

1550nm

C-15-001-R-SFCL/M/H
C-15-001-P-SFCL/M/H

1550nm Laser Diode Modules

Features

- Laser diode with multi-quantum-well structure
- Uncooled operation at $-40\sim+85^{\circ}\text{C}$
- Built-in InGaAs monitor photodiode
- Hermetically sealed active component

Packaging

- FC/ST/SC receptacle package with 2-hole flange
- Uncooled fiber pigtailed with optional FC/ST/SC connector

Application

- Design for fiber optic networks



Note:

1. Pin assignment can be customized.
2. Specifications subject to change without notice.

Handling Precautions

This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD guidelines.

Absolute Maximum Ratings($T_c=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Fiber Output Power Receptacle/Pigtailed L/M/H	P_f	0.4(L)/0.9(M)/1.6(H)	mW
LD Reverse Voltage	V_{RLD}	2	V
PD Reverse Voltage	V_{RPD}	10	V
PD Forward Current	I_{FPD}	2.0	mA
Operating Temperature	T_{opr}	$-40\sim+85$	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	$-40\sim+85$	$^{\circ}\text{C}$

(All optical data refer to a coupled 9/125 μm SM fiber)

Optical and Electrical Characteristics($T_c=25^{\circ}\text{C}$)

Parameter	Symbol	Min.	Typ.	Max	Unit	Test condition
Threshold Current	I_{th}	-	12	15	mA	CW
Fiber Output Power L M H	P_f	0.2 0.5 1	-	-	mW	CW, $I_{th}+25\text{mA}$, kink free
Peak Wavelength	λ	1520	1550	1580	nm	CW, $P_f=P_f(\text{Min})$
Spectrum Width	$\Delta\lambda$	-	2	5	nm	CW, $P_f=P_f(\text{Min})$
Forward Voltage	V_F	-	1.2	1.6	V	CW, $P_f=P_f(\text{Min})$
Rise/Fall Time	t_r / t_f	-	-	0.5	ns	$I_{bias}=I_{th}$, 10~90%
Tracking Error	$\Delta P_f/P_f$	-	-	± 1.0	dB	APC, $-40\sim+85^{\circ}\text{C}$
PD Monitor Current	I_m	100	-	-	μA	CW, $P_f=P_f(\text{Min})$, $V_{RPD}=2\text{V}$
PD Dark Current	I_{DARK}	-	-	0.1	μA	$V_{RPD}=5\text{V}$
PD Capacitance	C_t	-	6	15	pF	$V_{RPD}=5\text{V}$

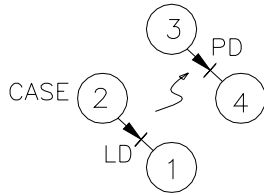
Connector Option

Model	Package	Fiber	Connector
C-15-001-R-SFCL/M/H C-15-001-R-SSTL/M/H C-15-001-R-SSCL/M/H	Receptacle	-	FC ST SC
C-15-001-P-SFCL/M/H C-15-001-P-SSTL/M/H C-15-001-P-SSCL/M/H	Pigtailed	SM	FC ST SC
C-15-001-P-SL/M/H			(None)

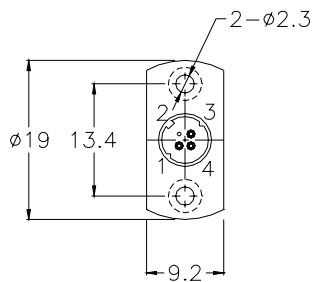
LD Modules-*receptacle*

LD Pin Assignment

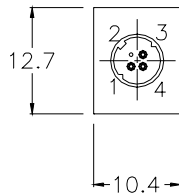
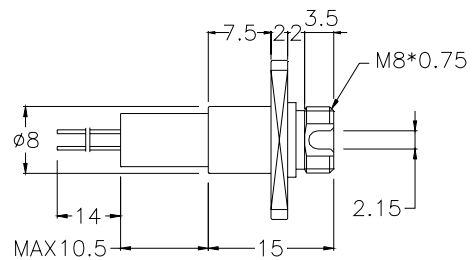
Units in mm.



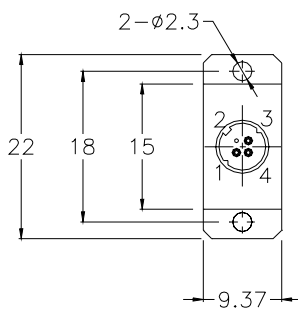
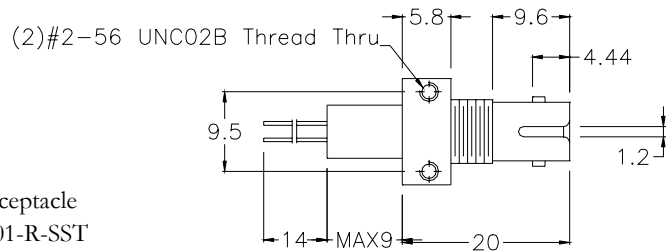
- Pin 1 : Laser Cathode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Monitor Diode Anode
- Pin 4 : Monitor Diode Cathode



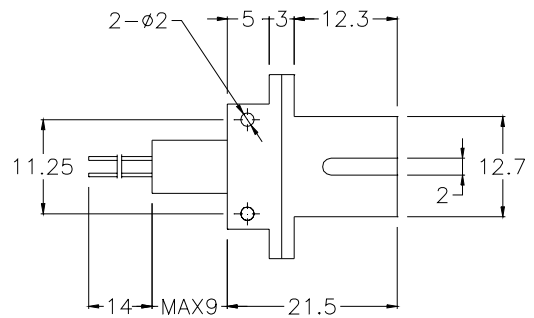
FC Receptacle
C-15-001-R-SFC



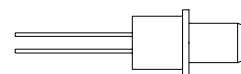
ST Receptacle
C-15-001-R-SST



SC Receptacle
C-15-001-R-SSC



Customer Specified



LD Modules-*pigtailed*

Units in mm.

