

C-15-DFB-P-SSC2I/APC-O-01-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

- Un-cooled fiber pigtailed with SC/APC connector

Application

- Design for fiber-optics networks
- RoHS Compliant available

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Rating	Unit
Fiber Output Power	P_f	2.6	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

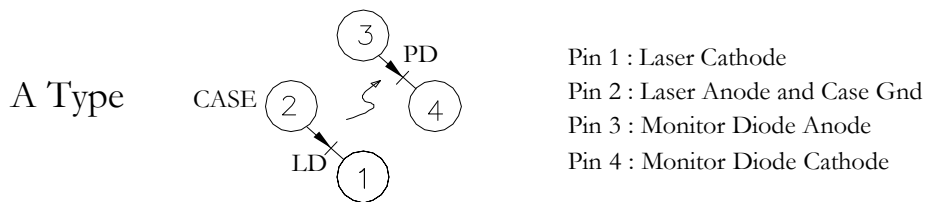
(All optical data refer to a coupled 9/125µm SM fiber)**Optical and Electrical Characteristics (Tc=25°C)**

Parameter	Symbol	Min	Typ	Max	Unit	Test Conditions
Threshold Current	I_{th}	-	-	20	mA	CW
Fiber Output Power	P_f	2	2.5	-	mW	CW, $I_{th}+30mA$, kink free
Peak Wavelength	λ	1535	1550	1565	nm	Note 1
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 Time/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	-	-	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. Selected wavelength is available for WDM application.

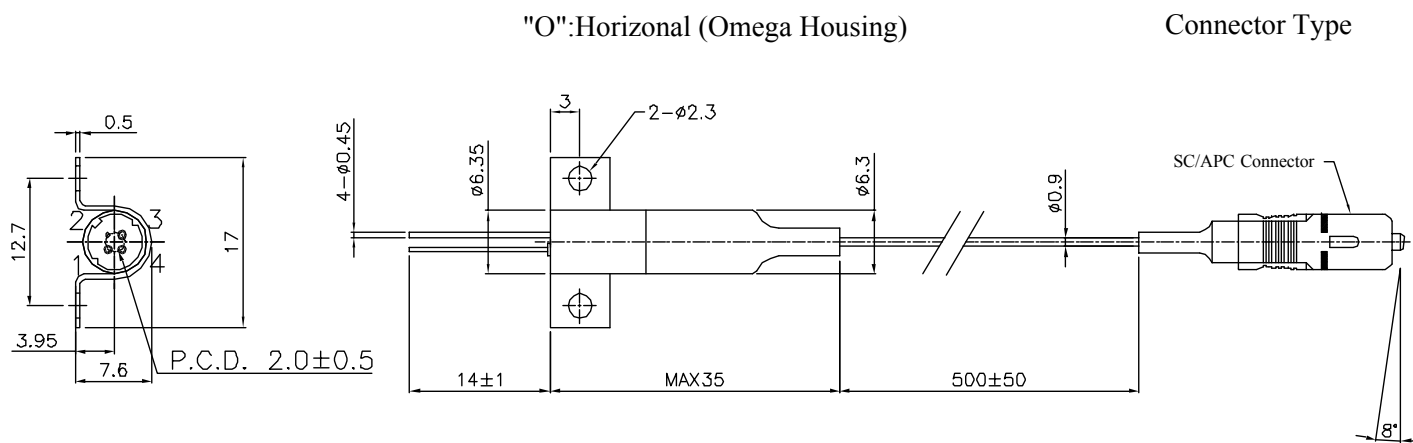
C-15-DFB-P-SSC2I/APC-O-01-XX

LD Pin Assignment



Packaging Dimension

Units in mm.



Ordering Information

C-15-DFB-PX-SSC2I/APC-O-01-XX

Wavelength
15=1550nm

Package
P=PinTail

Connector
SC

"I" = Isolator

Pin Assignment
"- " = A Type

Fiber Output Power
2

APC=APC Fiber

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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