



SYN-FP-LDM-1550NM High Power Laser Diode Module

Description

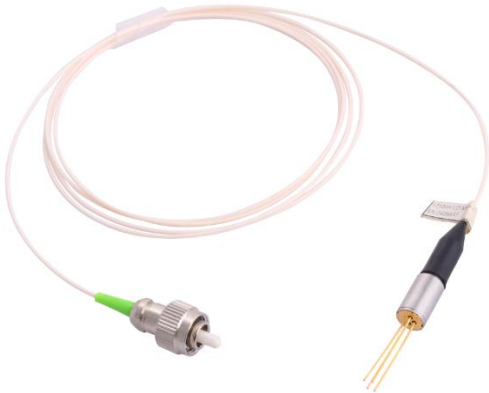
The SYN-FP-LDM-1550NM is a 1550 nm Multiple Quantum Well (MQW) structured Fabry-Perot (FP) laser diode coaxial module with single mode fiber. This module is specified to operate under pulsed condition and designed for light source of Optical Time Domain Reflectometer (OTDR).

Features

- ⊙ High stability FP laser chip
- ⊙ High power
- ⊙ Operate temperature from -40°C to +85°C

Application:

- ⊙ Optical Time Domain Reflectometer (OTDR)
- ⊙ High power laser for instrument
- ⊙ Test Equipments



Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Max	Unit
Operating Case Temperature	T _c	-	-40	85	°C
Storage Temperature	T _{stg}	-	-40	85	°C
Lead solder Temperature	-	-		260	°C
Lead Soldering Time	-	-		10	s

Optical/Electrical Characteristics (T=25°C , unless otherwise stated)

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Optical Output Power (pulse mode)	P _f	10	20	--	mW	I _{FP} =100mA, PW=10μS, Duty=1%
		20	40	--		I _{FP} =200mA, PW=10μS, Duty=1%
		40	60	--		I _{FP} =350mA, PW=10μS, Duty=1%
		60	80	--		I _{FP} =400mA, PW=10μS, Duty=1%
Optical Output Power	P _o	5	10	--	mW	CW, I _{op} =50mA
Threshold Current	I _{th}	--	8	15	mA	T=25 °C, I _{op} =50mA
Forward Voltage	V _F	--	1.2	2	V	CW, I _{op} =50mA
Operating Current	I _{op}	--	--	100	mA	CW, T=25 °C
Center Wavelength	λ _c	1530	1550	1570	nm	CW, T=25 °C
Spectral Width (-20 dB)	-	--	--	3.5	nm	CW, T=25 °C
Rise/Fall Times	t _R , t _F	--	0.2	2	ns	10% to 90%
Monitor Current	I _{mon}	100	--	--	μA	CW, I _{op} =50mA
Monitor Dark Current	I _D	--	--	0.1	μA	V _R =5 V



Order Information

Band	Laser Type	Wavelength	Pigtail type	Wavelength	Optical Connector
SYN-	FP-LDM-	1550NM-	SM-	0.5M-	SCUPC
			SMB-	1M-	SCAPC
			X- (Specified)	2M-	FCUPC
				X- (Customer Specified)	FCAPC
					LCUPC
					LCAPC

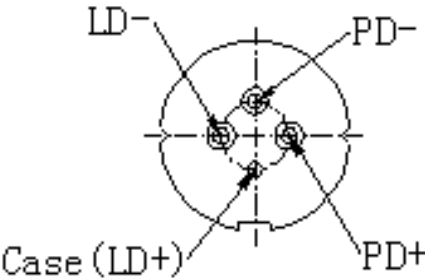
Note 1: Pigtail type without B means 900um pigtail type

Order Example

Part number: SYN-FP-LDM-1550NM-SM-1M-FCUPC

Description: 1550NM FP LDM, 900um single modle, fiber length 1M with FC/UPC connector

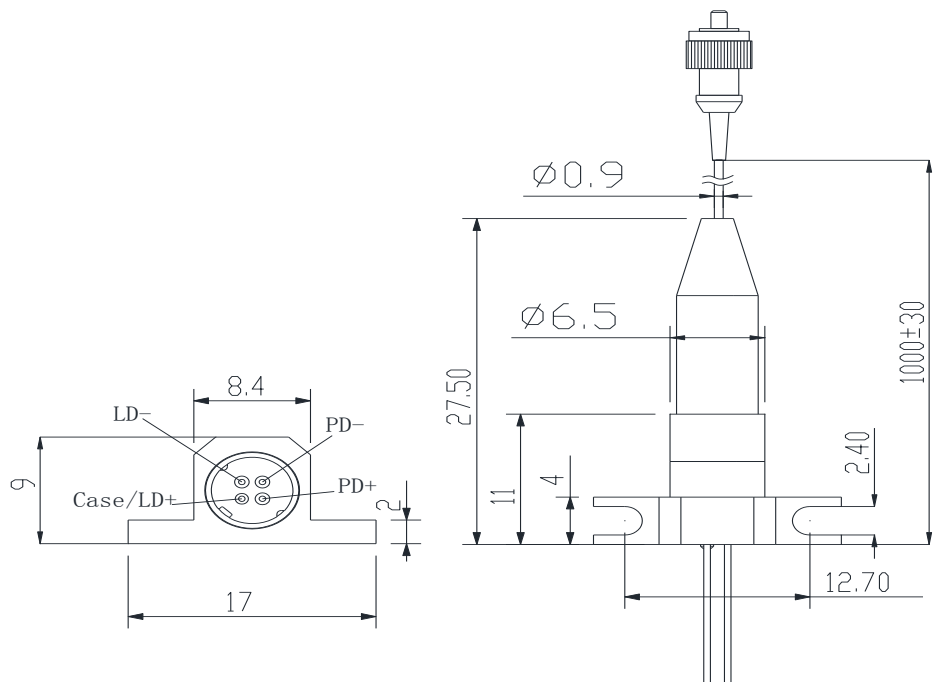
Pin Assignment



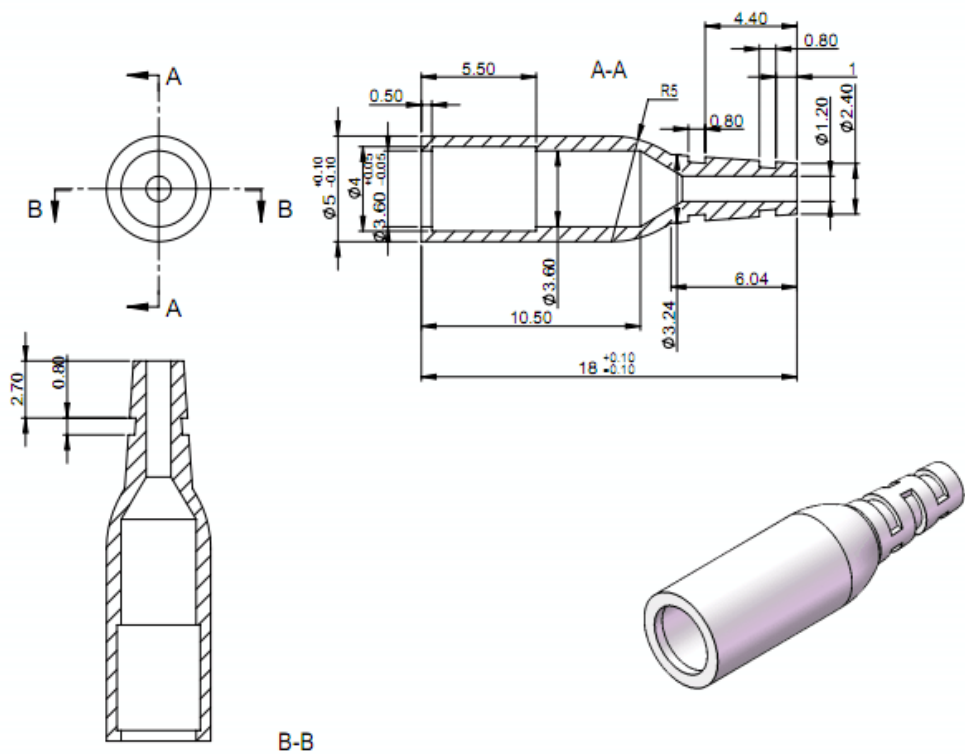


Drawing & Dimensions

Normal Type



Mini Type



Semiconductor lasers and detectors are Static sensitive components are vulnerable to Electrostatic discharge (ESD)and surge over Current (EOS) damage! Please contact with Static sensitive





SynMaster Enterprise Co., Ltd.