DFB, +5 to 0 dBm	1550 nm, -24 dBm	0°C to 70°C
PSFP1.2-X02				-40°C to 85°C
PSFP1.2-N1xx-01	1.25 Gbps	CWDM DFB, +5 to 0 dBm	CWDM, -32 dBm	0°C to 70°C

Single-Fiber (Bi-Direction) Models:

Part Number	Data Rate	TX Output Power	RX Sensitivity	Temperature
PSFP155-B35-M01	155 Mbps	1310 nm FP, 0 to -10 dBm (into 62.5/125 MMF)	1550 nm, -28 dBm	0°C to 70°C
PSFP155-B35-M02				-20°C to 85°C
PSFP155-B53-M01		1550 nm FP, 0 to -10 dBm (into 62.5/125 MMF)	1310 nm, -28 dBm	0°C to 70°C
PSFP155-B53-M02				-40°C to 85°C
PSFP155-B35-L01		1310 nm FP, 0 to -5 dBm	1550 nm, -34 dBm	0°C to 70°C
PSFP155-B35-L02				-40°C to 85°C
PSFP155-B53-L01		1550 nm DFB, 0 to -5 dBm	1330 nm, -34 dBm	0°C to 70°C
PSFP155-B53-L02				-40°C to 85°C
PSFP1.2-B35-S01	1.25 Gbps	1310 nm DFB, +2 to -3 dBm	1550 nm, -24 dBm	0°C to 70°C
PSFP1.2-B35-S02				-40°C to 85°C
PSFP1.2-B53-S01		1550 nm DFB, +2 to -3 dBm	1310 nm, -24 dBm	0°C to 70°C
PSFP1.2-B53-S02				-40°C to 85°C

- **LC receptacle is standard. Pigtail with ST, FC, or SC connector is optional.**
- **Models with higher data rates, and longer reaches are available upon request**

For enquiries/quote contact PDLD Inc.,
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