

1300 nm

C-13XX-DFB2.5-RD-SXXXX

C-13XX-DFB2.5-PD-SXXXX/XXX-X

1300 nm Series 2.5G CWDM Laser Diode Module**Features**

- Un-cooled laser diode with MQW structure
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983
- Single frequency operation with high SMSR

Packaging

- FC/ST/SC receptacle package with 2-hole flange
- Fiber pigtailed with optional FC/ST/SC/MU connector

Application

- Design for 2.5G CWDM high speed optic networks

**Note:**

1. Pin assignment can be customized.
 2. Specifications subject to change without notice.
 3. Selected wavelength is available for WDM application
- *Peak wavelength
n=1275 ; 1300 ; 1325 ; 1350

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 procedures.

OIC- Luminent
Reference No: OM-D-SP-0009-V2

Absolute Maximum Ratings(Tc=25°C)

Parameter	Symbol	Value	Unit
Fiber Output Power L/M/H/2	P _f	1(L)/1.5(M)/2.5(H)/3(2)	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}	0~+70	°C
Storage Temperature	T _{stg}	-40~+85	°C

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

Optical and Electrical Characteristics(Tc=25°C)

Parameter	Symbo	Min.	Typ.	Max.	Unit	Test condition
Threshold Current	I _{th}	-	10	15	mA	CW
Fiber Output Power L M H 2	P _f	0.2 0.5 1 2	- - 1.6 2.5	0.5 1 - -	mW	CW, I _{th} +20mA , kink free
Peak Wavelength	λ	n-2	n	n+2	nm	Note 3
Side mode Suppression	Sr	30	35	-	dB	CW, P _f =P _f (Min), 0~70°C
Forward Voltage	V _F	-	1.2	1.5	V	CW, P _f =P _f (Min)
Rise/Fall Time	t _r / t _f	-	-	150	ps	I _{bias} =I _{th} , 10~90%
Tracking Error	Δ P _f /P _f	-	-	±1.5	dB	APC, 0~70°C
PD Monitor Current	I _m	100	-	-	μA	CW, P _f =P _f (Min), V _{RPD} =2V
PD Dark Current	I _{DARK}	-	-	0.1	μA	V _{RPD} =5V
PD Capacitance	C _t	-	6	15	pF	V _{RPD} =5V, f=1MHz

Ordering Information

C-XXXX-DFB2.5-XD-SXXXXX/XXX-X

Wavelength

1275 : n=1274.6nm
1300 : n=1299.1nm
1325 : n=1323.6nm
1350 : n=1348.1nm

Package

P=Pigtail
R=Receptacle
Pin Assignment
D=DType

Connector

FC/ST/SC/MU/-

Fiber Output Power

L/M/H/2

"I" = Isolator

"-." = No isolator

- = PC Fiber

APC = APC Fiber

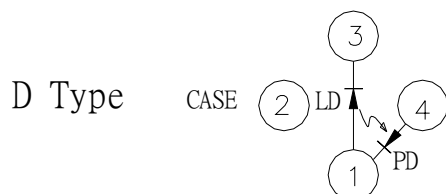
Flange type (-;O;V;K)

2.5G DFB LD Module-receptacle

Part Number : C-13XX-DFB2.5-RD-SXXXX

LD Pin Assignment

Units in mm



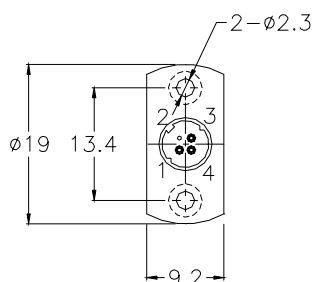
Pin 1 : Laser Anode and Monitor Diode Cathode

Pin 2 : Case Gnd

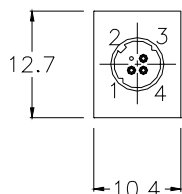
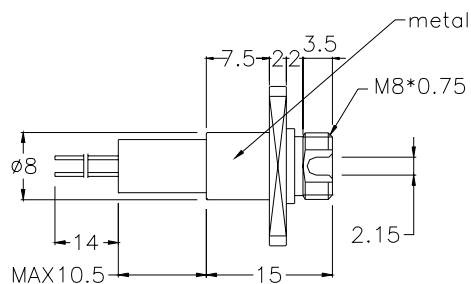
Pin 3 : Laser Cathode

Pin 4 : Monitor Diode Anode

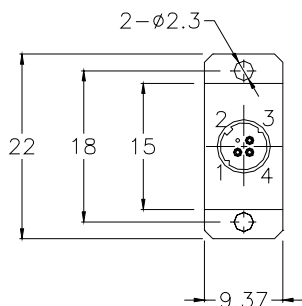
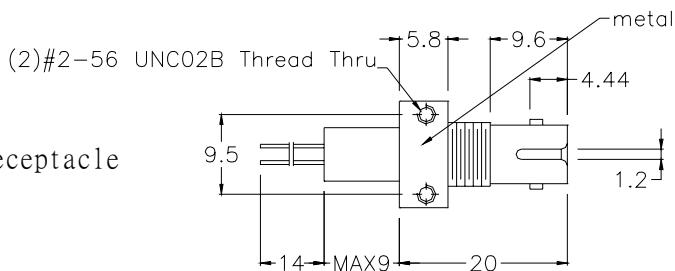
Connector Type



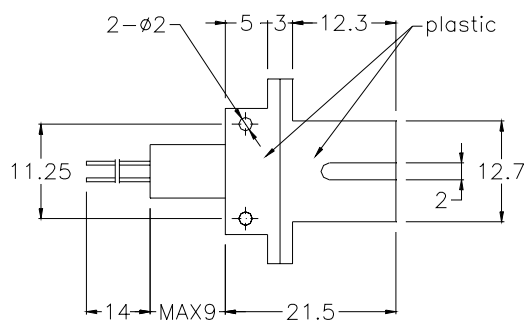
FC Receptacle



ST Receptacle



SC Receptacle



1300 nm

C-13XX-DFB2.5-RD-SXXXX

C-13XX-DFB2.5-PD-SXXXX/XXX-X

1300 nm Series 2.5G CWDM Laser Diode Module

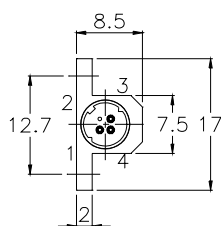
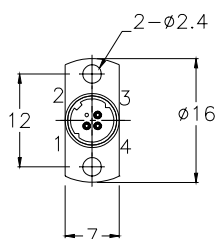
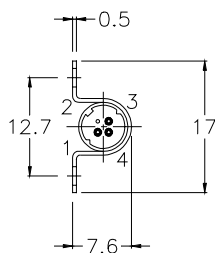
2.5G DFB LD Module-pigtailed

Part Number : C-13XX-DFB2.5-PD-SXXXX/XXX-X

Packaging Dimension

Units in mm

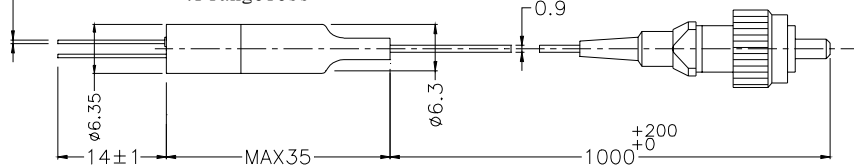
P.C.D. 2.0±0.5



Flange Type

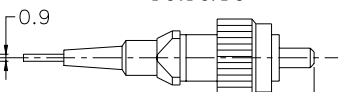
4-φ0.45

" — ":Flangeless

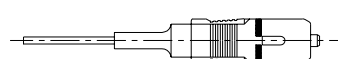


Connector Type

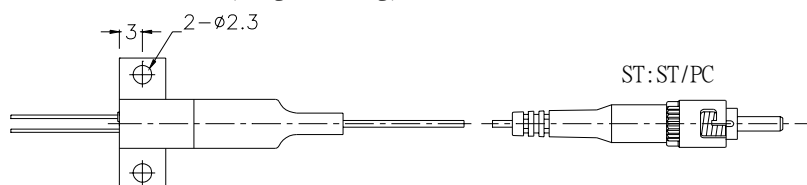
FC:FC/PC



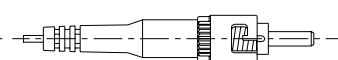
SC:SC/PC



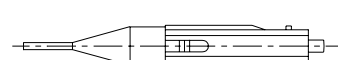
"O":Horizontal (Omega Housing)



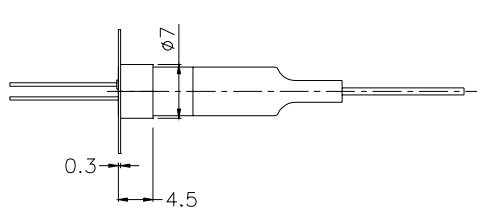
ST:ST/PC



MU:MUJ /PC



"V":Vertical



"K":Horizontal (KX Housing)

