



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
- TOSA
- FC/ST/SC Receptacle package with 2-hole flange
- Fiber pigtailed with optional FC/ST/SC/MU/LC 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/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	mA
Operating Temperature	T _{opr}	-40 ~ 85	
Storage Temperature	T _{stg}	-40 ~ 85	

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

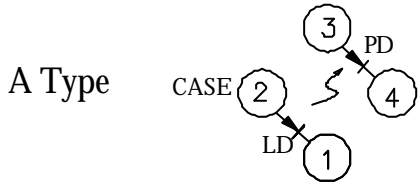
Optical and Electrical Characteristics (Tc=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Threshold Current	I _{th}	-	10	15	mA	CW
Fiber Output Power	P _f	0.2 0.5 1 2	- - 1.6 2.5	0.5 1 - -	mW	CW, I _{th} +25mA, kink free
Peak Wavelength		1530	1550	1570	nm	CW, P _f = P _f (Min)
Spectrum Width (RMS)	Receptacle TOSA Pigtail	- - -	2 - -	5 3 3	nm	CW, P _f = P _f (Min)
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	I _{bias} =I _{th} , 10%~90%
Tracking Error	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

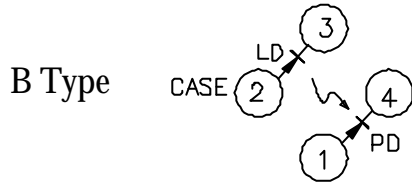
Note:

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

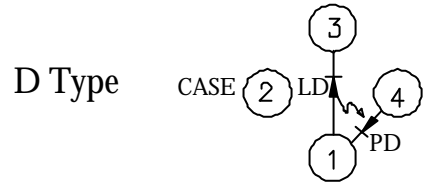
Pin Assignment



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



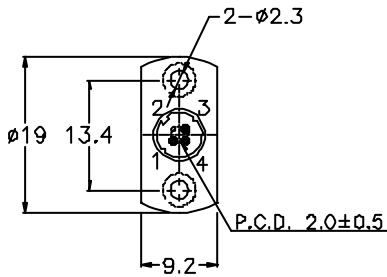
- Pin 1 : Monitor Diode Anode
- Pin 2 : Laser Anode and Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Cathode



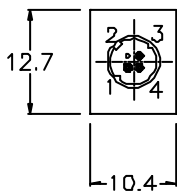
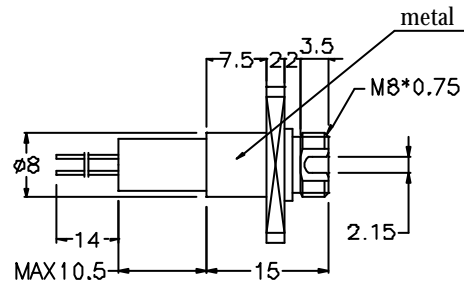
- Pin 1 : Laser Anode and Monitor Diode Cathode
- Pin 2 : Case Gnd
- Pin 3 : Laser Cathode
- Pin 4 : Monitor Diode Anode

Packaging Dimensions (Units in mm)

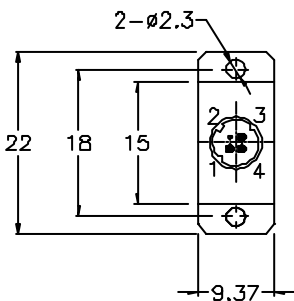
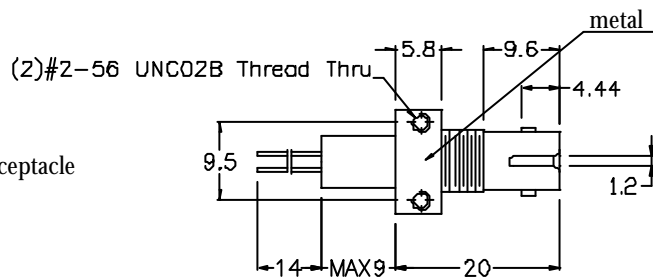
Part Number: C-15-001-RX-SXXXX-XX



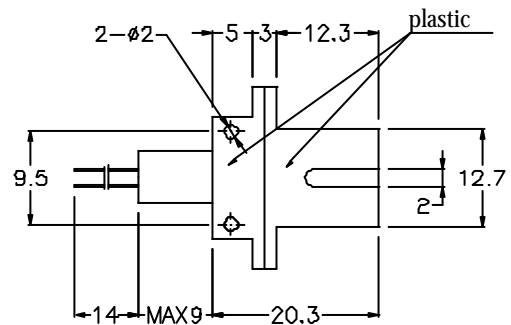
FC Receptacle



ST Receptacle



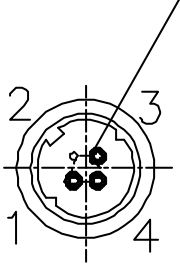
SC Receptacle



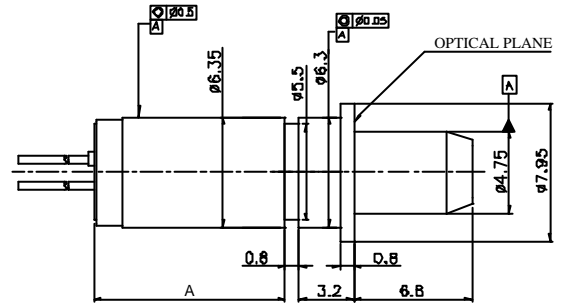
Packaging Dimensions (Units in mm)

Part Number: C-15-001-TX-SSCXX-XX

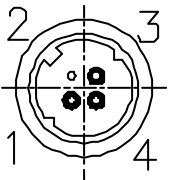
P.C.D. 2.0 ± 0.5



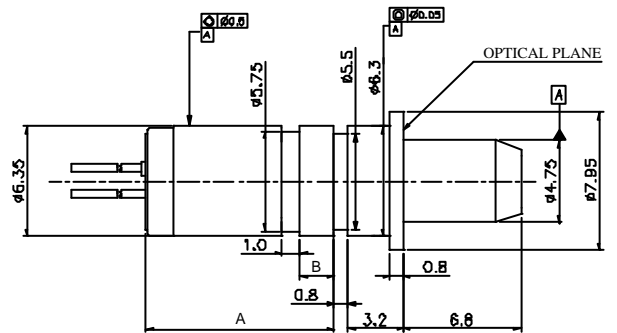
SC TOSA (L Power)
C-15-001-TX-SSCL-XX



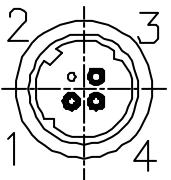
DIMENSION A: 7.77~8.37mm



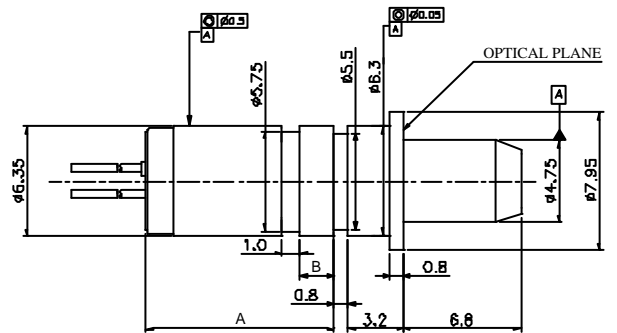
SC TOSA (L Power with Isolator)
C-15-001-TX-SSCLI-XX



DIMENSION A: 8.07~9.07mm
B: 1.0~2.0mm



SC TOSA (M&H&2 Power)
C-15-001-TX-SSCXX-XX

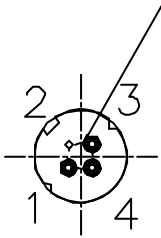


DIMENSION A: 10.2~11.2mm
B: 2.35~3.35mm

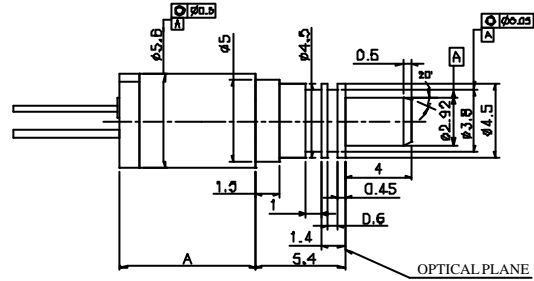
Packaging Dimensions (Units in mm)

Part Number: C-15-001-TX-SLCXX-XX

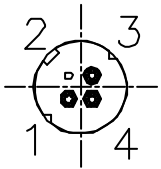
P.C.D. 2.0±0.5



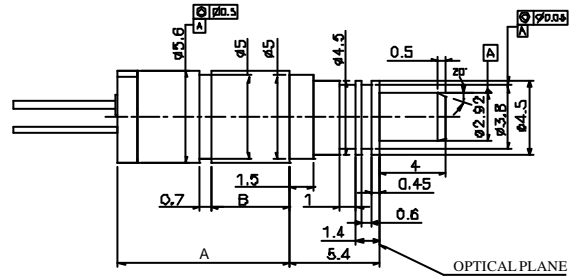
LC TOSA (L Power)
C-15-001-TX-SLCL-XX



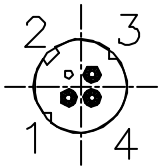
DIMENSION A: 7.77~8.37mm



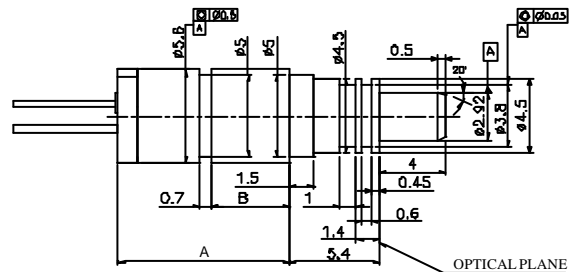
LC TOSA (L Power with Isolator)
C-15-001-TX-SLCLI-XX



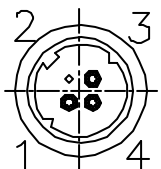
DIMENSION A: 8.07~9.07mm
DIMENSION B: 2.8~3.8mm



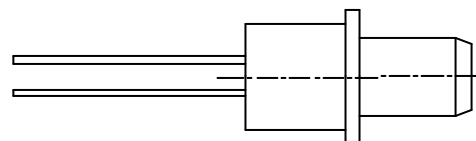
LC TOSA (M&H&2 Power)
C-15-001-TX-SLCXX-XX



DIMENSION A: 9.7~11.2mm
DIMENSION B: 3.2~4.7mm



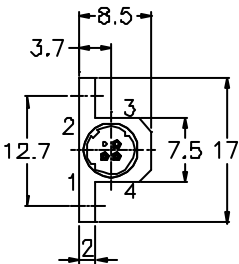
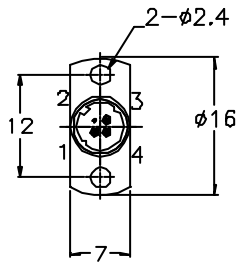
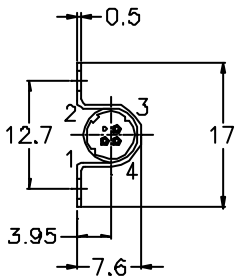
Customer Specified
TOSA



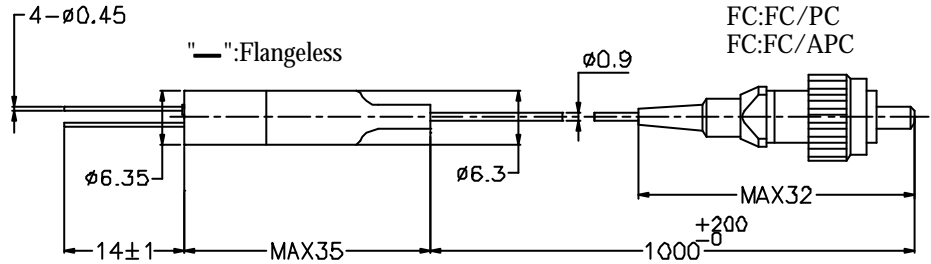
Packaging Dimensions (Units in mm)

Part Number: C-15-001-PX-SXXXX/XXX-X-XX

P.C.D. 2.0±0.5



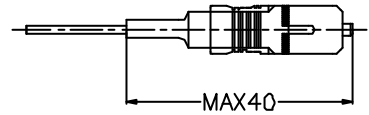
Flange Type



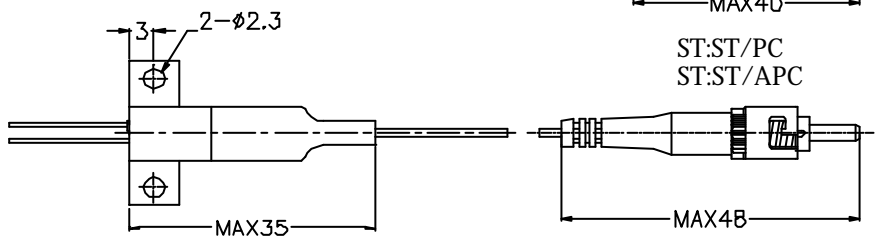
Connector Type

FC:FC/PC
FC:FC/APC

SC:SC/PC
SC:SC/APC

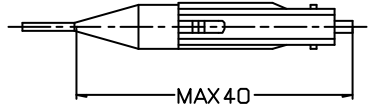


"□":Horizontal (Omega Housing)

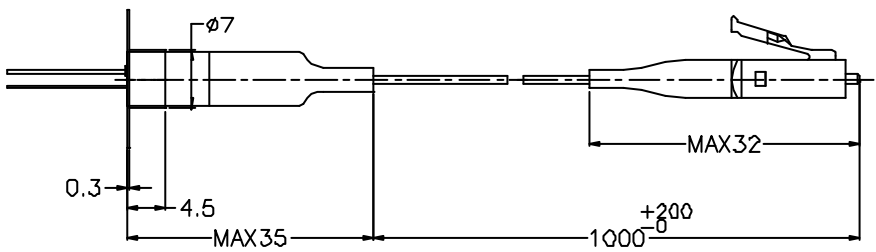


ST:ST/PC
ST:ST/APC

MU:MUJ/PC

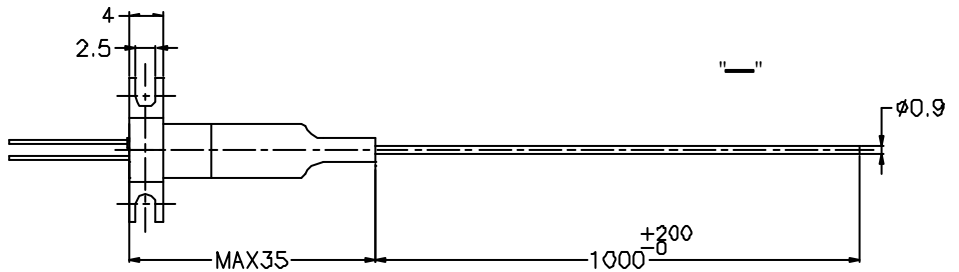


"V":Vertical



LC:LC/PC
LC:LC/APC

"K":Horizontal (KX Housing)



Ordering Information

C-15-001-XX-SXXXX/XXX-X-XX

Wavelength
15=1550nm

Package
T=TOSA
R=Receptacle
P=Pigtail

Connector
FC/ST/SC/MU/LC/Blank

Fiber Output Power
L/M/H/2

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

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.

Legal Notice

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