



### Features

- Laser diode with Multi-quantum-well structure
- Un-cooled operation at -40 to +85 °C
- 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 °C)

Parameter	Symbol	Rating	Unit
Fiber Output Power L/M/H	P <sub>f</sub>	0.6(L)/1 (M)/2.5(H)	mW
LD Reverse Voltage	V <sub>RLD</sub>	2	V
PD Reverse Voltage	V <sub>RPD</sub>	10	V
PD Forward Current	I <sub>FPD</sub>	2	mA
Operating Temperature	T <sub>opr</sub>	-40 ~ 85	
Storage Temperature	T <sub>stg</sub>	-40 ~ 85	

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

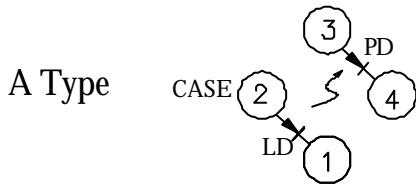
### Optical and Electrical Characteristics (Tc=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Threshold Current	I <sub>th</sub>	-	10	15	mA	CW
Fiber Output Power	L M H P <sub>f</sub>	0.2 0.5 1	- - -	0.5 1 2	mW	CW, I <sub>th</sub> +25mA, kink free
Peak Wavelength		1490	1510	1530	nm	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Spectrum Width (RMS)	Receptacle Pigtail	- -	2 -	5 3	nm	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Forward Voltage	V <sub>F</sub>	-	1.2	1.5	V	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Rise Time / Fall Time	T <sub>r</sub> / T <sub>f</sub>	-	-	0.3	ns	I <sub>bias</sub> =I <sub>th</sub> , 10%~90%
Tracking Error	P <sub>f</sub> / P <sub>f</sub>	-1.5	-	1.5	dB	APC, -40 ~ 85
PD Monitor Current	I <sub>m</sub>	100	-	-	μ A	CW, P <sub>f</sub> = P <sub>f</sub> (Min), V <sub>RPD</sub> = 2V
PD Dark Current	I <sub>dark</sub>	-	-	0.1	μ A	V <sub>RPD</sub> = 5V
PD Capacitance	C <sub>t</sub>	-	6	15	pF	V <sub>RPD</sub> = 5V, f = 1MHz

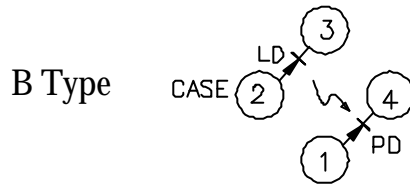
#### Note:

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

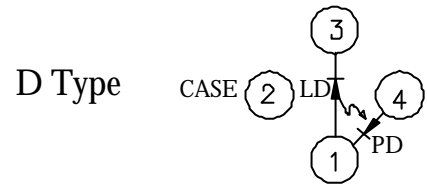
### Pin Assignment



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



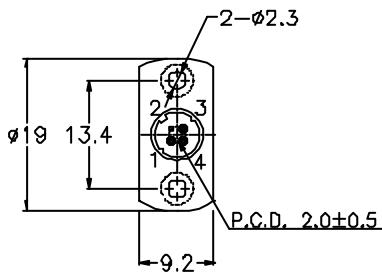
- Pin 1 : Monitor Diode Anode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Cathode



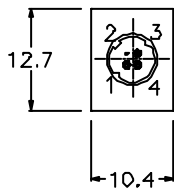
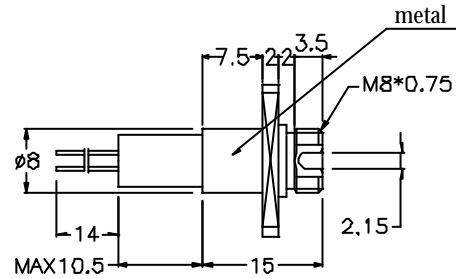
- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode

### Packaging Dimensions (Units in mm)

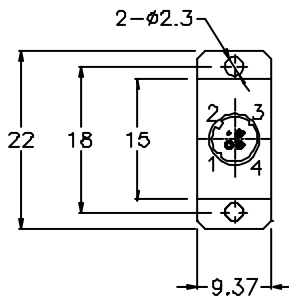
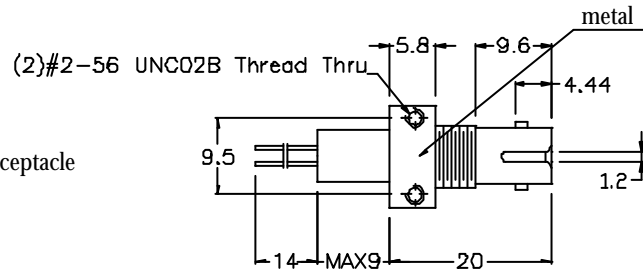
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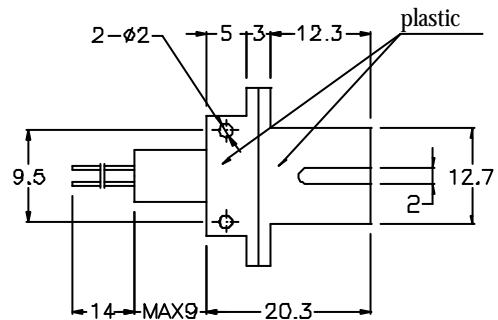
FC Receptacle



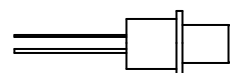
ST Receptacle



SC Receptacle

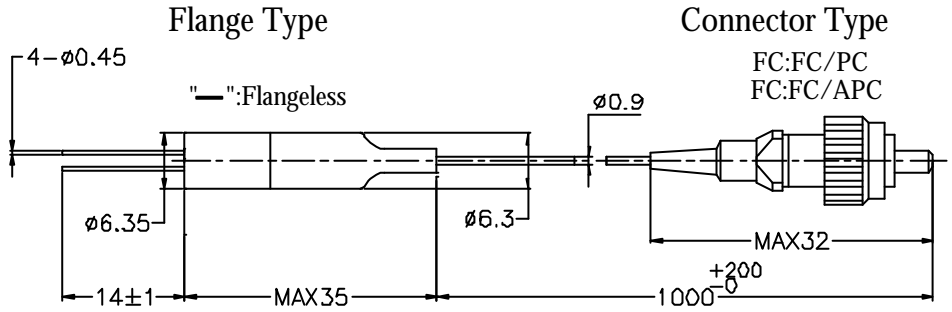
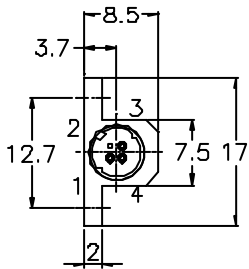
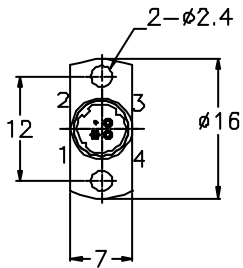
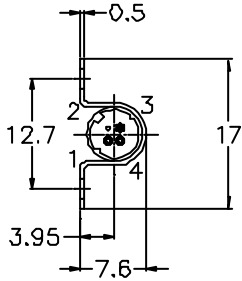
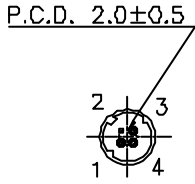


Customer Specified

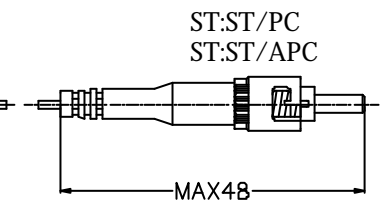
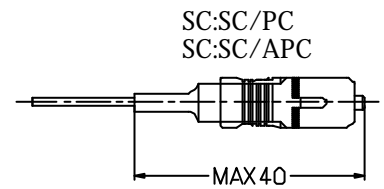
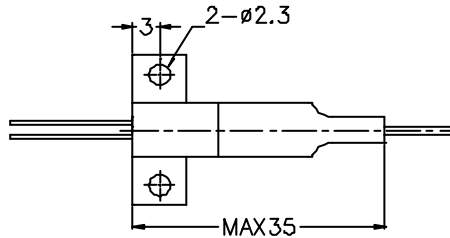


Packaging Dimensions (Units in mm)

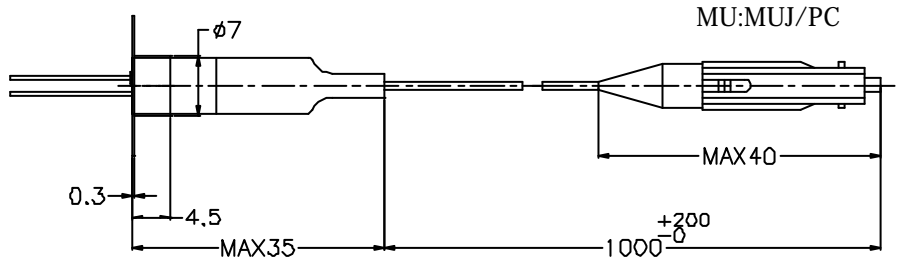
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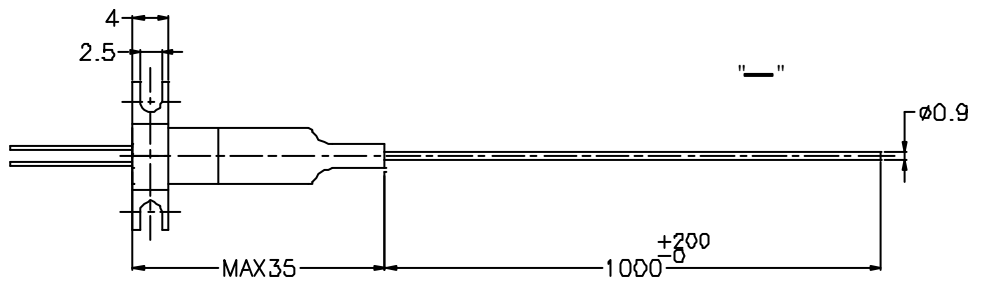
"□":Horizontal (Omega Housing)



"V":Vertical



"K":Horizontal (KX Housing)



Ordering Information

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

Wavelength  
151=1510nm

Package  
R=Receptacle  
P=Pigtail

Connector  
FC/ST/SC/MU/Blank

Fiber Output Power  
L/M/H

Blank=PC Fiber  
APC=APC Fiber

Flange type (Blank;O;V;K)

Pin Assignment  
Blank=A Type  
B=B Type  
D=D Type

Isolator  
I=Isolator  
Blank=No isolator

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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