

BiDi-C1000
CWDM Laser

Technical Specification

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1.0 PRODUCT FEATURE

- Tx Laser wavelengths optical : 17 CWDM
- Using DFB Lasers
- DFB laser optical: with isolation or without isolation
- Low threshold current and operating current
- High output power
- Built-in InGaAsP monitor PD
- Wide temperature range operation($T_c = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$)
- Fiber ITU-T G.657 Bending low loss, fiber optic cable features



2.0 MAIN APPLICATION

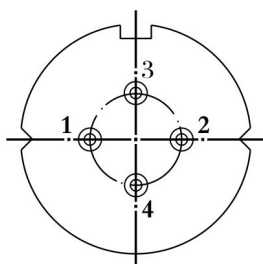
- video, audio data transmission
- FTTx PON
- RFoG
- CATV HFC 网
-

3.0 Technique index

Performance			Index			Supplement
			Min.	Typ.	Max.	
Transmit	Center wavelength (λ_c)	(nm)	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610			-
	Laser Type		DFB			
	Center wavelength accuracy	(nm)	-1.5		+1.5	
	Threshold current (I_{th})	(mA)	-	5	15	$\lambda_{nm}, 25^\circ C$
	Spectral width ($\Delta\lambda$)	(nm)	-	1	2	CW, $I_{th}+20mA$
	Output power (P_o)	(mW)	-	2.0		CW, $I_{th}+20mA, \lambda_{nm}$
	Operating voltage (V_{op})	(V)	-	1.1	1.5	CW, $I_{th}+20mA$
	Rise/ Fall time (T_r/T_f)	(nS)	-	0.3	0.7	CW, $I_{th}+20mA$
	Monitor current (I_m)	(mA)	0.1	0.7	-	CW, $I_{th}+20mA$
General feature	Return Loss	(dB)	50			
	Connector		APC			
	Fiber Type		SMF28 900 μm			
	Optical fiber length	(m)	0.5	0.8	1.5	
Limit value	Storage temperature	($^\circ C$)	-40		+100	-
	Operating temperature	($^\circ C$)	-40		+85	-
	Reverse voltage	(V)			2	CW
	Soldering temperature/time	($^\circ C / S$)			260/10	-

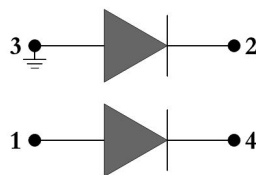
4.0 PIN Defination

4.1 Transmit



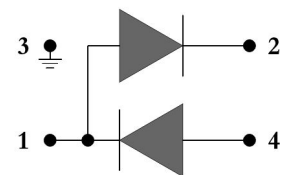
A Type:

- [3]** LD “+”
- [2]** LD “-”
- [1]** PD “+”
- [4]** PD “-”

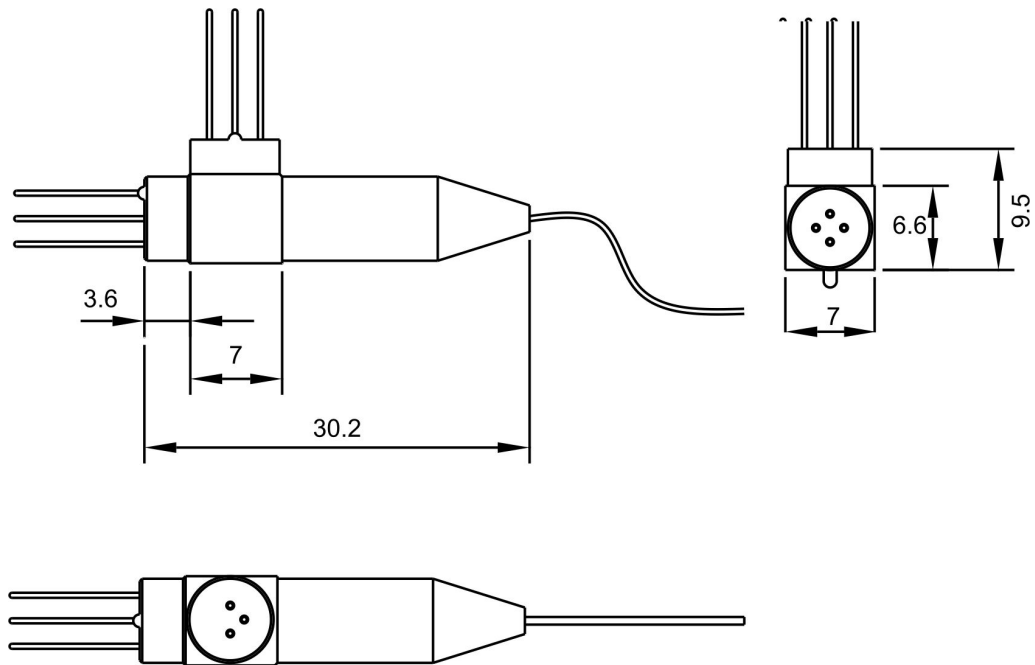


B Type:

- [1]** LD “+”
- [2]** LD “-”
- [1]** PD “+”
- [4]** PD “-”
- [3]** Case.



5.0 Dimensions



6.0 PRODUCT SERIES

Model	CWDM Tx Operating Wavelength (nm)	Output Power (dBm)	Laser Type
BiDi-Cxxx-3/DI	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610	2~3	DFB With ISO
BiDi-Cxxx-3/DO			DFB Without ISO

7.0 Model explanation

BiDi - C 1 □□□ - 3 / D□ □ - R□□□ - B - □□ / □□

CWDM Tx Operatinng Wavelength (nm)		Output Power (dBm)		DFB Laser The Built-in Isolator		Tx Pin Defination		Rx Operatinng Wavelength (nm)		Rx Pin Defination		Connector		Fiber length	
1270	1270	3	2~3	I	With ISO	A	A Type	131	1310	B	B Type	FP	FC/UPC	05	0.5M
1290	1290			O	Without ISO	B	B Type	155	1550			FA	FC/APC	08	0.8M
1310	1310							xxx	xxx0			SP	SC/UPC	10	1.0M
1330	1330											SA	SC/APC		
1350	1350											LP	LC/UPC		
1370	1370											LA	LC/APC		
1390	1390														
1410	1410														
1430	1430														
1470	1470														
1490	1490														
1510	1510														
1530	1530														
1550	1550														
1570	1570														
1590	1590														
1610	1610														