

1300 nm

C-13XX-DFB-RX-SXXXX

C-13XX-DFB-PX-SXXXX/XXX-X

1300 nm Series 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 CWDM fiber 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=1274.6; 1299.1 ; 1323.6 ; 1348.1

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.

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	-	-	0.3	ns	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

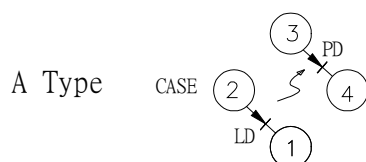
C-XXXX-DFB-XX-SXXXX/XXX-X				
Wavelength 1275 : n=1274.6nm 1300 : n=1299.1nm 1325 : n=1323.6nm 1350 : n=1348.1nm	Package P=Pigtail R=Receptacle Pin Assignment "- "=A Type B =B Type D =DType	Connector FC/ST/SC/MU/- Fiber Output Power L/M/H/2 "I" = Isolator "- " = No isolator	- = PC Fiber APC = APC Fiber Flange type (-;O;V;K)	

DFB LD Module-receptacle

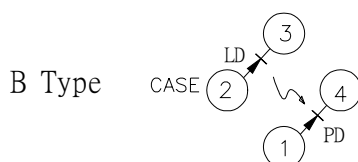
Part Number : C-13XX-DFB-RX-SXXXX

LD Pin Assignment

Units in mm



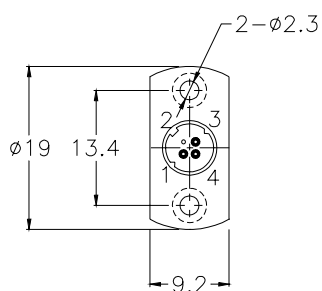
Pin 1 : Laser Cathode
Pin 2 : Laser Anode and Case Gnd
Pin 3 : Monitor Diode Anode
Pin 4 : Monitor Diode Cathode



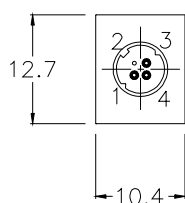
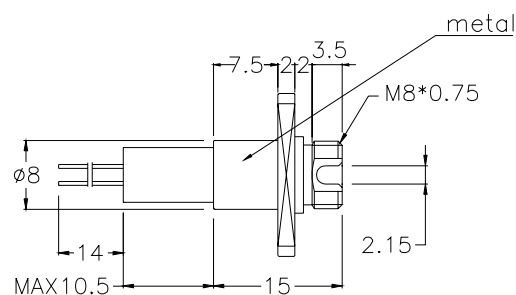
Pin 1 : Monitor Diode Anode
Pin 2 : Laser Anode and Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Cathode



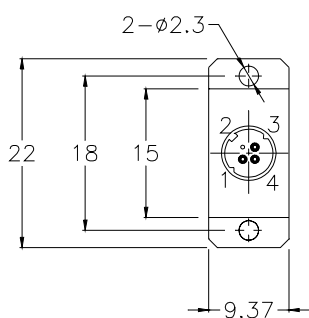
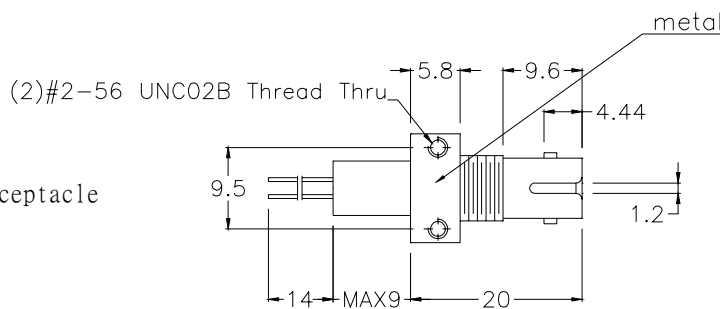
Pin 1 : Laser Anode and Monitor Diode Cathode
Pin 2 : Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Anode



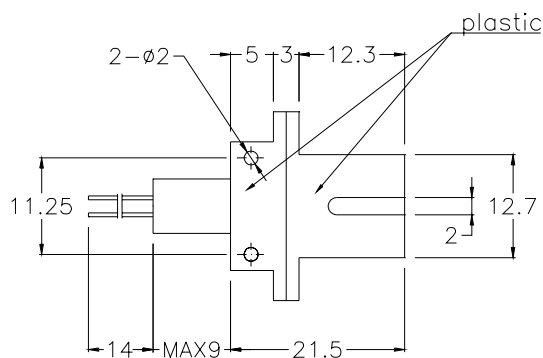
FC Receptacle



ST Receptacle



SC Receptacle



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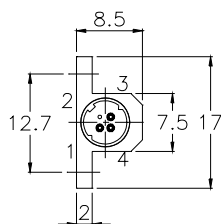
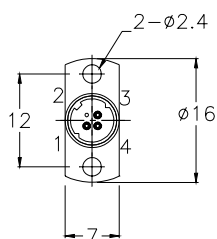
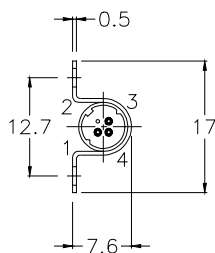
DFB LD Module-pigtailed

Part Number : C-13XX-DFB-PX-SXXXX/XXX-X

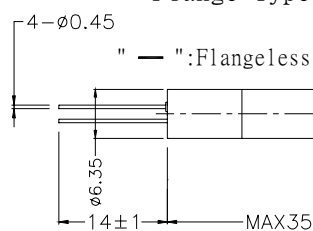
Packaging Dimension

Units in mm

P.C.D. 2.0±0.5

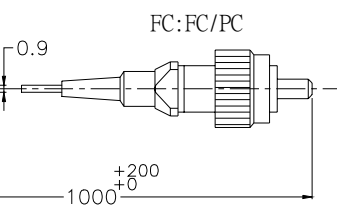


Flange Type

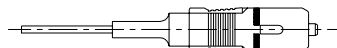


"":Flangeless

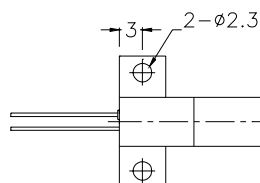
Connector Type



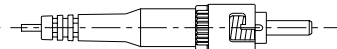
FC:FC/PC



"O":Horizontal (Omega Housing)



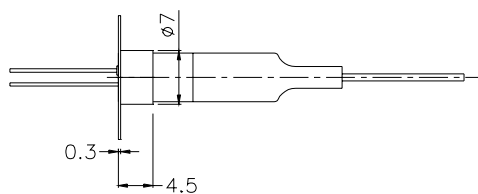
ST:ST/PC



MU:MUJ /PC



"V":Vertical



"K":Horizontal (KX Housing)

