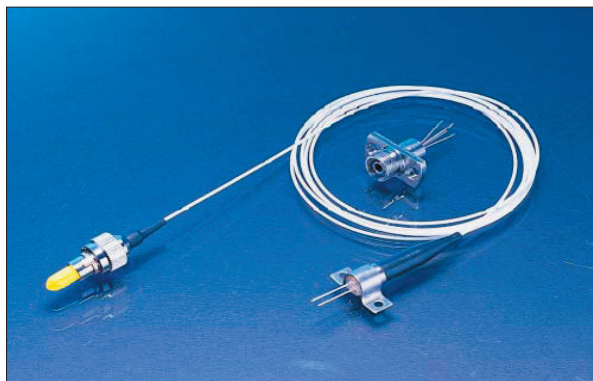


C-13-DFB-XX-SXXXX/XXX-X-XX



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
- TOSA
- FC/ST/SC receptacle package with 2-hole flange
- Fiber pigtailed with optional FC/ST/SC/MU/LC connector
- Design for fiber optic networks
- RoHS Compliant available

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating	Unit
Fiber Output Power L/M/H/2	P_f	1(L)/1.5(M)/2.5(H)/3(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)

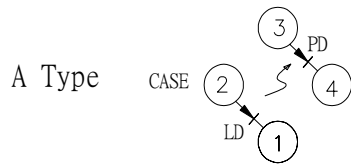
Optical and Electrical Characteristics (Tc=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold Current	I_{th}	-	10	15	mA	CW
Fiber Output Power	L	0.2	-	0.5	mW	CW, $I_{th}+20mA$, kink free
	M	0.5	-	1		
	H	1	1.6	-		
	2	2	2.5	-		
Peak Wavelength	λ	1295	1310	1325	nm	CW, $P_f = P_f$ (Min)
Spectral Width (-20 dB)	$\Delta\lambda$	-	-	0.8	nm	CW, $P_f = P_f$ (Min)
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	$V_{RPD}=5V$

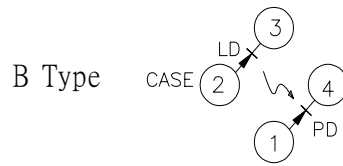
Note: 1.Pin assignment can be customized.
2.Specifications subject to change without notice.

C-13-DFB-XX-SXXXX/XXX-X-XX

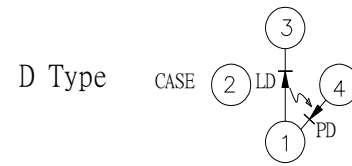
LD Pin Assignment



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

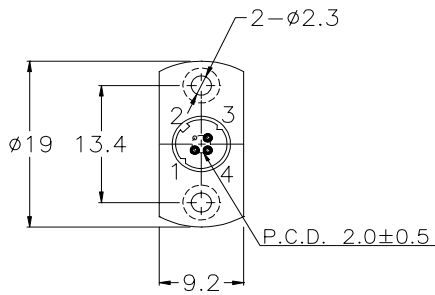


Pin 1 : Laser Anode and Monitor Diode Cathode
 Pin 2 : Case Gnd
 Pin 3 : Laser Cathode
 Pin 4 : Monitor Diode Anode

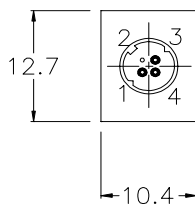
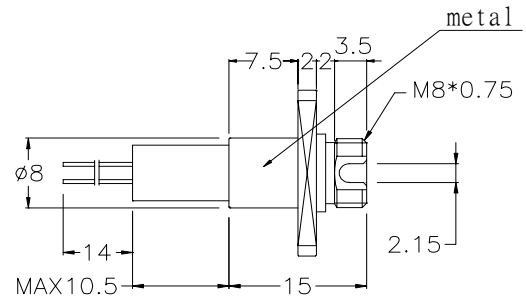
Packaging Dimension

Units in mm

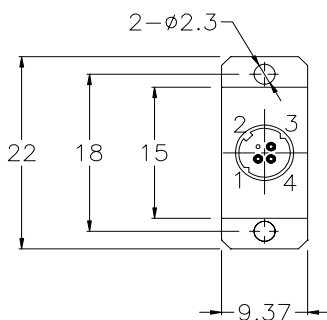
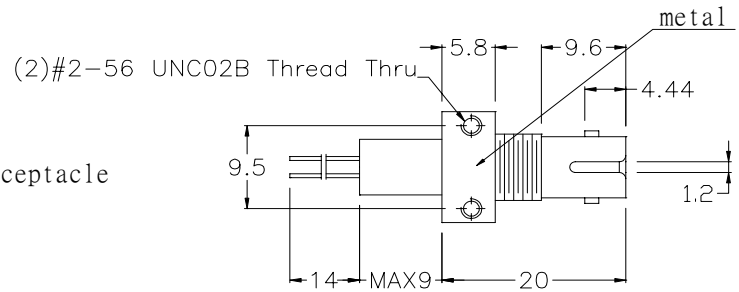
Part Number: C-13-DFB-RX-SXXXX-XX



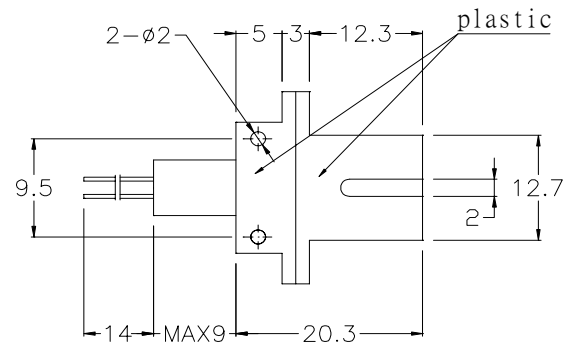
FC Receptacle



ST Receptacle



SC Receptacle

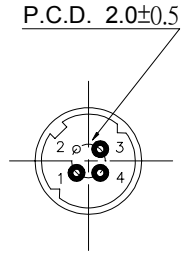


C-13-DFB-XX-SXXXX/XXX-X-XX

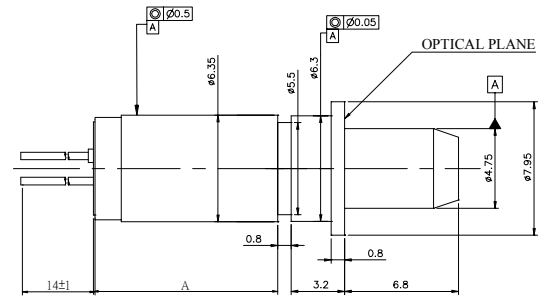
Packaging Dimension

Units in mm.

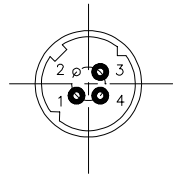
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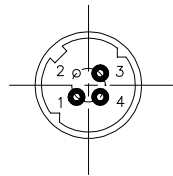
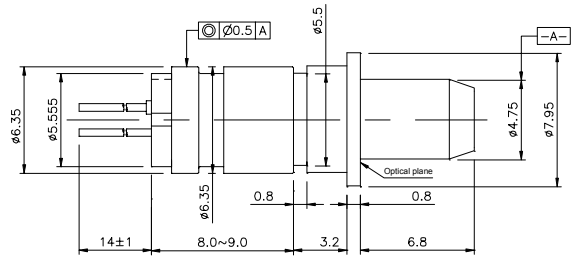
SC TOSA (L&M Power)
C-13-DFB-TX-SSCXX-XX



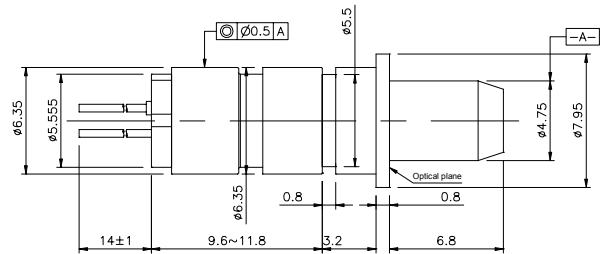
DIMENSION A: 7.77~8.37mm



SC TOSA
(L&M Power with Isolator)
C-13-DFB-TX-SSCXI-XX



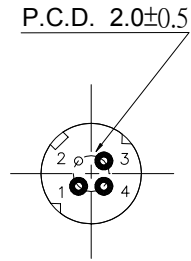
SC TOSA (H&2 Power)
C-13-DFB-TX-SSCXX-XX



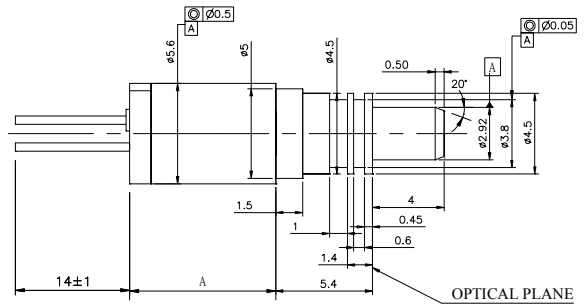
Packaging Dimension

Units in mm.

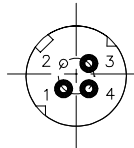
Part Number: C-13-DFB-TX-SLCXX-XX



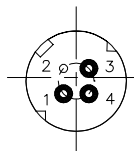
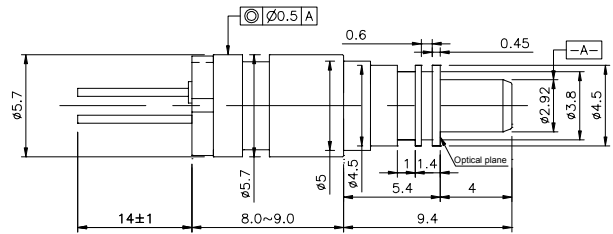
LC TOSA (L&M Power)
C-13-DFB-TX-SLCX-XX



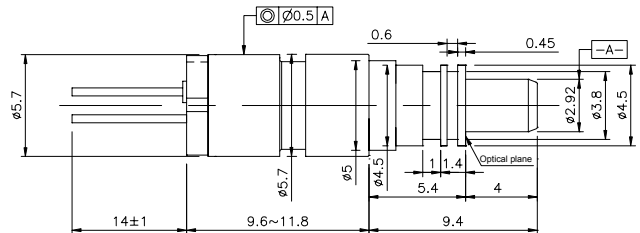
DIMENSION A: 7.77~8.37mm



LC TOSA
(L&M Power with Isolator)
C-13-DFB-TX-SLCXI-XX



LC TOSA (H&2 Power)
C-13-DFB-TX-SLCXX-XX

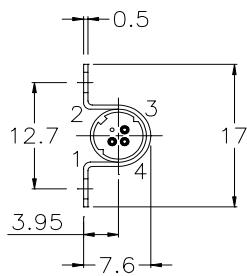
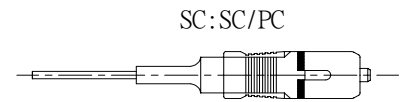
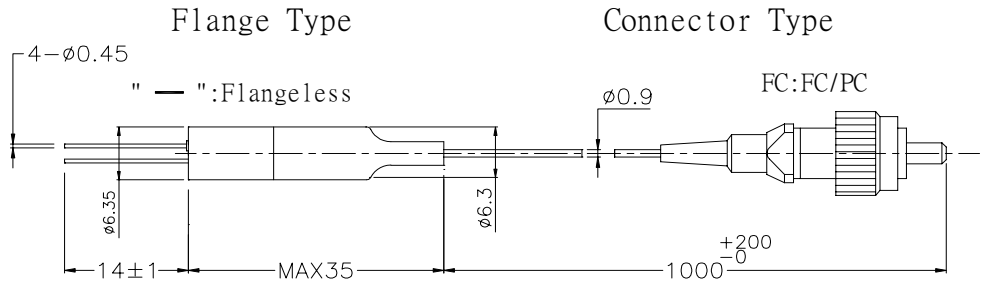
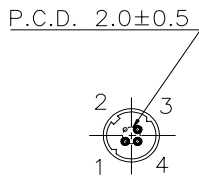


C-13-DFB-XX-SXXXX/XXX-X-XX

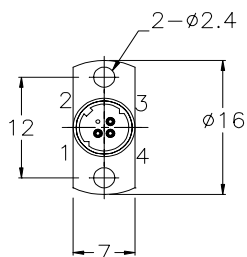
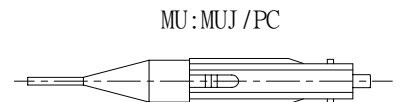
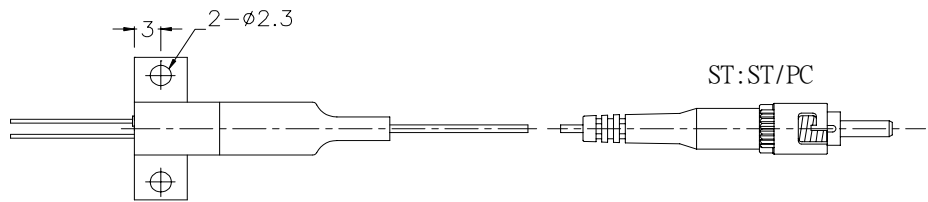
Packaging Dimension

Units in mm.

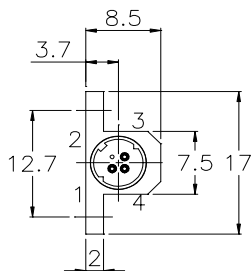
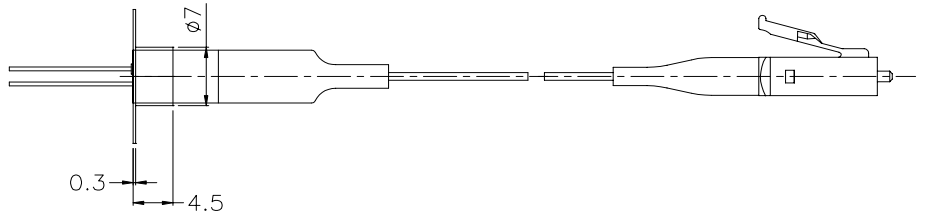
Part Number: C-13-DFB-PX-SXXXX/XXX-X-XX



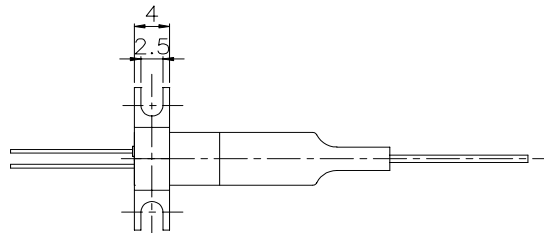
"O": Horizontal (Omega Housing)



"V": Vertical



"K": Horizontal (KX Housing)



Ordering Information

C-13-DFB-XX-SXXXXX/XXX-X-XX

Wavelength
13=1310nm

Package

T=TOSA
R=Receptacle
P=Pigtail

Pin Assignment

"-" =A Type
B =B Type
D =DType

Connector

FC/ST/SC/MU/LC/-

Fiber Output Power

L/M/H/2

"I" = Isolator

"-" = No isolator

- = PC Fiber

APC = APC Fiber

Flange type (-;O;V;K)

RoHS Compliant

-/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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