

FOL1371 Series

Coolerless Coaxial 1310nm FP Laser Diode Modules



Applications

- ~OC-12/STM-4, GbE Systems (FOL1371)
- OC-48/STM-16 Systems (FOL1377)
- Short / Intermediate reach applications
- Digital data systems / Telecommunications

Description

- FOL1371 / 1377 -series are for intermediate applications and for use in both Data-communication and Tele-communication.
- FOL1371-series is suitable for ~OC12/STM4 and GbE application, and FOL1377-series is suitable for OC48/STM16 application.
- This laser module complies with telecom requirements described in Telcordia™ GR-468 requirement and manufactured in an ISO™9001 certified production line
- Wide power range supports any application for Fiber-in-the-Loop (FITL) and SONET/SDH compliant links.

Features

- 4-pin coaxial package
- InGaAsP / InP MQW (Multiple Quantum Well) Laser
- Low Threshold current
- Wide variation in package types
 - RC (SC/FC receptacle compliant)
 - LC (LC receptacle compliant)
 - pigtail (your choice of connector available)
- Wide range of output power (Standard range from 0.1mW to 1.6mW, Higher output power available on request)

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Storage Temperature	Tstg	-40	85	°C
Operating Case Temperature*	Tc	-40	85	°C
LD Forward Current	If	-	150	mA
LD Reverse Voltage	Vr	-	2	V
PD Forward Current	I _{fPD}	-	5	mA
PD Reverse Voltage	V _{rPD}	-	20	V
Soldering Temperature (<10sec)	-	-	260	°C

Optical and Electrical Specifications

(Case Temperature Tc = 25°C, unless otherwise specified.)

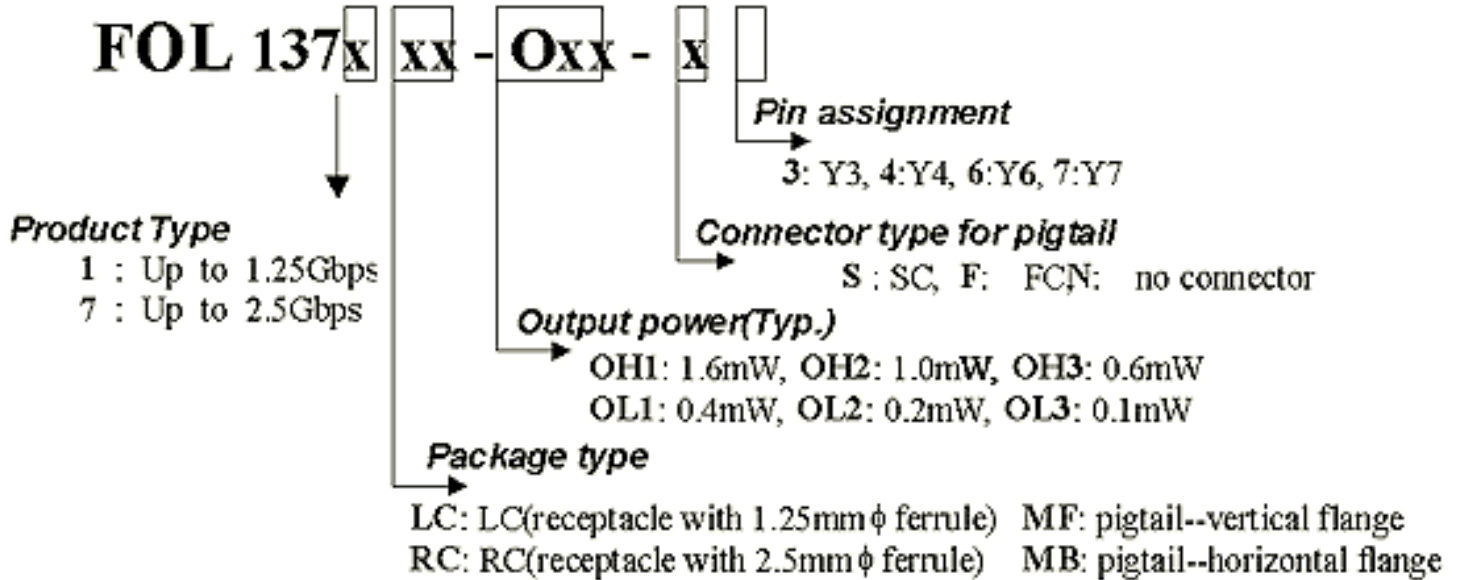
Parameter		Symbol	Min	Typ	Max	Unit	Conditions
LD Output Power *1)	OH1	Pf	-	1.6	-	mW	I _{op} = I _{th} +10mA
	OH2		-	1.0	-		
	OH3		-	0.6	-		
	OL1		-	0.4	-		
	OL2		-	0.2	-		
	OL3		-	0.1	-		
LD Forward Current		I _{op}	-	-	40	mA	CW, Pf(typ.) *2)
			-	-	70		CW, Pf(typ.), Tc= -40°C~85°C
Threshold Current		I _{th}	-	-	15	mA	CW
			-	-	35		CW, Tc= -40°C~85°C
LD Forward Voltage		V _f	-	1.1	1.5	V	CW, I _{op}
Center Wavelength		λ _c	1260	-	1360	nm	Pf(typ.), RMS, Tc= -40°C~85°C
Spectral Width		Δλ	-	-	4	nm	Pf(typ.), RMS
Rise and Fall Time (10-90%)	FOL1371	tr/ta	-	500	-	ps	I _b =I _{th} , Tc= -40°C~85°C
	FOL1377		-	-	200		
Monitor Current		I _m	200	-	1000	μA	Pf (typ.), VrPD=5V
Monitor Dark Current		I _d	-	-	100	nA	V _{rPD} =5V

Monitor Capacitance	C	-	-	10	pF	$V_{rPD}=5V, f=1MHz$
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*1) LD output power describes average output power in case average LD current is set at $I_{op} = I_{th} + 10mA$. Suitable average output power would depend on customer's driving conditions.

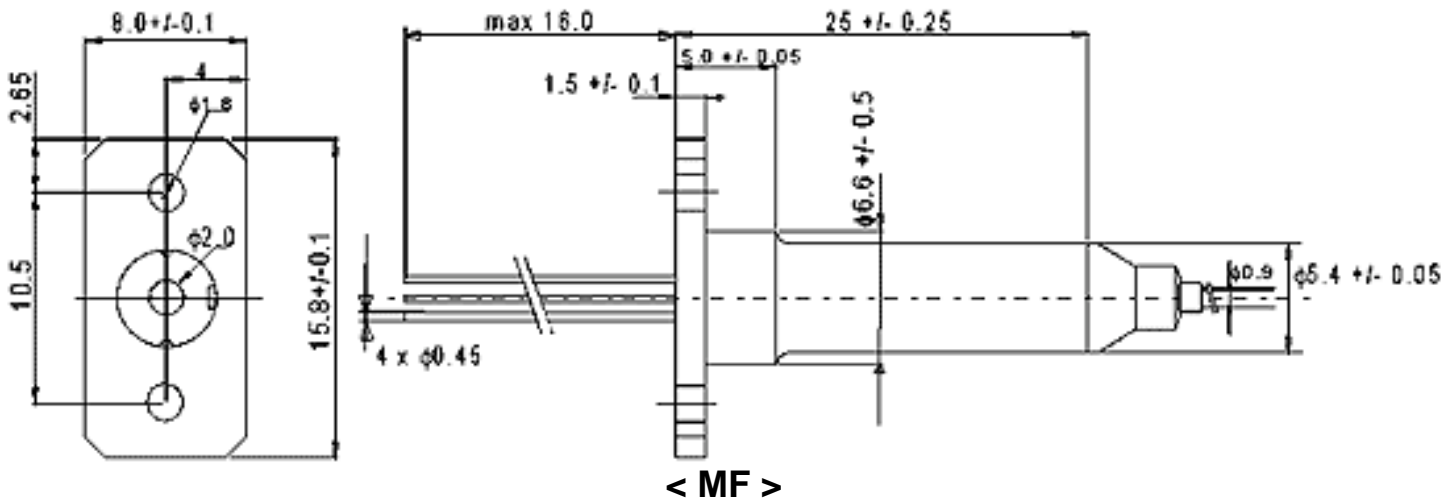
*2) Pf(typ.) stands for the Typical LD Output Power listed above.

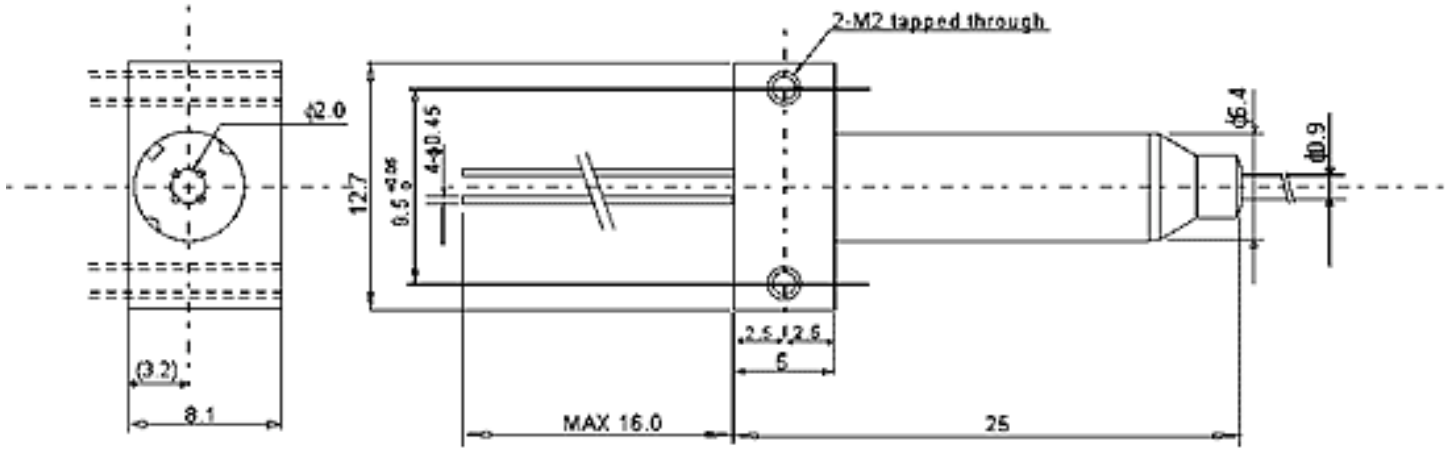
Ordering Information



Dimensions

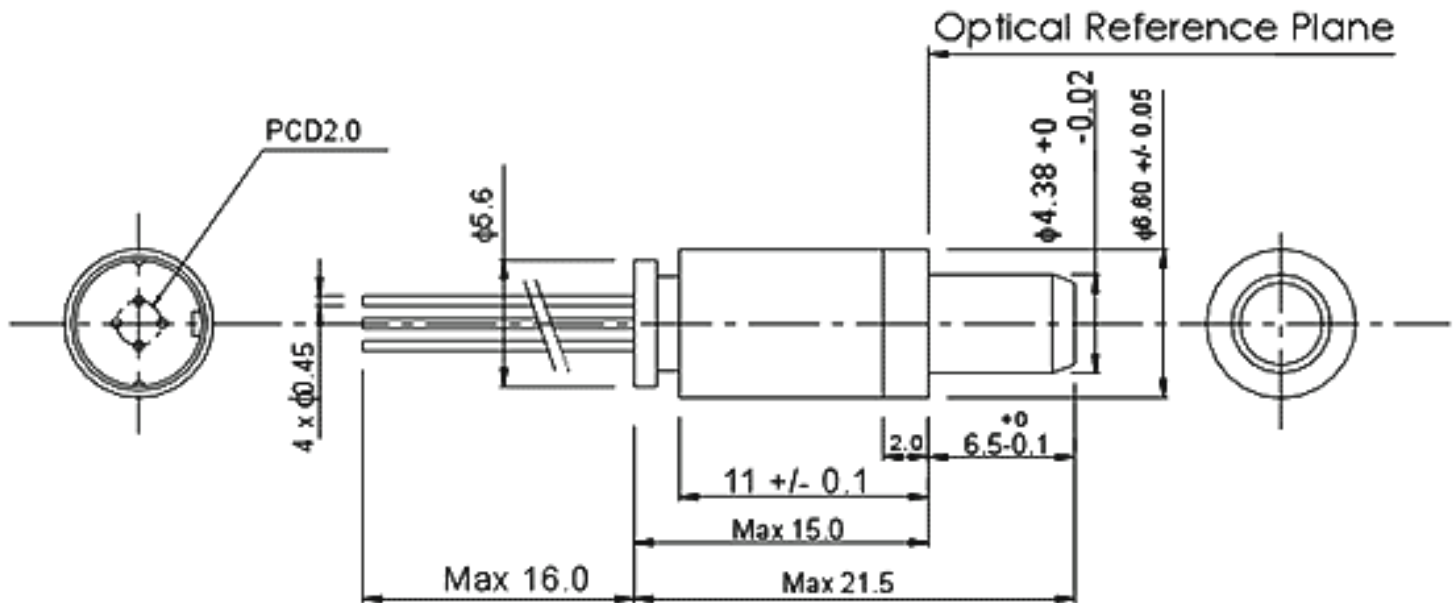
Dimensions and Pin assignment can be customized.



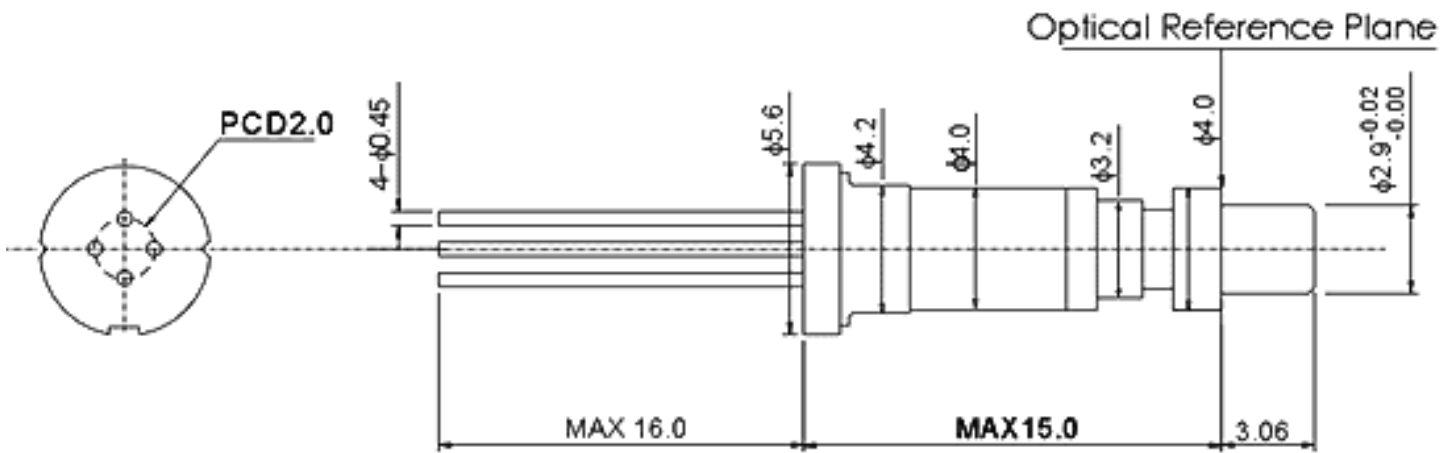


*Fiber: Single Mode
*Code: flame retardant tight buffer

< MB >



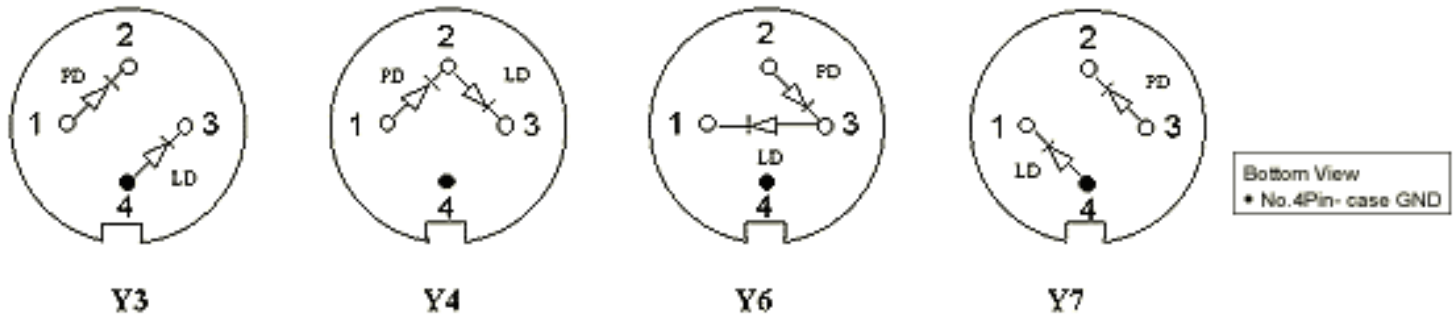
< RC >



unit: mm

< LC >

Pin Assignment



Safety Information

This product complies with 21 CFR 1040.10 and 1040.11, Class 3b laser product. Invisible laser radiation is emitted from the end of the fiber or connector. Avoid direct exposure to the beam.



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