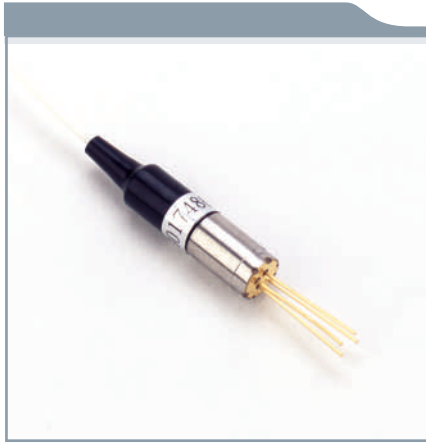


C-1470-DFB2.5-RD-SFCX • C-1470-DFB2.5-PD-SFCX



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

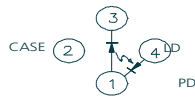
Connector
FC/ST/SC/-
Fiber Output Power
"I"=Isolator
" " =No isolator
Flange type (-; O; V; K)

2.5G DFB LD Modules-receptacle

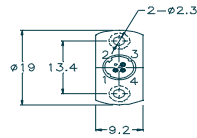
LD Pin Assignment

Units in mm

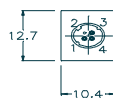
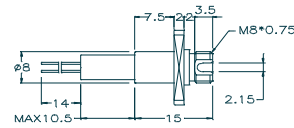
D Type



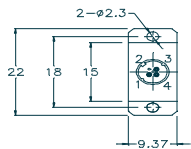
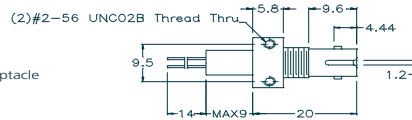
- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode



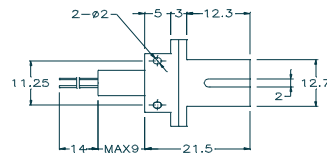
FC Receptacle



ST Receptacle



SC Receptacle



Customer Specified



