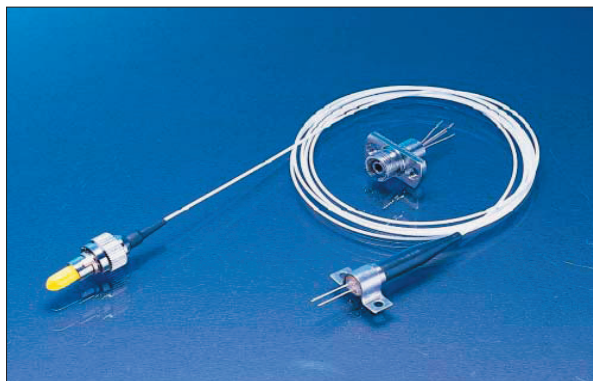


C-13-DFB2.5-XX-SXXXX/XXX-X-XX



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

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
- 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	Note 3
Side mode Suppression Ratio	Sr	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.

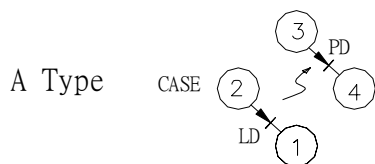
2.Specifications subject to change without notice.

3.Selected wavelength is available for WDM application.

C-13-DFB2.5-XX-SXXXX/XXX-X-XX

LD Pin Assignment

Part Number: C-13-DFB2.5-RX-SXXXX-XX



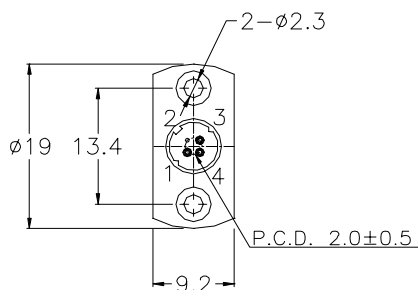
Pin 1 : Laser Cathode
Pin 2 : Laser Anode and Case Gnd
Pin 3 : Monitor Diode Anode
Pin 4 : Monitor Diode Cathode



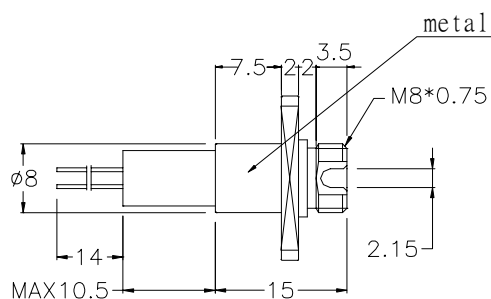
Pin 1 : Monitor Diode Anode
Pin 2 : Laser Anode and Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Cathode



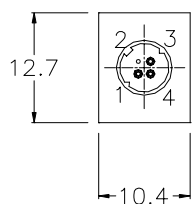
Pin 1 : Laser Anode and Monitor Diode Cathode
Pin 2 : Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Anode



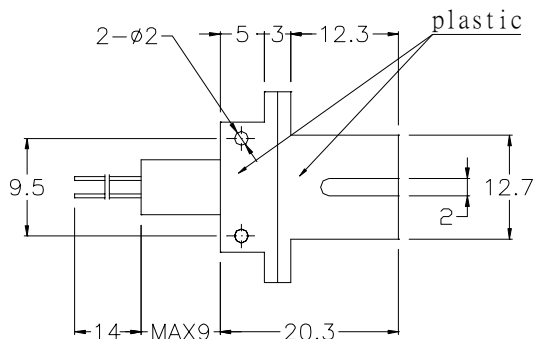
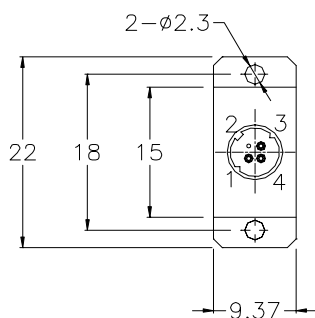
FC Receptacle



ST Receptacle



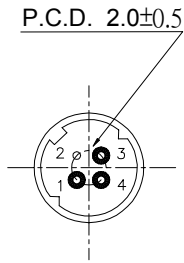
SC Receptacle



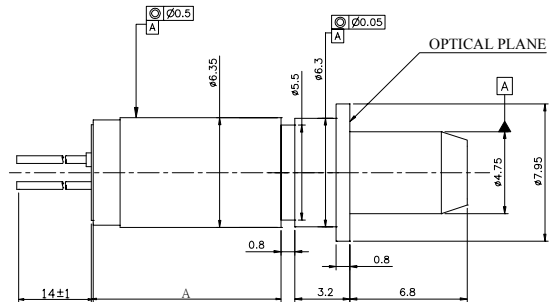
Packaging Dimension

Units in mm.

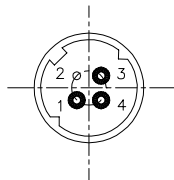
Part Number: C-13-DFB2.5-TX-SSCXX-XX



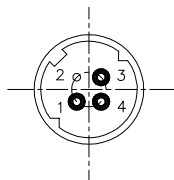
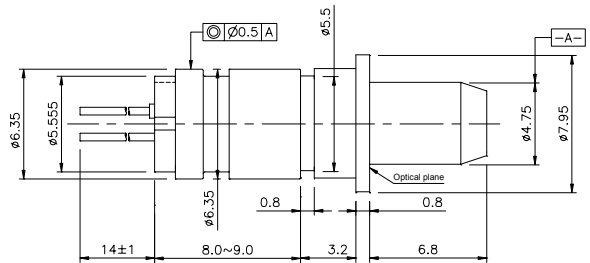
SC TOSA (L&M Power)
C-13-DFB2.5-TX-SSCX-XX



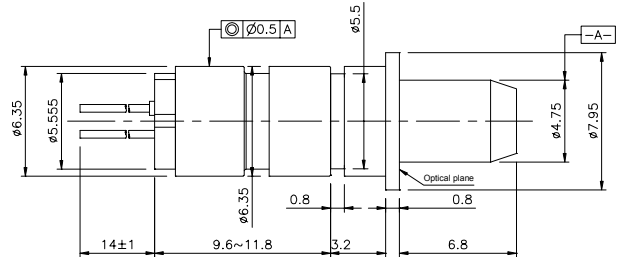
DIMENSION A: 7.77~8.37mm



SC TOSA
(L&M Power with Isolator)
C-13-DFB2.5-TX-SSCXI-XX



SC TOSA (H&2 Power)
C-13-DFB2.5-TX-SSCXX-XX



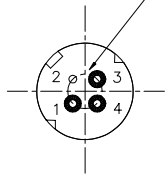
C-13-DFB2.5-XX-SXXXX/XXX-X-XX

Packaging Dimension

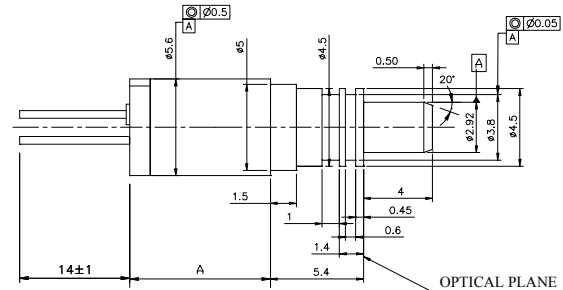
Units in mm.

Part Number: C-13-DFB2.5-TX-SLCXX-XX

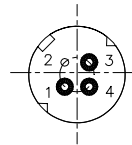
P.C.D. 2.0 ± 0.5



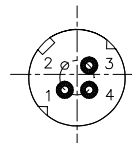
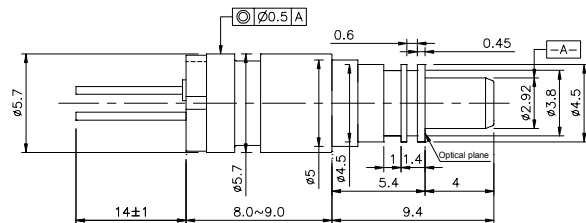
LC TOSA (L&M Power)
C-13-DFB2.5-TX-SLCX-XX



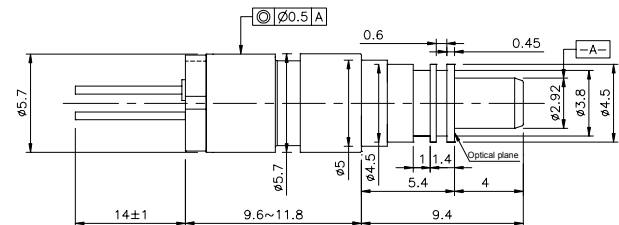
DIMENSION A: 7.77~8.37mm



LC TOSA
(L&M Power with Isolator)
C-13-DFB2.5-TX-SLCXI-XX



LC TOSA (H&2 Power)
C-13-DFB2.5-TX-SLCXX-XX

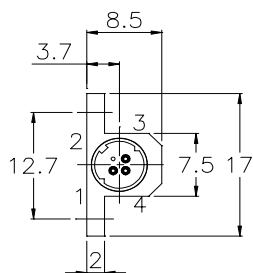
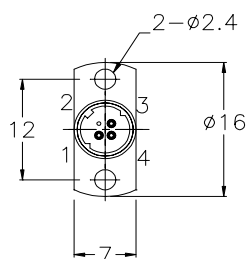
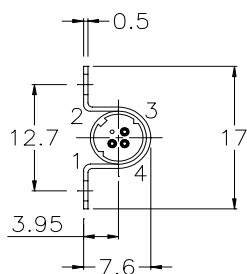
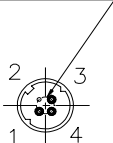


Packaging Dimension

Units in mm.

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

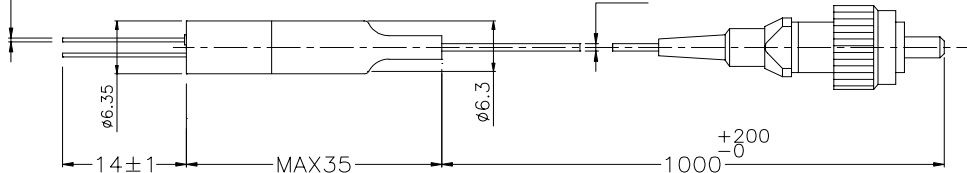
P.C.D. 2.0 ± 0.5



Flange Type

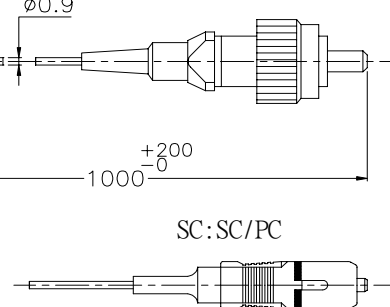
4- $\phi 0.45$

"":Flangeless

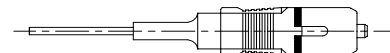


Connector Type

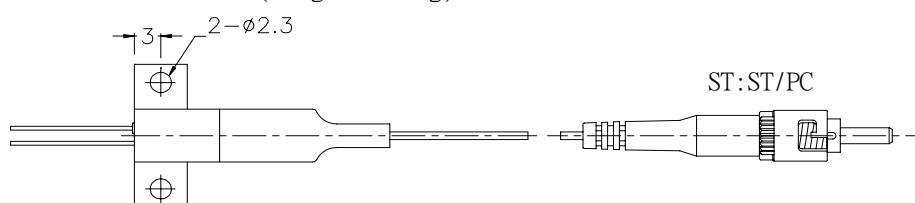
FC:FC/PC



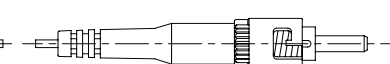
SC:SC/PC



"O":Horizontal (Omega Housing)



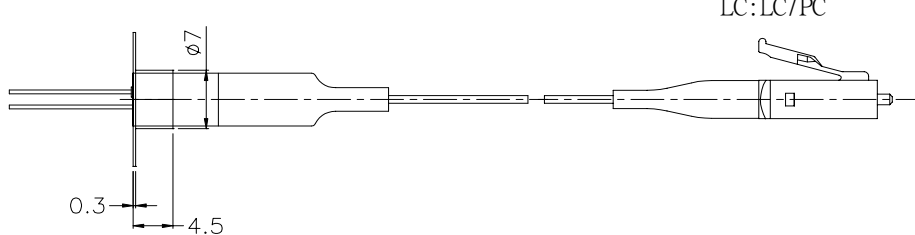
ST:ST/PC



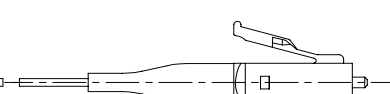
MU:MUJ /PC



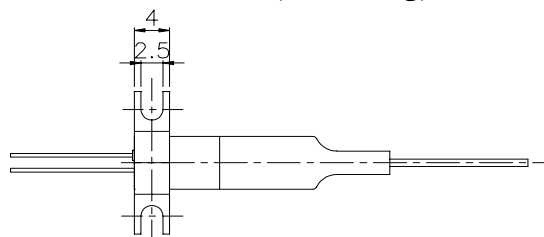
"V":Vertical



LC:LC/PC



"K":Horizontal (KX Housing)



C-13-DFB2.5-XX-SXXXXX/XXX-X-XX

Ordering Information

C-13-DFB2.5-XX-SXXXXX/XXX-X-XX

Wavelength
13=1310nm

Package
T=TOSA
R=Receptacle
P=Pin tail

Pin Assignment
"-" = A Type
B = B Type
D = D Type

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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