

Product Overview

Bi-directional Diplexer Optical Module

Features

- Single Fiber Bi-directional Operation
- Integrated WDM filter
- Low Threshold Current, Uncooled MQW FP LD
- High Response, Low Dark Current InGaAs PIN
- Operation Temperature -40°C to +85°C
- Class I FDA and IEC Laser Safety
- Isolation > 35dB and Cross talk < - 45dB,
- Complies with Bellcore TA-NWT-000983

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Note
Reverse Voltage of LD	VRL	-	2	V	-
Forward Current of PD	IFD	-	2	mA	-
Reverse Voltage of PD	VRD	-	20	V	-
Operating Case Temperature	Tc	0	+70	°C	-
		-40	+85		
Storage Temperature	Tstg	-40	+85	°C	-
Lead Soldering Temperature/Time	Tsld	-	240/10	°C/S	-
Optical Return Loss	Orl	14minimum		dB	-

Transmitter Specifications (Tc=25°C, unless otherwise specified)

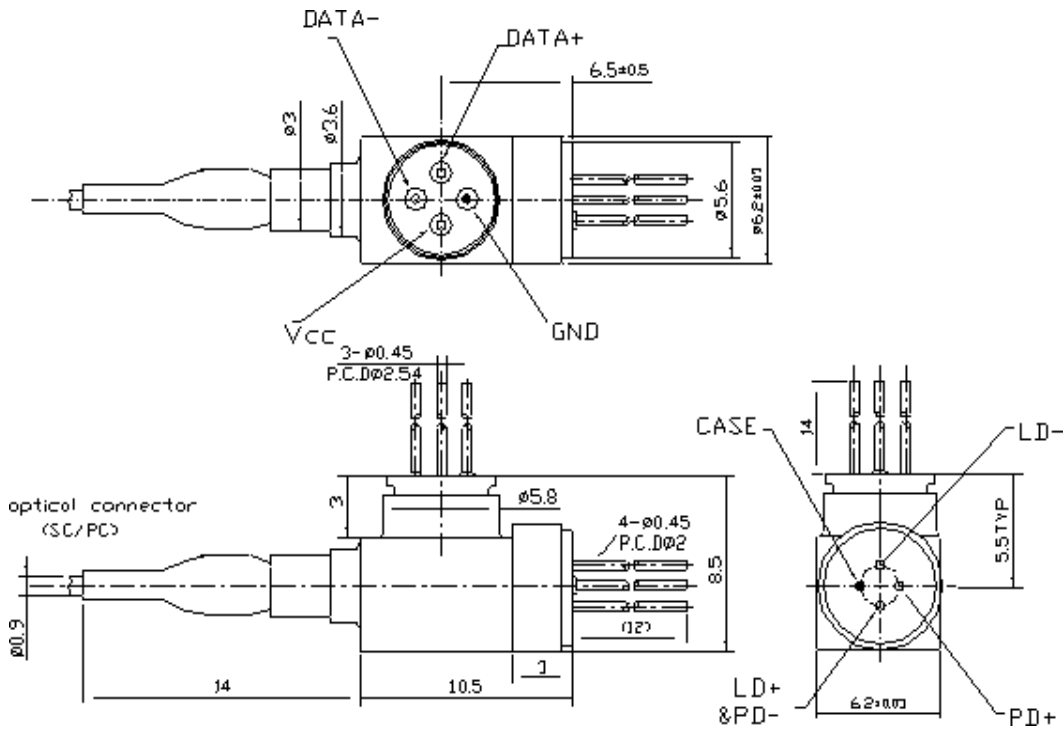
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Center Wavelength	λ	SB1*1	1260	1310	1360	nm
		CW				
		SB5*1	1520	1550	1580	
Operating Voltage	Vop	CW, Po	-	1.1	1.5	V
Threshold Current	Ith	CW	-	10	25	mA
Operating Current	Iop	CW	-	30	50	mA
Output Power	Po	CW, If=Ith+20mA	0.5	-	-	mW

Spectral Width (RMS)	$\Delta\lambda$	Po	SB1*1	-	1.5	4	nm
			SB5*1	-	1	2.5	
Optical Rise/Fall Time	Tr/Tf	10%~90%	-	-	0.7	ns	

Receiver Specifications (Tc=25°C, unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max
Wavelength	λ	SB5*1	1480	1550	1580
		SB1*1	1260	1310	1360
Operating Current	Icc	3.3V	-	35	-
Optical Isolation	Iso	-	35	-	-
Optical Cross talk	Ct	-	-	-	-45
Responsivity(PIN-PD)	R	-	0.7	-	-

Package Information (Unit: mm)



Ordering Information

SB □ □ □ - □ □ - □ □ - □ □ □

Transmitter	Receiver	Package	Data	Condition	Output	Connector	LD PIN	PD PIN
Component (nm)	Component	type	Rate (b/s)	(°C)	Power (μW)	type	distribute	distribute
1: 1310	1: PIN (couple)	1:	1:	1: 5V	1: 100	0: no	1:	
FP-LD	wavelength)	pigtail	155M	0~70	~500	connector	type1	1: type1
2: 1310	2: PIN(single	2:	2:	2: 5V	2: 500	1:	2:	

DFB-LD	wavelength)	receptacle	622M	-40~85	~1000	FC/PC	type2
3: 1490	3: PIN+TIA		3:	3: 3.3V	3: 1000	2:	
FP-LD	(couple wavelength)		1.25G	0~70	~2000	FC/APC	
4: 1490	4: PIN+TIA		4:	4: 3.3V	4: 2000	3:	
DFB-LD	(couple wavelength)		2.5G	-40~85	~	SC/PC	
5: 1550						4:	
FP-LD						SC/APC	
6: 1550						5:	
DFB-LD						ST/PC	

Products:



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