



### 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
- Fiber pigtailed with optional SC connector
- The O type flange is loose and included in the shipment
- Design for 2.5G CWDM high speed optic networks
- RoHS Compliant available

### Absolute Maximum Ratings (Tc=25 °C)

Parameter	Symbol	Rating	Unit
Fiber Output Power	P <sub>f</sub>	3.3	mW
LD Reverse Voltage	V <sub>RLD</sub>	2	V
PD Reverse Voltage	V <sub>RPD</sub>	10	V
PD Forward Voltage	I <sub>FPD</sub>	2	mA
Operating Temperature	T <sub>opr</sub>	0 ~ 70	
Storage Temperature	T <sub>stg</sub>	-40 ~ 85	

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

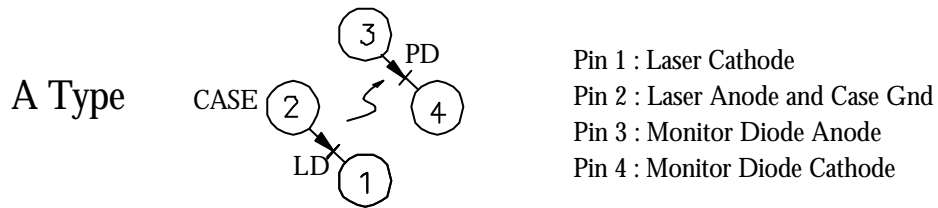
### Optical and Electrical Characteristics (Tc=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Thres hold Current	I <sub>th</sub>	-	-	20	mA	CW
Fiber Output Power	P <sub>f</sub>	2	2.5	3.3	mW	CW, I <sub>th</sub> +30mA, kink free
Peak Wavelength		n-3	n	n+3	nm	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Slope Efficiency	S <sub>e</sub>	0.067	-	0.11	mW/mA	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Side mode Suppression	S <sub>r</sub>	30	35	-	dB	CW, P <sub>f</sub> = P <sub>f</sub> (Min), 0 ~ 70
Forward Voltage	V <sub>F</sub>	-	1.2	1.5	V	CW, P <sub>f</sub> = P <sub>f</sub> (Min)
Rise Time	T <sub>r</sub>	-	-	150	ns	I <sub>bias</sub> =I <sub>th</sub> , 20%~80%
Fall Time	T <sub>f</sub>	-	-	200	ns	lead length=1mm
Tracking Error	P <sub>f</sub> /P <sub>f</sub>	-1.5	-	1.5	dB	APC, 0 ~ 70
PD Monitor Current	I <sub>m</sub>	100	-	-	μ A	CW, P <sub>f</sub> = P <sub>f</sub> (Min), V <sub>RPD</sub> = 2V
PD Dark Current	I <sub>dark</sub>	-	-	0.1	μ A	V <sub>RPD</sub> = 5V
PD Capacitance	C <sub>t</sub>	-	6	15	pF	V <sub>RPD</sub> = 5V, f = 1MHz
Optical Isolation	OI	30	-	-	dB	T <sub>c</sub> =25
		20	-	-	dB	0 < T <sub>c</sub> < 70

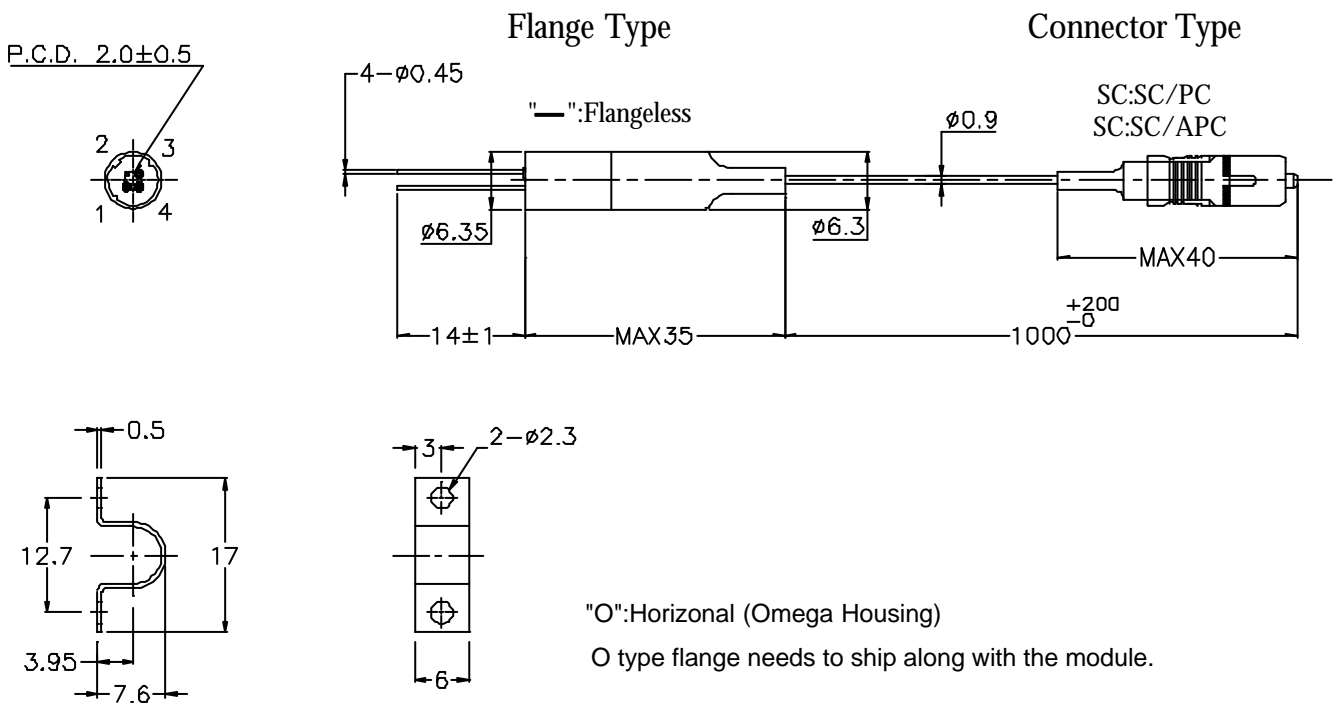
**Note:**

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

### Pin Assignment

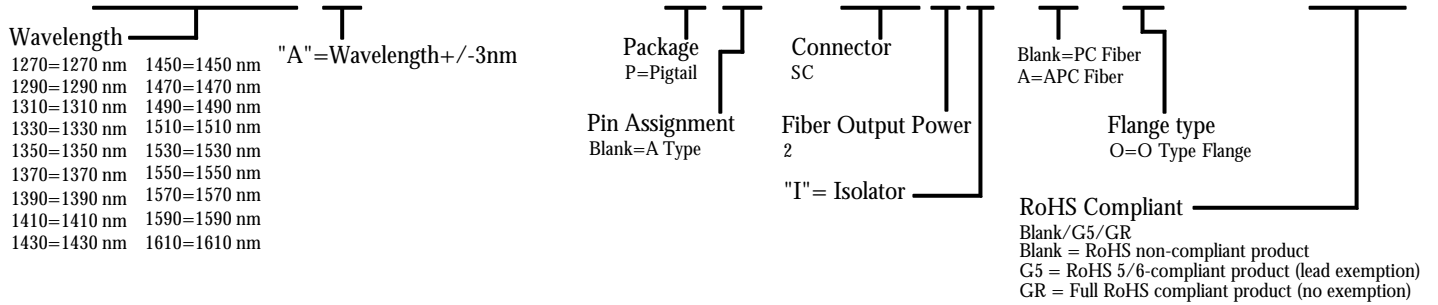


### Packaging Dimensions (Units in mm)



Ordering Information

# C-XXXXA-DFB2.5-PX-SSC2I/X-O-04-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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