

## Features



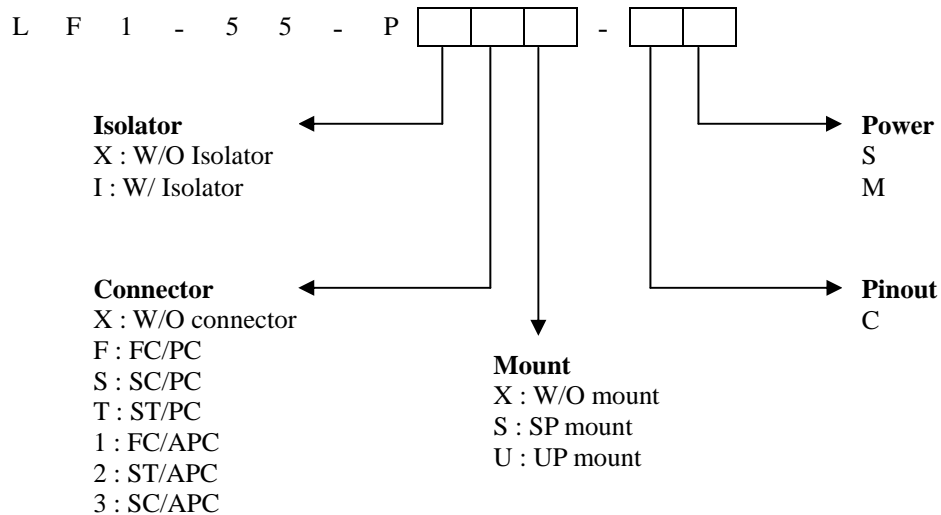
- InGaAsP MQW-FP laser diode (LD)
- Built-in InGaAs monitor PIN photodiode (PD)
- Uncooled, hermetically sealed
- Low threshold current
- Fiber pigtail type with optional FC/SC/ST connector

## Applications

- Gigabit Ethernet

## Ordering Information

Part Number	Connector	Mount	Pin-out	Power
LF1-55-PXFX-CS	FC/PC	W/O	C	S
LF1-55-PXFX-CM	FC/PC	W/O	C	M





## 1550nm 1.25Gbps FP Laser Diode Pigtail type Module

### Specifications

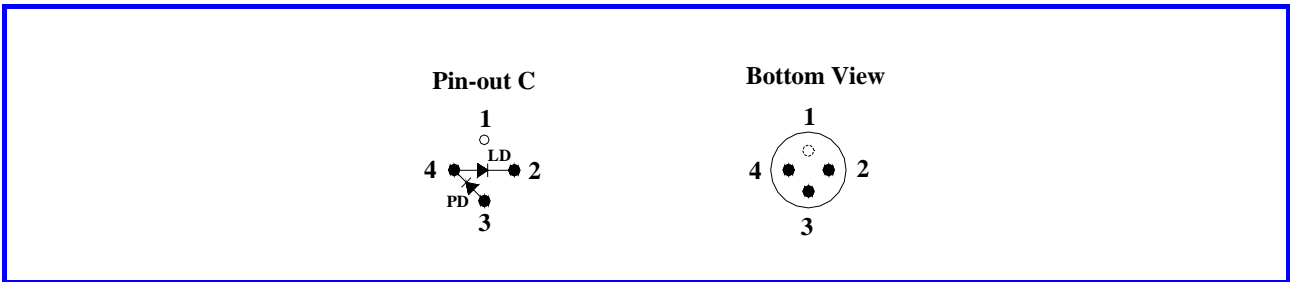
#### Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Storage temperature	$T_{stg}$	-40~+85	°C
Operating case temperature	$T_{op}$	0~+70	°C
Peak optical output power	S	0.8	mW
	M	1.4	
Reverse voltage (LD)	$V_{RL}$	2	V
Forward current (PD)	$I_{FP}$	2	mA
Reverse voltage (PD)	$V_{RP}$	20	V
Soldering temperature (10 sec.)	$S_{temp}$	260	°C

#### Electrical and Optical Characteristics (T=25°C, unless otherwise specified)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Threshold current	$I_{th}$	CW	-	10	25	mA
Center Wavelength	$\lambda_c$	$P_f$	1480	-	1580	nm
Fiber output power	S	CW, $I_{th} + 25mA$	0.25	-	0.5	mW
	M		0.5	-	1.0	
Slope efficiency	S	CW	0.01	-	0.02	mW/mA
	M		0.02	-	0.04	
Operating voltage	$V_{op}$	$P_f$	-	-	1.7	V
Spectral width	$\Delta \lambda$	CW, RMS	-	1.5	3.5	nm
Rise time	$T_r$	$I_b = I_{th}$ , 10%~90%	-	-	0.7	nsec
Fall time	$T_f$	$I_b = I_{th}$ , 90%~10%	-	-	0.7	nsec
Tracking error	$\Delta P_f / P_f$	APC, 0°C ~+70°C	-	±1.0	-	dB
Monitor current	$I_m$	$P_f$ , $V_{RP} = 10V$	100	-	-	μA
Monitor dark current	$I_d$	$V_{RP} = 10V$	-	-	0.1	μA
Monitor capacitance	C	$V_{RP} = 10V$ , f=1MHz	-	-	20	pF

## Pin Assignment



## Package Outline Drawing

