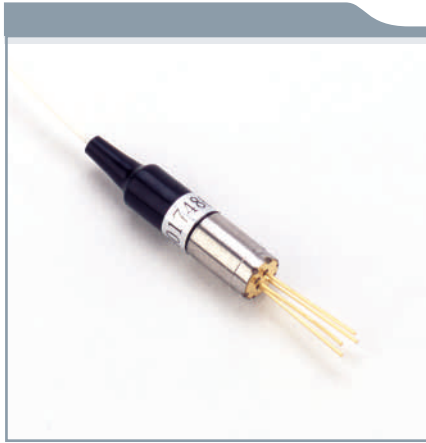


C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX



Features

- Uncooled 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

Application

- Designed for 2.5 Gbps CWDM high speed optic networks

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

Parameter	Symbol	Value	Unit
Fiber Output Power			
L	P _f	0.4	mW
M		0.9	
H		1.6	
LD Reverse Voltage	V _{rld}	2	V
PD Reverse Voltage	V _{rpd}	10	V
PD Forward Current	I _{fpd}	2	mA
Operating Temperature	T _{opr}	0 to +70	°C
Storage Temperature	T _{stg}	-40 to +85	°C

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

Parameter	Symbol	Min.	Typ	Max	Unit	Test condition
Threshold Current	I _{th}	-	10	15	mA	CW
Fiber Output Power						
L	P _f	0.2	-	0.5	mW	CW, I _{th} +30mA, kink free
M		0.5	-	1		
H		1	-	2		
2		2	-	3		
Peak Wavelength	λ	n-2	n	n+2	nm	
Side Mode Suppression	S _r	30	35	-	dB	CW, P _f =P _f (Min), 0 to +70°C
Forward Voltage	V _F	-	1.2	1.5	V	CW, P _f =P _f (Min)
Rise Time, Fall Time	t _r , t _f	-	-	150	Ps	I _{bias} = I _{th} , 10 to 90%
Tracking Error	ΔP _f /P _f	-	-	±1.0	dB	APC, 0 to +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

C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX

Ordering Information

C--1470--DFB2.5--XX--SXXXX-X

Wavelength

1470=	1470 nm
1490=	1490 nm
1510=	1510 nm
1530=	1530 nm
1550=	1550 nm
1570=	1570 nm
1590=	1590 nm
1610=	1610 nm

Package
P=Pigtail
R=Receptacle

Pin Assignment
D= D type

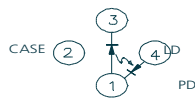
Connector
FC/ST/SC/-
Fiber Output Power
"I"=Isolator
" " =No isolator
Flange type (-; O; V; K)

2.5G DFB LD Modules-receptacle

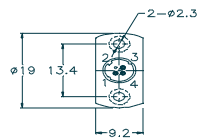
LD Pin Assignment

Units in mm

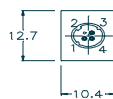
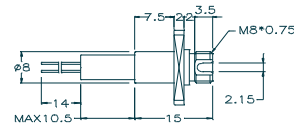
D Type



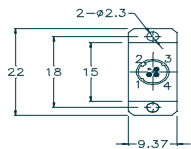
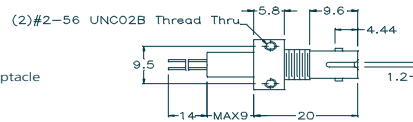
Pin 1 : Laser Anode and Monitor Diode Cathode
Pin 2 : Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Anode



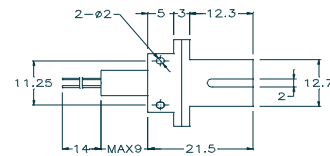
FC Receptacle



ST Receptacle



SC Receptacle



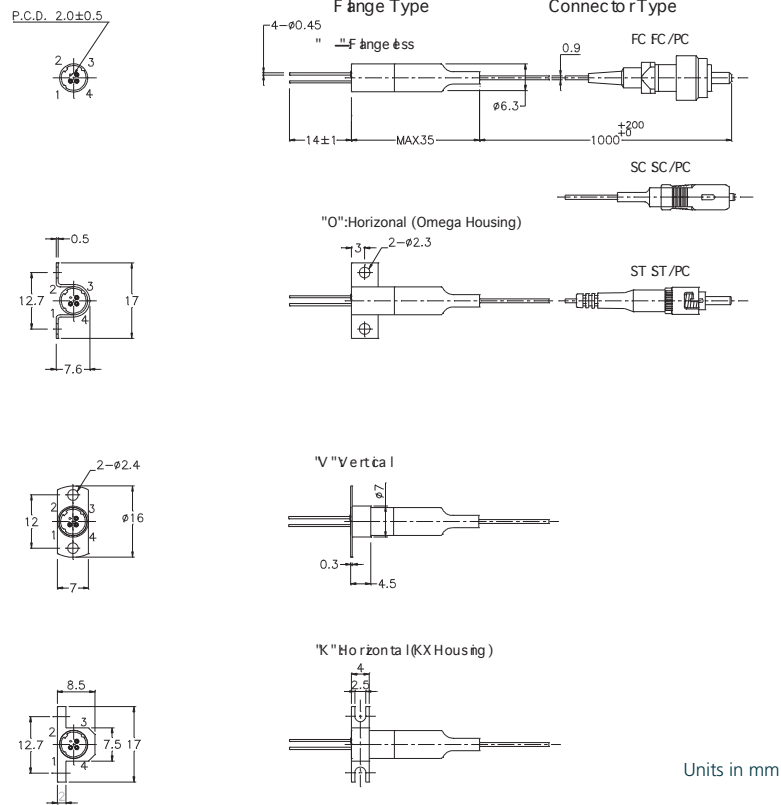
Customer Specified



C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX

2.5G DFB LD Modules-pigtailed

Packaging Dimension



Note: This singlemode transceiver is a class I laser product. It complies with IES 825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical parts of the module will terminate with an optical connector or with a dust plug.

Warnings

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.

Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

Legal Notice

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