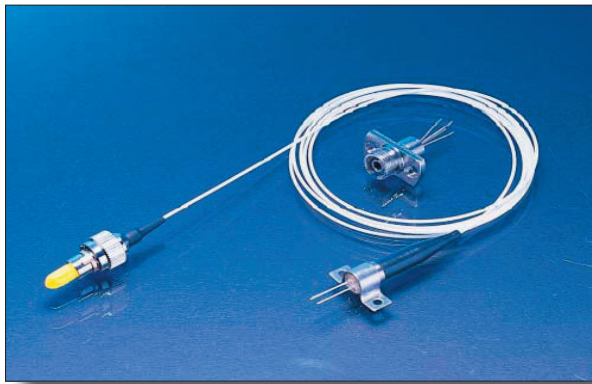


C-15-DFB-XX-SXXXX/XXX-X-XX



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 (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)

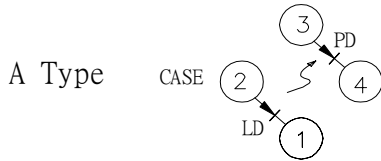
Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold Current	I_{th}	-	-	20	mA	CW
Fiber Output Power						
L		0.2	-	0.5		CW, $I_{th}+25mA$, kink free
M		0.5	-	1		
H	P_f	1	1.6	-	mW	
2 (without Isolator)		2	2.5	-		
2 (with Isolator)		2	2.5	-		
Peak Wavelength	λ	1535	1550	1565	nm	Note 3
Side mode Suppression Ratio	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	-	-	0.3	ns	$I_{bias} = I_{th}$, 10~90% 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.

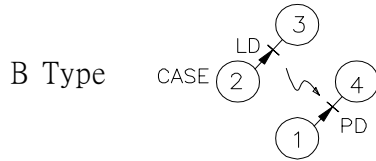
C-15-DFB-XX-SXXXX/XXX-X-XX

LD Pin Assignment

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



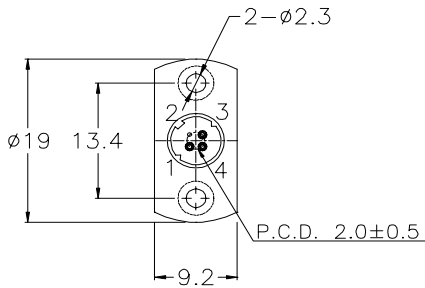
- Pin 1 : Laser Cathode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Monitor Diode Anode
- Pin 4 : Monitor Diode Cathode



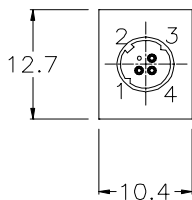
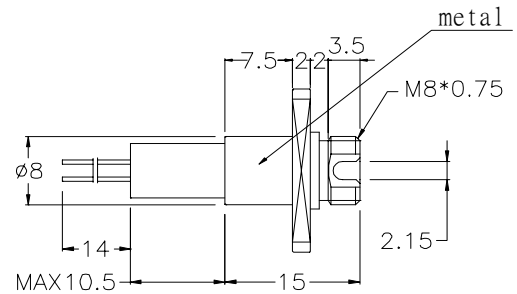
- Pin 1 : Monitor Diode Anode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Cathode



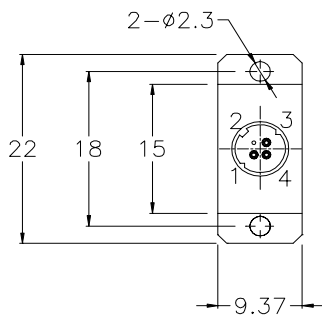
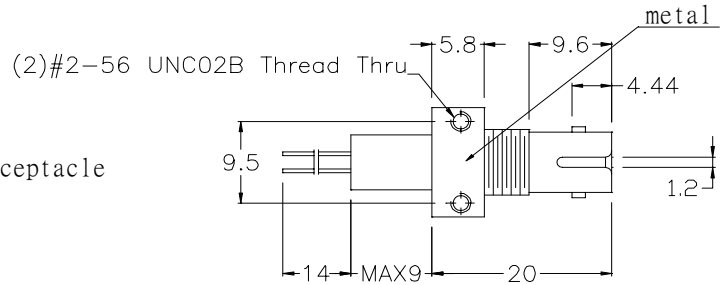
- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode



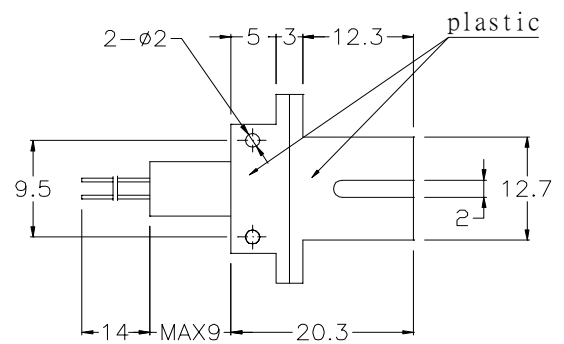
FC Receptacle



ST Receptacle



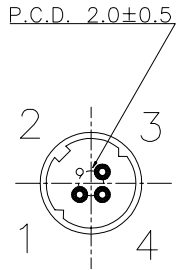
SC Receptacle



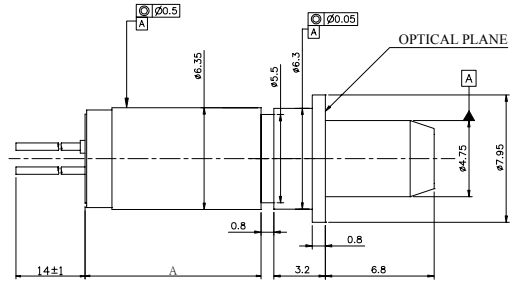
Packaging Dimension

Units in mm.

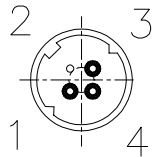
Part Number: C-15-DFB-TX-SSCXX-XX



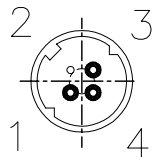
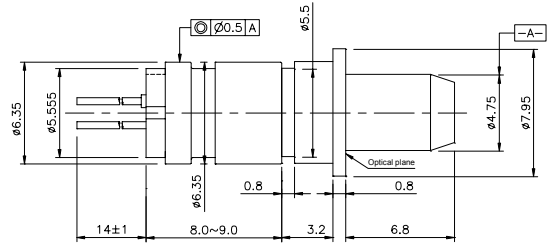
SC TOSA (L Power)
C-15-DFB-TX-SSCL-XX



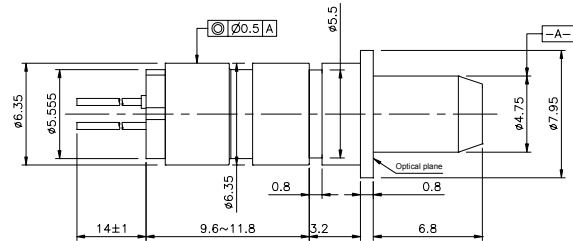
DIMENSION A: 7.77~8.37mm



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



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

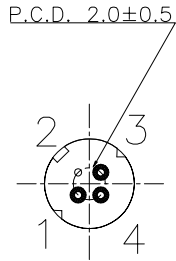


C-15-DFB-XX-SXXXX/XXX-X-XX

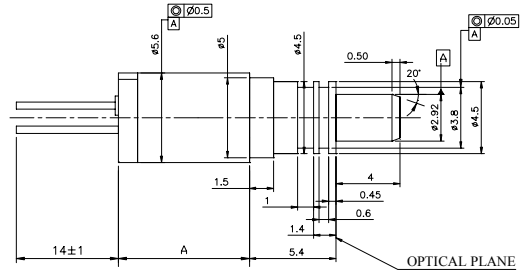
Packaging Dimension

Units in mm.

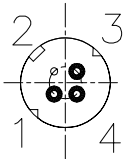
Part Number: C-15-DFB-TX-SLCXX-XX



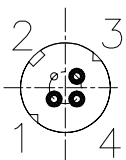
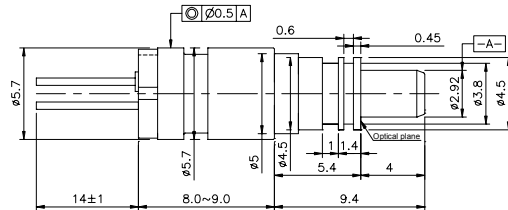
LC TOSA (L Power)
C-15-DFB-TX-SLCL-XX



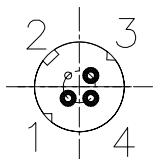
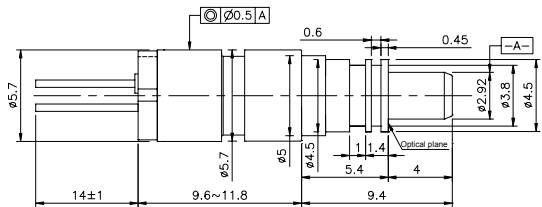
DIMENSION A: 7.77~8.37mm



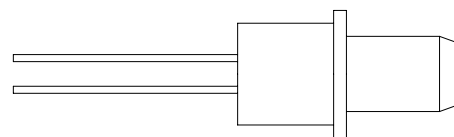
LC TOSA (L Power)
C-15-DFB-TX-SLCLI-XX



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



Customer Specified
TOSA

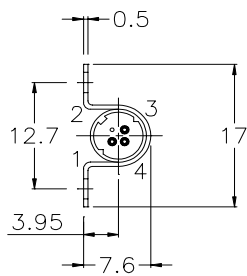
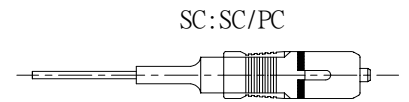
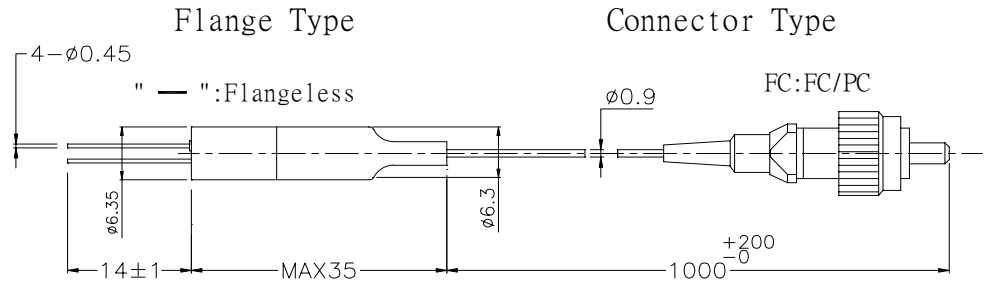
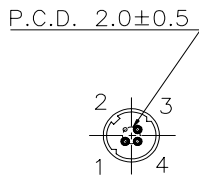


C-15-DFB-XX-SXXXX/XXX-X-XX

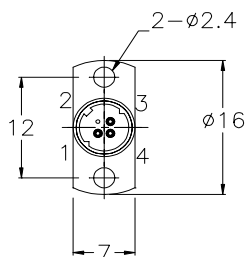
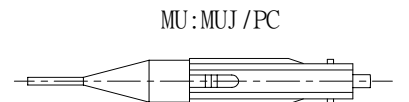
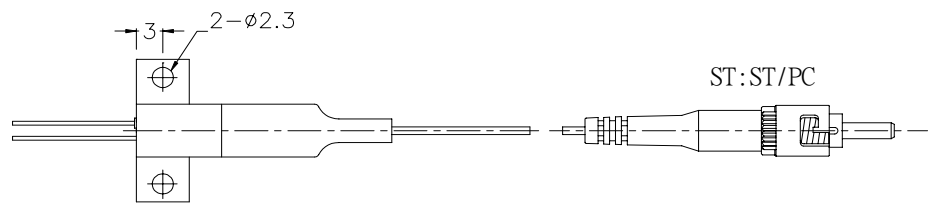
Packaging Dimension

Units in mm.

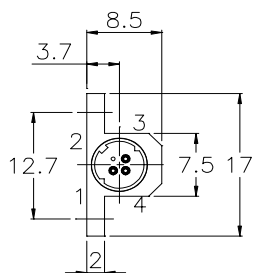
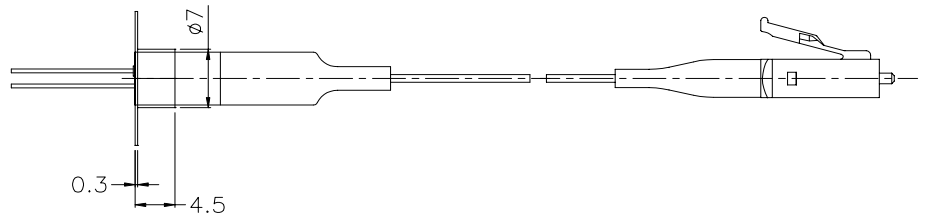
Part Number: C-15-DFB-PX-SXXXX/XXX-X-XX



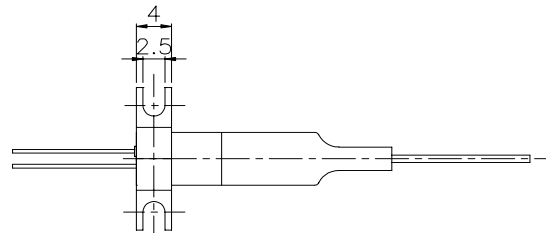
"O":Horizontal (Omega Housing)



"V":Vertical

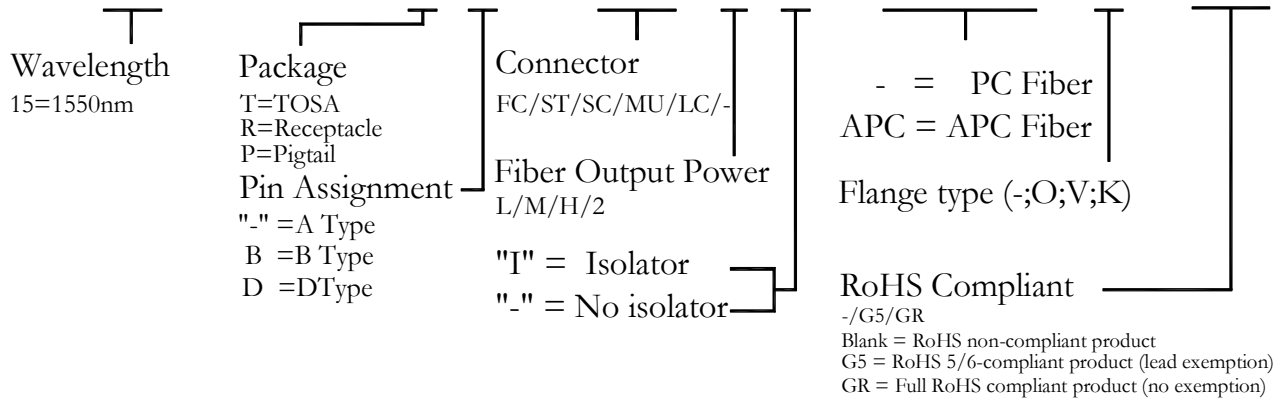


"K":Horizontal (KX Housing)



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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