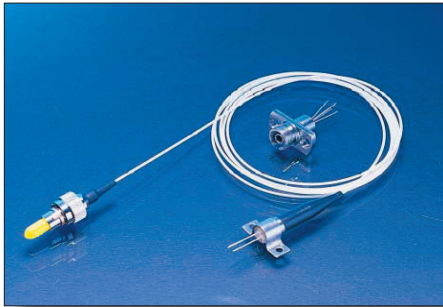


C-XXXXX-DFB-XX-SXXXI/XXX-X-XX



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 Bellcore TA-NWT-000983
- Single frequency operation with high SMSR

Packaging

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

Application

- Design for CWDM fiber optic networks
- RoHS Compliant available

Absolute Maximum Ratings

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 9/125 μ m S/M 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	P_f	L	0.2	-	0.5	mW	CW, $I_{th}+25$ mA, kink free
		M	0.5	-	1.5		
		H	1	1.6	-		CW, $I_{th}+30$ mA, kink free
		2	2	2.5	-		
Peak Wavelength	λ	n-2	n	n+2	nm	Note 3	
		n-3	n	n+3			
Side mode Suppression	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%	
Tracking Error	$\Delta P_f / P_f$	-1.5	-	1.5	dB	APC, 0~70°C	
PD Monitor Current	I_m	100	-	-	μ A	CW, $P_f = P_f$ (Min), $V_{RPD}=2$ V	
PD Dark Current	I_{dark}	-	-	0.1	μ A	$V_{RPD}=5$ V	
PD Capacitance	C_t	-	6	15	pF	$V_{RPD}=5$ V, f=1MHz	
Optical Isolation	OI	30	-	-	dB	Tc=25°C	
		20	-	-		0°C < Tc < 70°C	

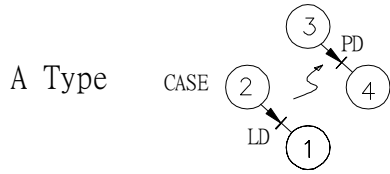
Note: 1.Pin assignment can be customized.

2.Specifications subject to change without notice.

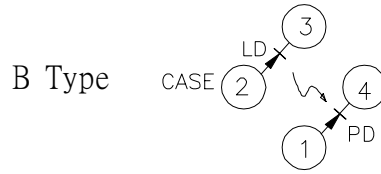
3.Selected wavelength is available for WDM application

***Peak wavelength n=1270;1290;1310;1330;1350;1370;1390;1410;1430;1450;1470;1490;1510;1530;1550;1570;1590;1610**

LD Pin Assignment



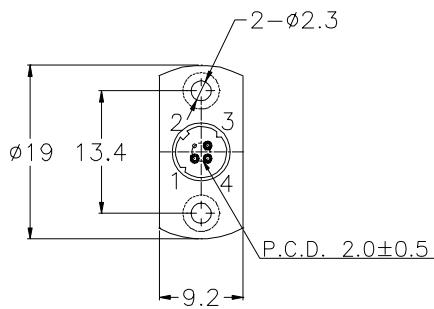
Pin 1 : Laser Cathode
 Pin 2 : Laser Anode and Case Gnd
 Pin 3 : Monitor Diode Anode
 Pin 4 : Monitor Diode Cathode



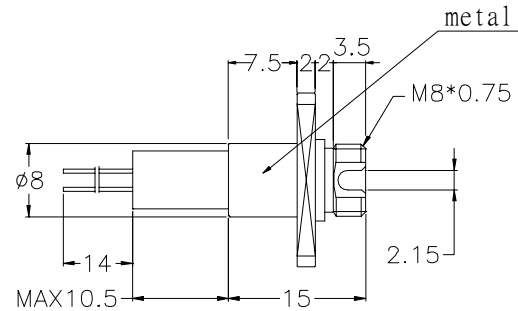
Pin 1 : Monitor Diode Anode
 Pin 2 : Laser Anode and Case Gnd
 Pin 3 : Laser Cathode
 Pin 4 : Monitor Diode Cathode



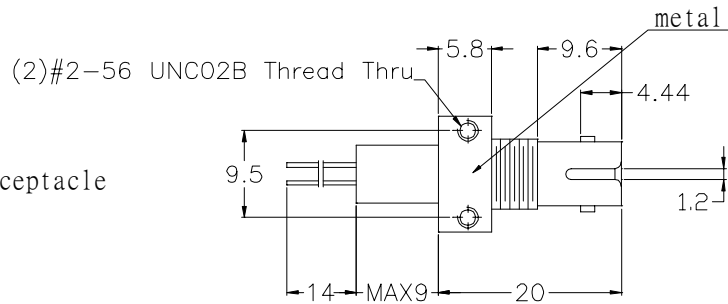
Pin 1 : Laser Anode and Monitor Diode Cathode
 Pin 2 : Case Gnd
 Pin 3 : Laser Cathode
 Pin 4 : Monitor Diode Anode



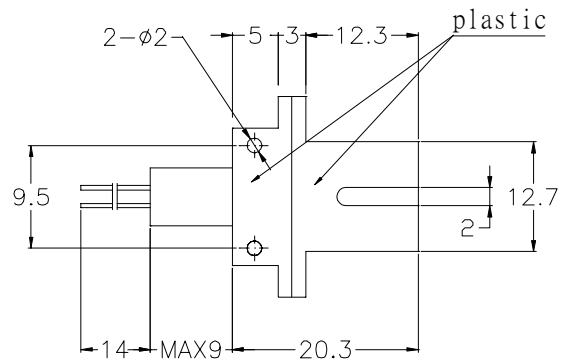
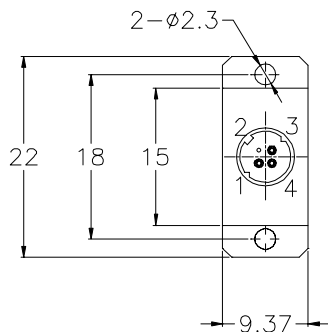
FC Receptacle



ST Receptacle



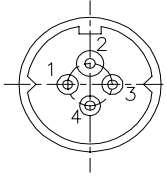
SC Receptacle



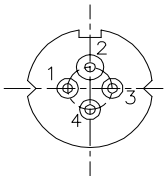
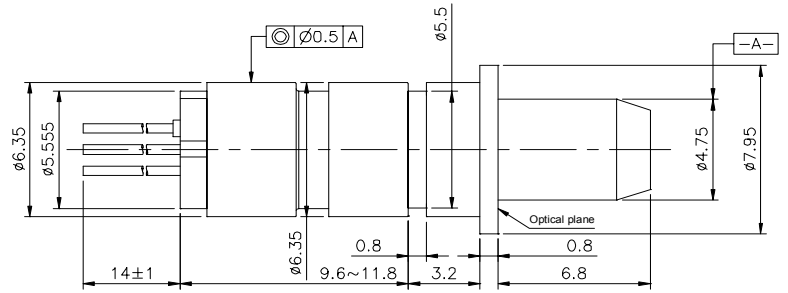
C-XXXXX-DFB-XX-SXXXI/XXX-X-XX

Packaging Dimension

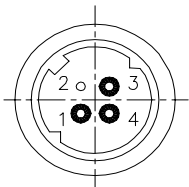
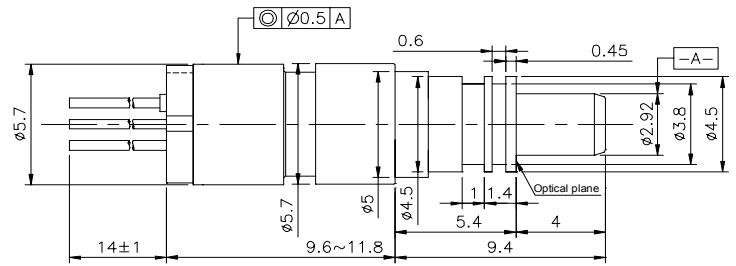
Units in mm.



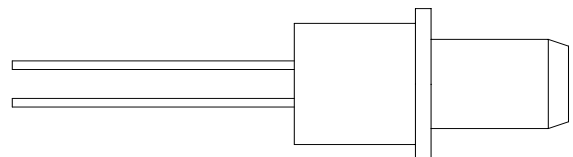
SC TOSA
C-XXXXX-DFB-TX-SSCXX



LC TOSA
C-XXXXX-DFB-TX-SLCXI



Customer Specified
TOSA



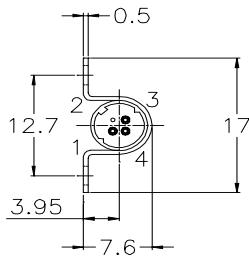
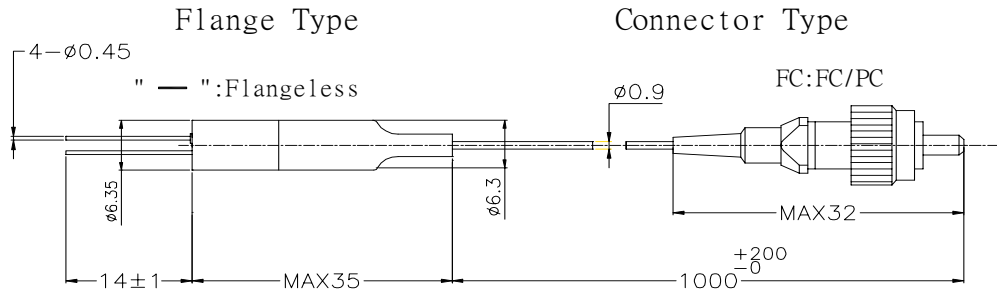
C-XXXXX-DFB-XX-SXXXI/XXX-X-XX

Packaging Dimension

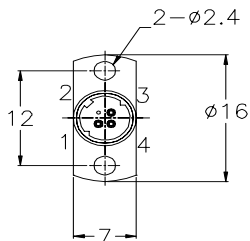
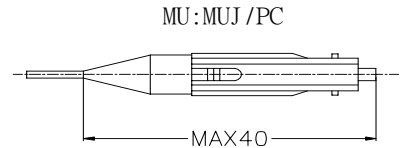
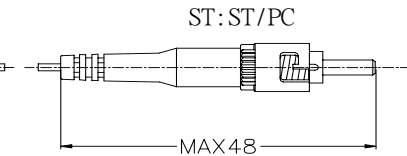
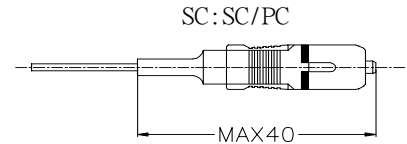
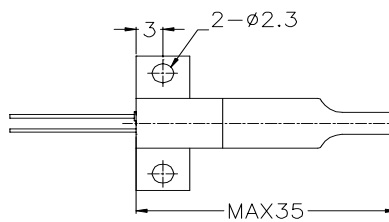
Units in mm.

Part Number: C-XXXXX-DFB2.5-PX-SXXXI/XXX-X-XX

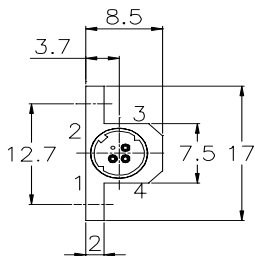
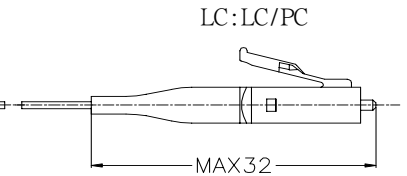
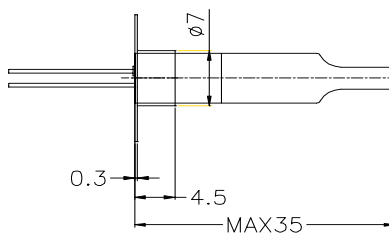
P.C.D. 2.0 ± 0.5



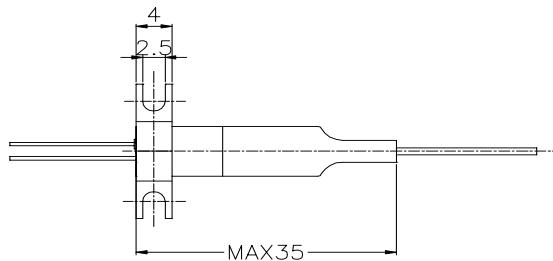
"□": Horizontal (Omega Housing)



"V": Vertical



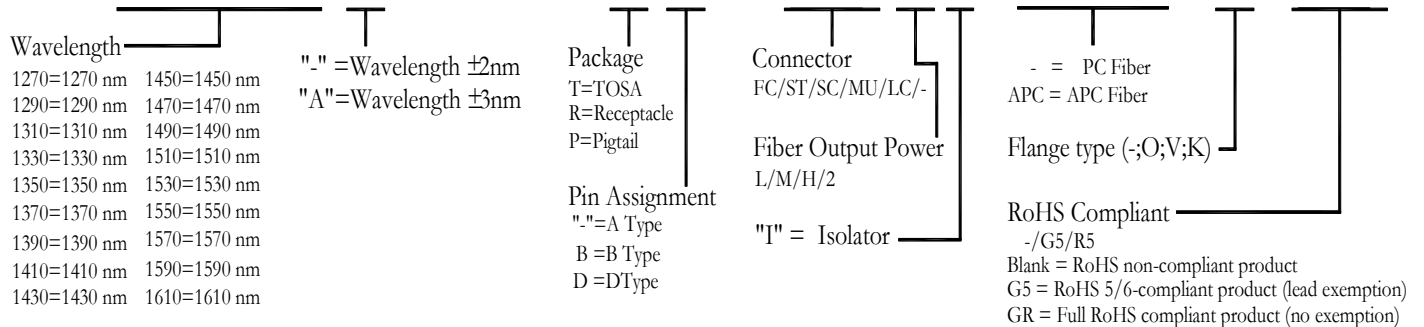
"K": Horizontal (KX Housing)



C-XXXXX-DFB-XX-SXXXI/XXX-X-XX

Ordering Information

C-XXXXX-DFB-XX-SXXXI/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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