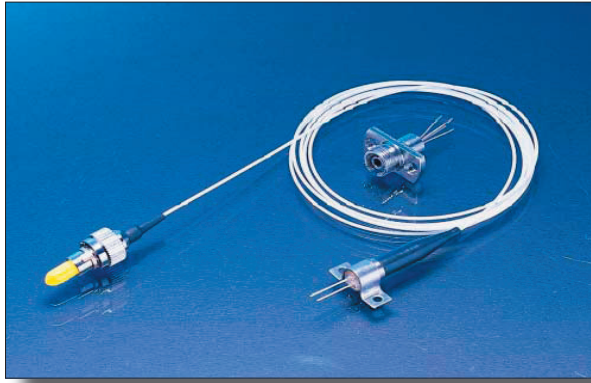


## C-15-DFB2.5-XX-SXXXX/XXX-X-XX



### 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
- RoHS Compliant available

### Packaging

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

### Application

- Design for 2.5Gbps high speed optics networks

### Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating	Unit
Fiber Output Power L/M/H/2	$P_f$	0.6(L) / 1(M) / 2(H) / 2.6(2)	mW
LD Reverse Voltage	$V_{RLD}$	2	V
PD Reverse Voltage	$V_{RPD}$	10	V
PD Forward Current	$I_{FPD}$	2.0	mA
Operating Temperature	$T_{opr}$	0 ~+70	°C
Storage Temperature	$T_{stg}$	-40 ~+85	°C

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

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold Current	$I_{th}$	-	-	20	mA	CW
Fiber Output Power	L	0.2	-	0.5	mW	CW, $I_{th}+30mA$ , kink free
	M	0.5	-	1		
	H	1	1.6	-		
	2	2	2.5	-		
Peak Wavelength	$\lambda$	1535	1550	1565	nm	Note 3
Side mode Suppression Ratio	$S_r$	30	35	-	dB	CW, $P_f = P_f$ (Min), 0~70°C
Forward Voltage	$V_f$	-	1.2	1.5	V	CW, $P_f = P_f$ (Min)
Rise/Fall Time	$t_r / t_f$	-	-	150	ps	$I_{bias} = I_{th}$ , 20~80% Lead length=1mm
Tracking Error	$\Delta P_f / P_f$	-1.5	-	1.5	dB	APC, 0~70°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	$V_{RPD} = 5V, f = 1MHz$

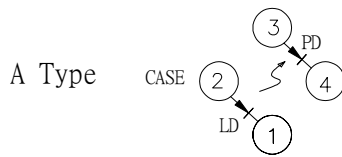
**Note: 1.Pin assignment can be customized.**

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

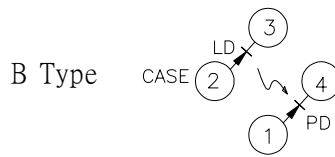
**3.Selected wavelength is available for WDM application.**

## C-15-DFB2.5-XX-SXXXX/XXX-X-XX

### LD 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

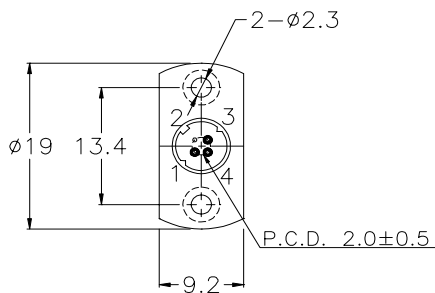


- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode

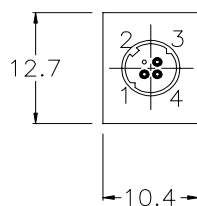
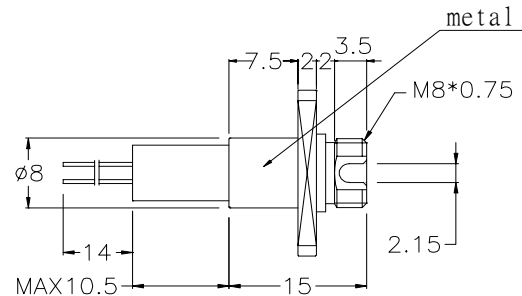
### Packaging Dimension

Units in mm

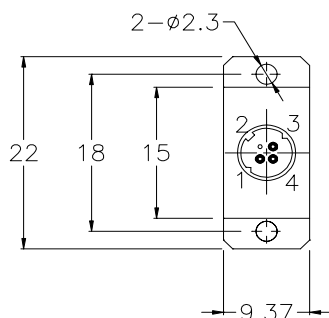
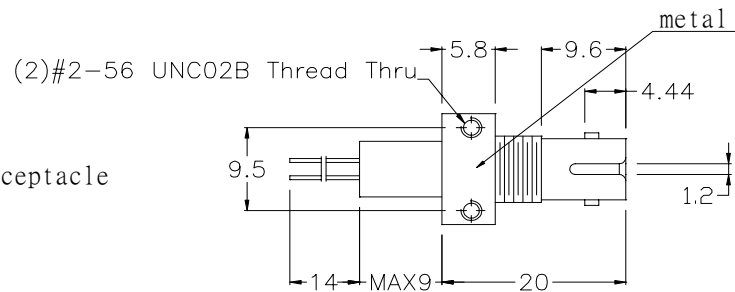
### Part Number: C-15-DFB2.5-RX-SXXXX-XX



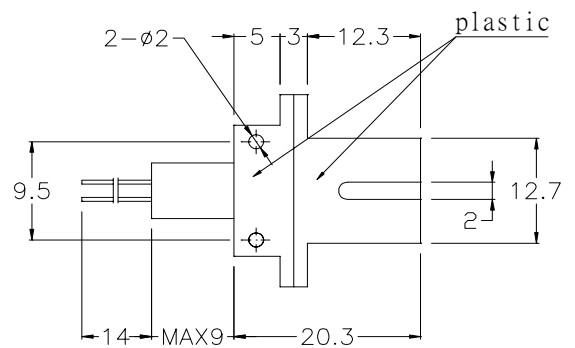
FC Receptacle



ST Receptacle



SC Receptacle

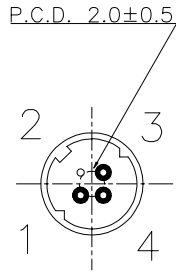


C-15-DFB2.5-XX-SXXXX/XXX-X-XX

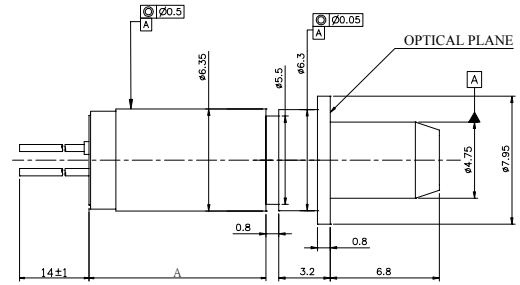
Packaging Dimension

Units in mm.

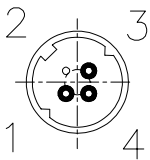
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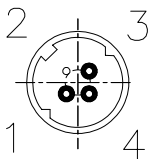
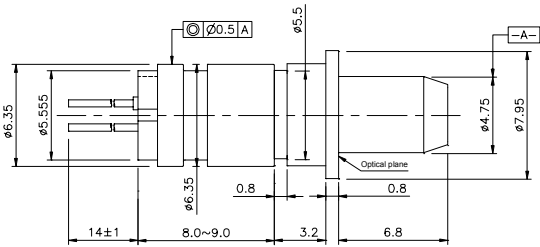
SC TOSA (L Power)  
C-15-DFB2.5-TX-SSCL-XX



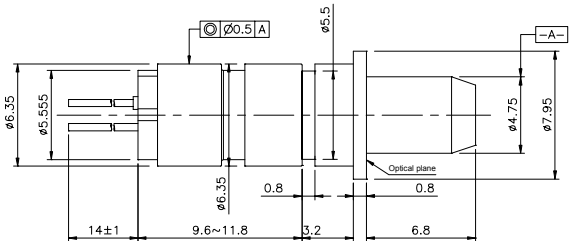
DIMENSION A: 7.77~8.37mm



SC TOSA (L Power with Isolator)  
C-15-DFB2.5-TX-SSCLI-XX



SC TOSA (M&H&2 Power)  
C-15-DFB2.5-TX-SSCXX-XX

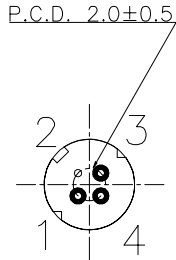


C-15-DFB2.5-XX-SXXXX/XXX-X-XX

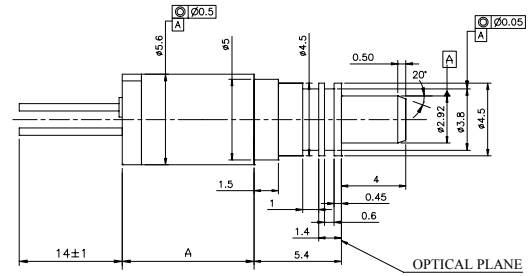
Packaging Dimension

Units in mm.

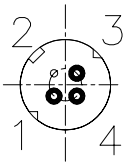
Part Number: C-15-DFB2.5-TX-SLCXX-XX



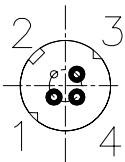
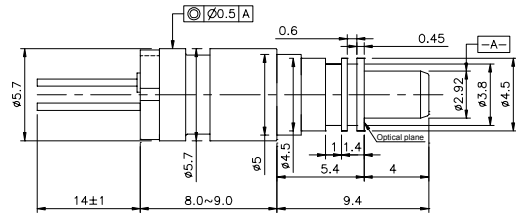
LC TOSA (L Power)  
C-15-DFB2.5-TX-SLCL-XX



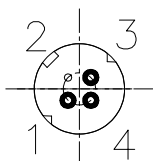
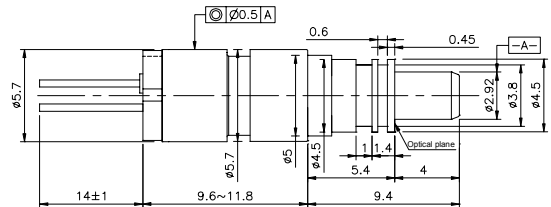
DIMENSION A: 7.77~8.37mm



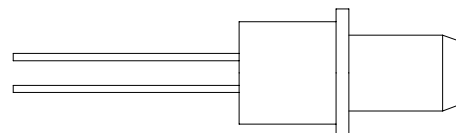
LC TOSA (L Power)  
C-15-DFB2.5-TX-SLCLI-XX



LC TOSA (M&H&2 Power)  
C-15-DFB2.5-TX-SLCXX-XX



Customer Specified  
TOSA

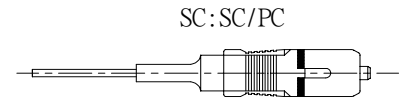
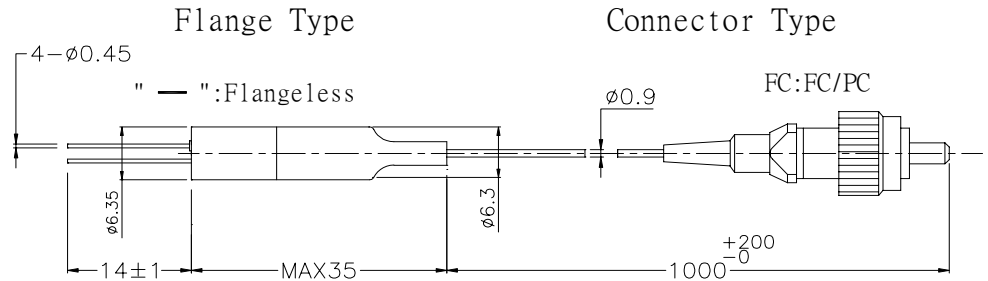
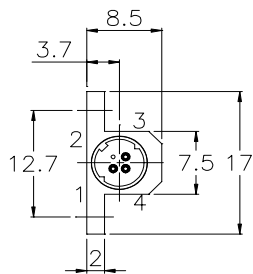
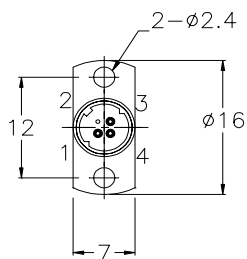
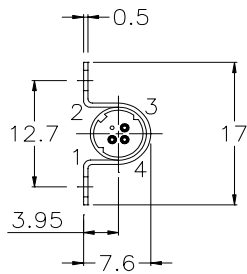
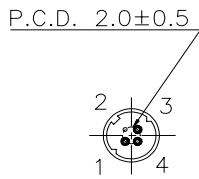


C-15-DFB2.5-XX-SXXXX/XXX-X-XX

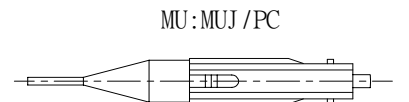
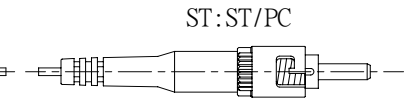
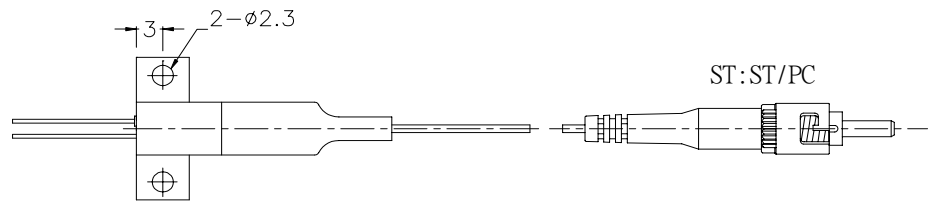
Packaging Dimension

Units in mm.

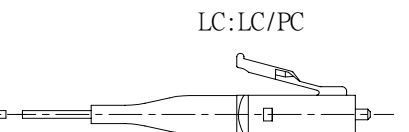
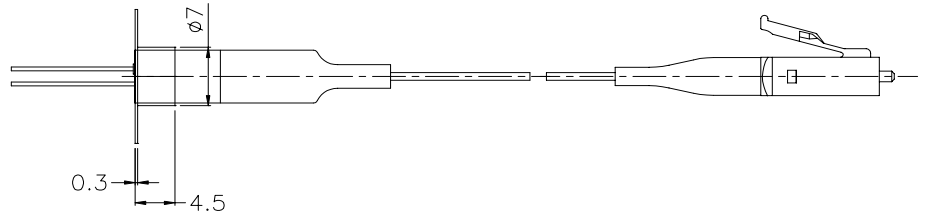
Part Number: C-15-DFB2.5-PX-SXXXX/XXX-X-XX



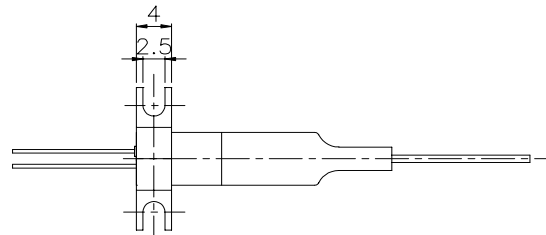
"O":Horizontal (Omega Housing)



"V":Vertical

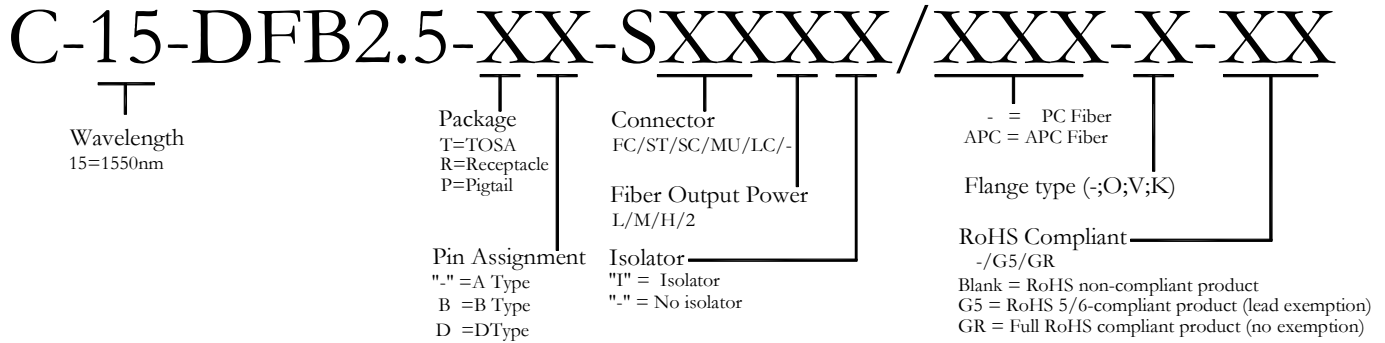


"K":Horizontal (KX Housing)



C-15-DFB2.5-XX-SXXXXX/XXX-X-XX

Ordering Information



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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