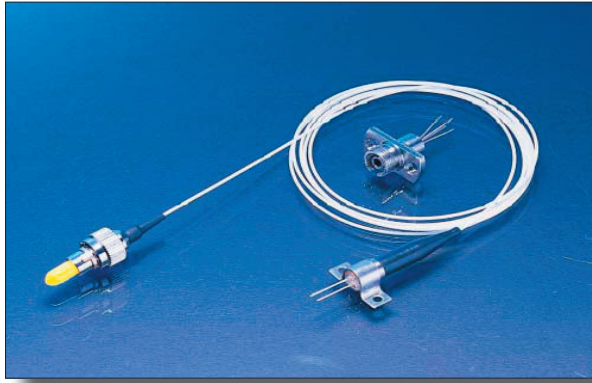


## C-15-DFB-XX-SXXXX/XXX-X-XX

**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 Telcordia Technologies GR-468-CORE
- Single frequency operation with high SMSR

**Packaging**

- TOSA
- FC/ST/SC receptacle package with 2-hole flange
- Fiber pigtailed with optional FC/ST/SC/MU/LC connector

**Application**

- Design for fiber-optics networks
- RoHS Compliant available

**Absolute Maximum Ratings (T<sub>c</sub>=25°C)**

Parameter	Symbol	Rating	Unit
Fiber Output Power L/M/H/2	P <sub>f</sub>	0.6(L) / 1(M) / 2(H) / 2.6(2)	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>	2.0	mA
Operating Temperature	T <sub>opr</sub>	0 ~+70	°C
Storage Temperature	T <sub>stg</sub>	-40 ~+85	°C

**(All optical data refer to a coupled 9/125μm SM fiber)****Optical and Electrical Characteristics (T<sub>c</sub>=25°C)**

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold Current	I <sub>th</sub>	-	-	20	mA	CW
Fiber Output Power						
L		0.2	-	0.5		CW, I <sub>th</sub> +25mA, kink free
M		0.5	-	1		
H	P <sub>f</sub>	1	1.6	-	mW	
2 (without Isolator)		2	2.5	-		
2 (with Isolator)		2	2.5	-		
Peak Wavelength	λ	1535	1550	1565	nm	Note 3
Side mode Suppression Ratio	Sr	30	35	-	dB	CW, P <sub>f</sub> = P <sub>f</sub> (Min), 0~70°C
Forward Voltage	V <sub>f</sub>	-	1.2	1.5	V	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Rise/Fall Time	t <sub>r</sub> / t <sub>f</sub>	-	-	0.3	ns	I <sub>bias</sub> =I <sub>th</sub> , 10~90% Lead length = 1mm
Tracking Error	ΔP <sub>f</sub> /P <sub>f</sub>	-1.5	-	1.5	dB	APC, 0~70°C
PD Monitor Current	I <sub>m</sub>	100	-	-	μA	CW, P <sub>f</sub> = P <sub>f</sub> (Min), V <sub>RPD</sub> =2V
PD Dark Current	I <sub>DARK</sub>	-	-	0.1	μA	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.**

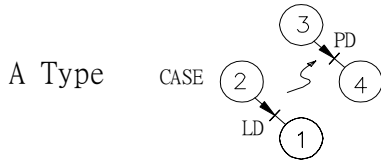
**2.Specifications subject to change without notice.**

**3.Selected wavelength is available for WDM application.**

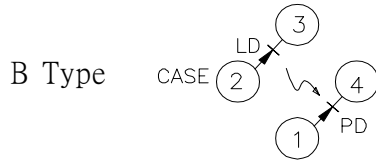
## C-15-DFB-XX-SXXXX/XXX-X-XX

### LD Pin Assignment

### Part Number: C-15-DFB-RX-SXXXX-XX



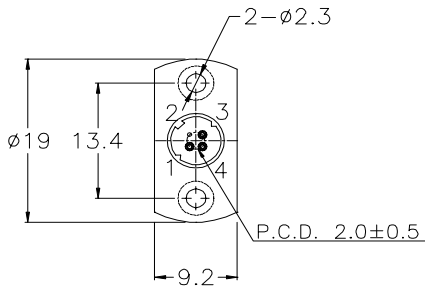
- Pin 1 : Laser Cathode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Monitor Diode Anode
- Pin 4 : Monitor Diode Cathode



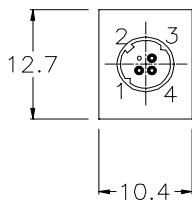
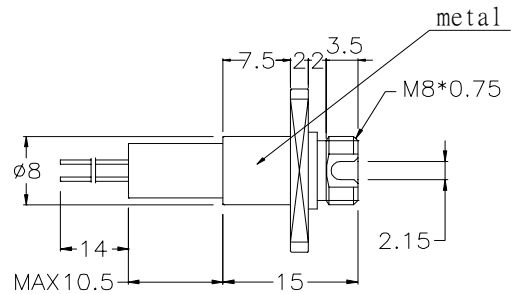
- Pin 1 : Monitor Diode Anode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Cathode



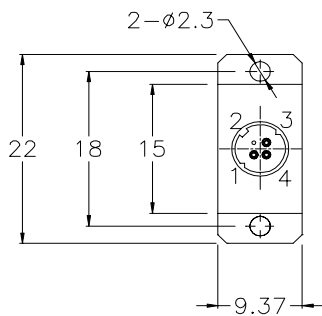
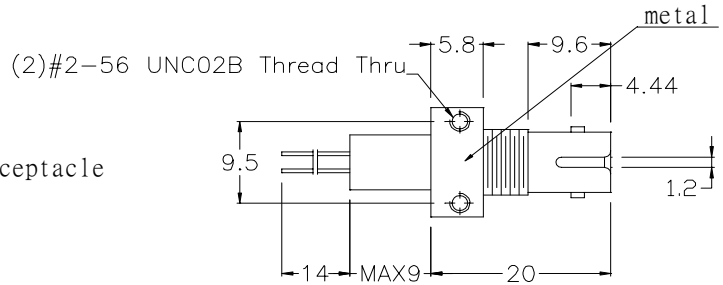
- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode



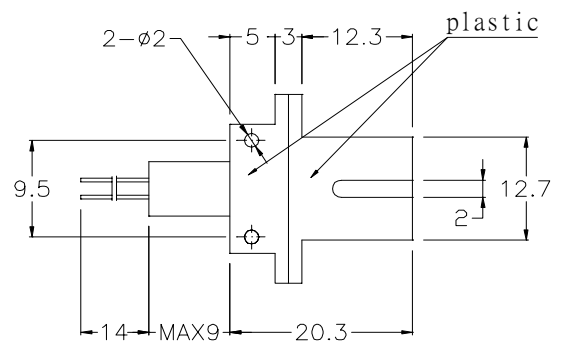
FC Receptacle



ST Receptacle



SC Receptacle

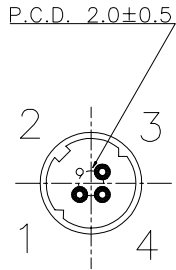


## C-15-DFB-XX-SXXXX/XXX-X-XX

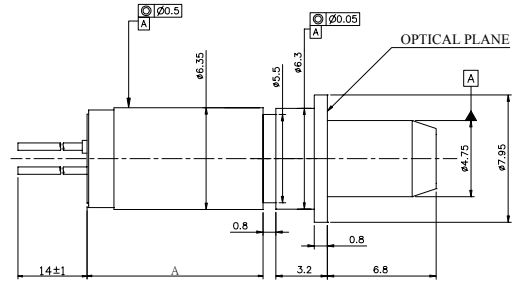
Packaging Dimension

Units in mm.

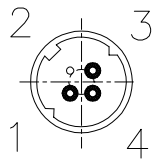
Part Number: C-15-DFB-TX-SSCXX-XX



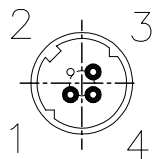
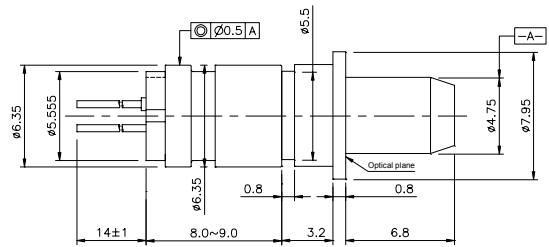
SC TOSA (L Power)  
C-15-DFB-TX-SSCL-XX



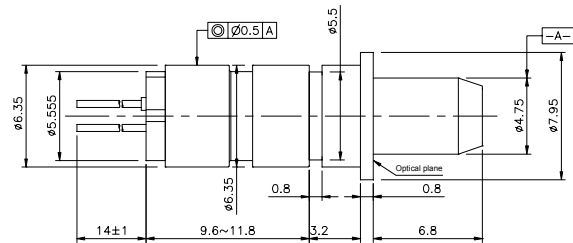
DIMENSION A: 7.77~8.37mm



SC TOSA (L Power with Isolator)  
C-15-DFB-TX-SSCLI-XX



SC TOSA (M&H&2 Power)  
C-15-DFB-TX-SSCXX-XX

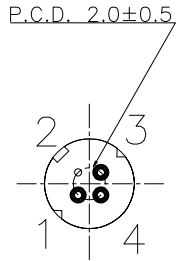


## C-15-DFB-XX-SXXXX/XXX-X-XX

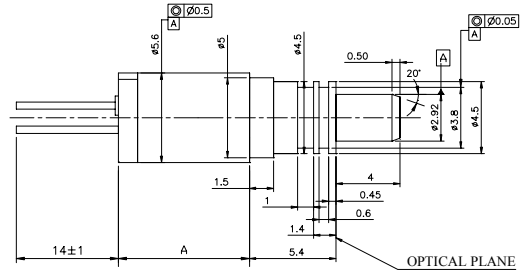
Packaging Dimension

Units in mm.

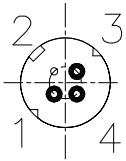
Part Number: C-15-DFB-TX-SLCXX-XX



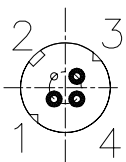
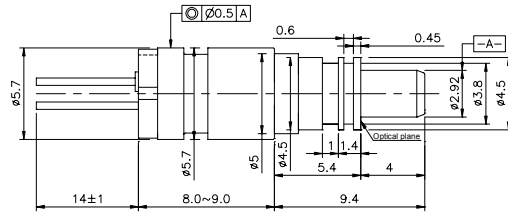
LC TOSA (L Power)  
C-15-DFB-TX-SLCL-XX



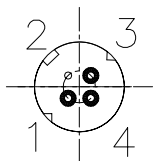
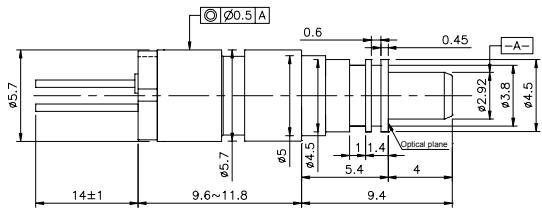
DIMENSION A: 7.77~8.37mm



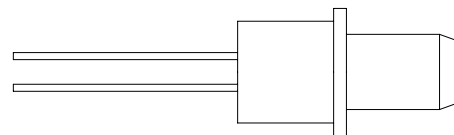
LC TOSA (L Power)  
C-15-DFB-TX-SLCLI-XX



LC TOSA (M&H&2 Power)  
C-15-DFB-TX-SLCXX-XX



Customer Specified  
TOSA

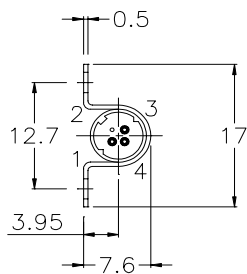
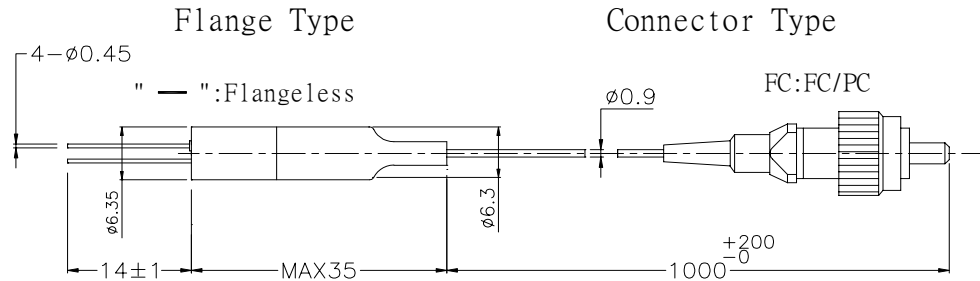
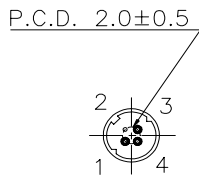


## C-15-DFB-XX-SXXXX/XXX-X-XX

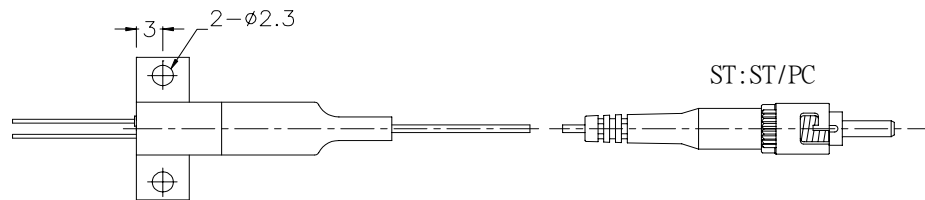
Packaging Dimension

Units in mm.

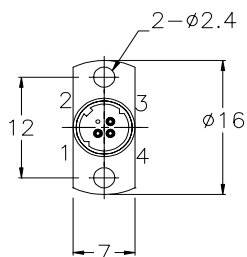
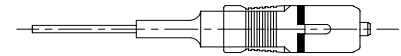
Part Number: C-15-DFB-PX-SXXXX/XXX-X-XX



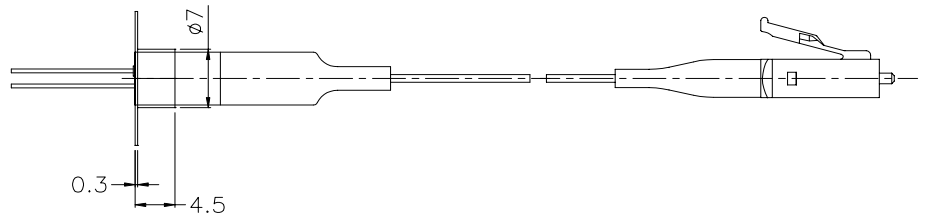
"O":Horizontal (Omega Housing)



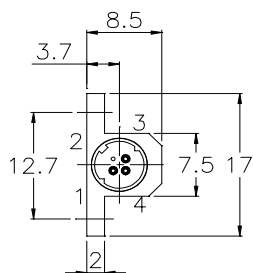
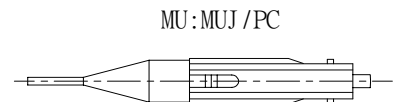
SC:SC/PC



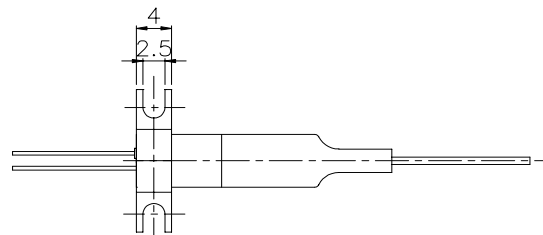
"V":Vertical



LC:LC/PC

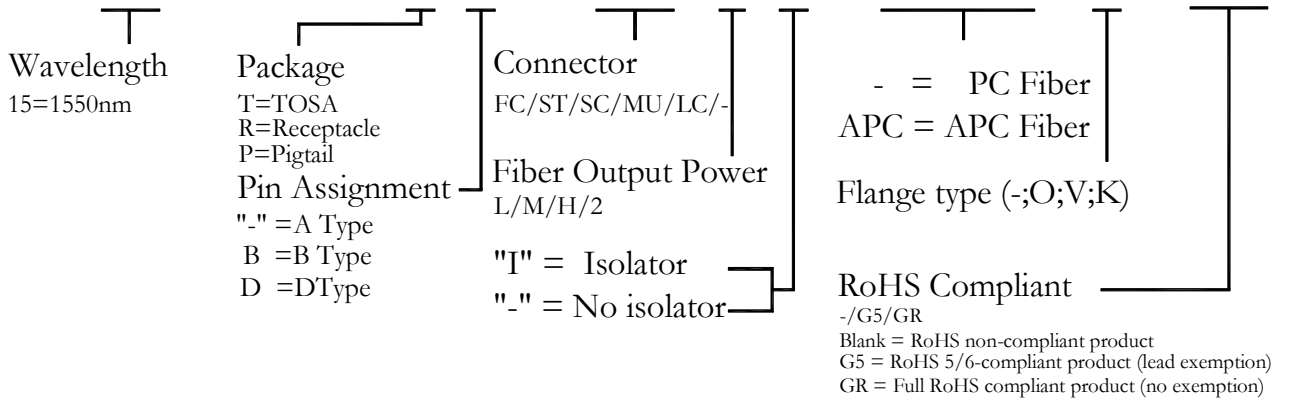


"K":Horizontal (KX Housing)



Ordering Information

C-15-DFB-XX-SXXXXX/XXX-X-XX



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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