P/N: C-151-001-XX-SXXXX/XXX-X-XX

1510nm Laser Diode Module

Features

- Laser diode with Multi-quantum-well structure
- Un-cooled operation at -40 to +85 ℃
- Built-in InGaAs monitor photodiode
- Hermetically sealed active component
- Complies with Telcordia Technologies GR-468-CORE
- FC/ST/SC Receptacle package with 2-hole flange
- Fiber pigtailed with optional FC/ST/SC/MU connector
- Design for fiber-optics networks
- RoHS Compliant available

Absolute Maximum Ratings (Tc=25 ℃)

Parameter	Symbol	Rating	Unit
Fiber Output Power L/M/H	P_f	0.6(L)/1 (M)/2.5(H)	mW
LD Reverse Voltage	V_{RLD}	2	V
PD Reverse Voltage	V_{RPD}	10	V
PD Forward Current	I_{FPD}	2	mA
Operating Temperature	Topr	-40 ~ 85	℃
Storage Temperature	Tstg	-40 ~ 85	℃

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

Optical and Electrical Characteristics (Tc=25 ℃)

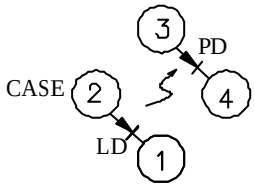
Parameter		Symbol	Min.	Typ.	Max.	Unit	Notes
Threshold Current		Ith	-	10	15	mA	CW
Fiber Output Power	L	Pf	0.2	-	0.5	mW	CW, Ith+25mA, kink free
	M		0.5	-	1		
	H		1	-	2		
Peak Wavelength		λ	1490	1510	1530	nm	CW, $P_f = P_f$(Min)
Spectrum Width (RMS)	Receptacle	Δλ	-	2	5	nm	CW, $P_f = P_f$(Min)
	Pigtail		-	-	3		
Forward Voltage		V_F	-	1.2	1.5	V	CW, $P_f = P_f$(Min)
Rise Time / Fall Time		T_r / T_f	-	-	0.3	ns	Ibias=Ith, 10%~90%
Tracking Error		$\Delta P_f / P_f$	-1.5	-	1.5	dB	APC, -40 ~ 85℃
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

Note:

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

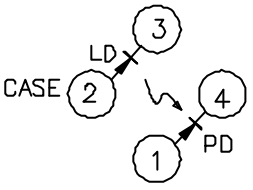
Pin Assignment

A Type



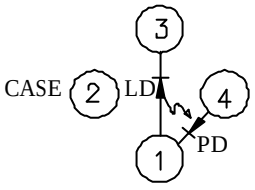
Pin 1 : Laser Cathode
Pin 2 : Laser Anode and Case Gnd
Pin 3 : Monitor Diode Anode
Pin 4 : Monitor Diode Cathode

B Type



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

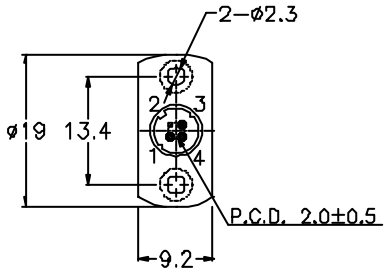
D Type



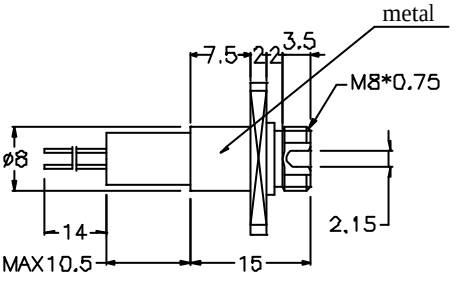
Pin 1 : Laser Anode and Monitor Diode Cathode
Pin 2 : Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Anode

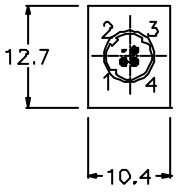
Packaging Dimensions (Units in mm)

Part Number: C-151-001-RX-SXXXX-XX

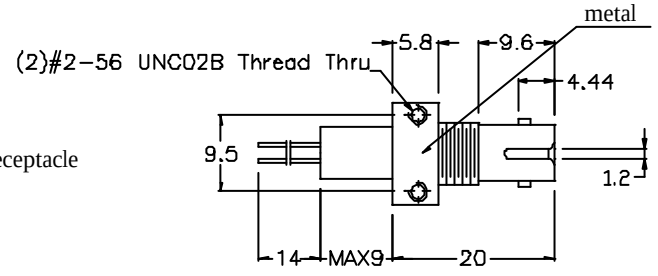


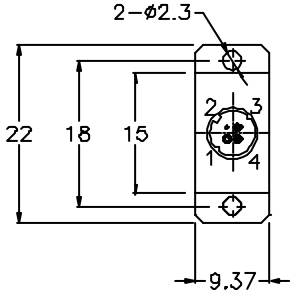
FC Receptacle



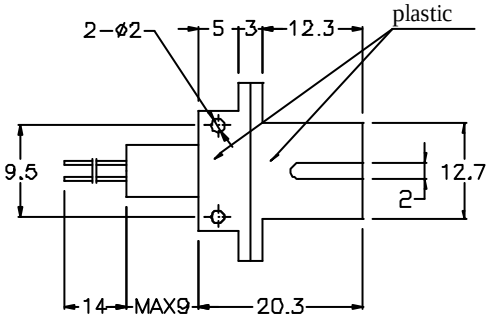


ST Receptacle

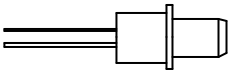




SC Receptacle

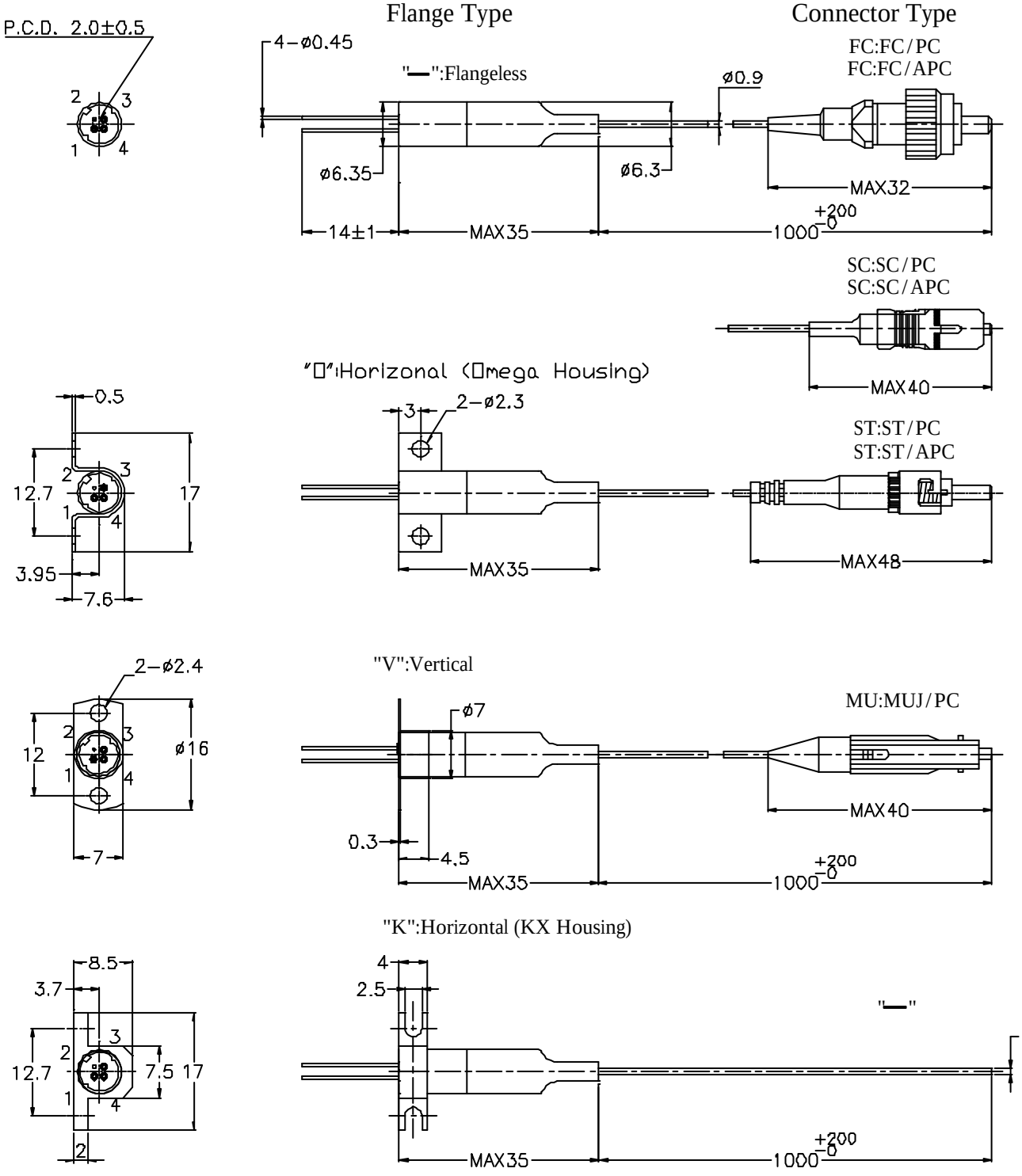


Customer Specified



Packaging Dimensions (Units in mm)

Part Number: C-151-001-PX-SXXXX/XXX-X-XX



Ordering Information

C-151-001-XX-SXXXX/XXX-X-XX

- Wavelength: 151=1510nm
- Package: R=Receptacle; P=Pigtail
- Pin Assignment: Blank=A Type; B=B Type; D=D Type
- Connector: FC/ST/SC/MU/Blank
- Fiber Output Power: L/M/H
- Isolator: I=Isolator; Blank=No isolator
- Blank=PC Fiber; APC=APC Fiber
- Flange type (Blank;O;V;K)
- RoHS Compliant: Blank/G5/GR
  - Blank = RoHS non-compliant product
  - G5 = RoHS 5/6-compliant product (lead exemption)
  - GR = Full RoHS compliant product (no exemption)

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.

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