



## 84Mb/S TTL SINGLE MODE BI-DIRECTIONAL SINGLE FIBER TRANSCEIVER

### Features

- Single Fiber Bi-Directional SM optical Transceiver
- Transmitter section Selects 1310nmFP \1550mFP LD or 1490nm DFB\1550nm DFB
- Standard+3.3V /+5V Power Supply
- SC/FC/ST or pigtail optical interface
- Standard TTL data output with signal detect indication, compatible with CMOS level
- Standard 1×9 package

### Applications

- Suitable for optical fiber transmission system with the rate below 84Mb/s

### Specifications

Parameter	Condition	Min	Typ	Max
Wavelength (nm)	1310nm	1270	1310	1350
	1490nm	1480	1490	1500
	1550nm	1530	1550	1570
Power Supply (V)	Vcc	3.135	3.3	3.465
		4.75	5	5.25
Signal Level	TTL		0~5	
	LVTTL		0~3.3	
Output Spectral Width (nm)	FP-LD,RMS			4
	DFB-LD,-20dB			1
Extinction Ratio (dB)	EX	10		
Current of transmitter section (mA)	Vcc=5V			65
	Vcc=3.3V			65
Current of receiver section (mA)	Vcc=5V			50
	Vcc=3.3V			50



Data rate	LD	Wavelength and Mode	P0 (dBm)	Sensitivity (dBm)	Reach
84Mb/s	1310nmFP	SM 1310nm	≥-12	≤-34	20km
	1550nm FP	SM 1550nm	≥-12		
84Mb/s	1310nmFP	SM 1310nm	≥-12	≤-35	40km
	1550nm FP	SM 1550nm	≥-12		
84Mb/s	1310nmFP	SM 1310nm	≥-12	≤-36	60km
	1550nm FP	SM 1550nm	≥-12		
84Mb/s	1490nmDF B	SM 1490nm	≥-12	≤-36	80km
	1550nmDF B	SM 1550nm	≥-12		
84Mb/s	1490nmDF B	SM 1490nm	≥-12	≤-36	100km
	1550nmDF B	SM 1550nm	≥-12		

### Absolute Maximum Ratings

Operating temperature (°C)	0~+70	Lead soldering temperature (°C)	<26 0
	-40~+84		
Storage temperature (°C)	-40~+85	Soldering duration (Sec)	<10

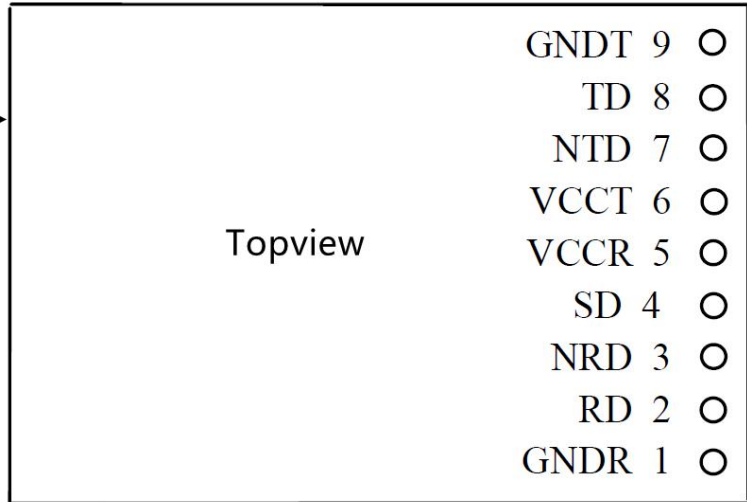
### Pin Connections

Pin	Name	Level	Description
1	GNDR		Signal ground for Receiver
2	RD	TTL/LVTTL	Data output of receiver section
3	NC		No connect
4	SD	TTL/LVTTL	Signal Detect
5	VccR		Power supply for receiver
6	VccT		Power supply for transmitter
7	NC		No connect
8	TD	TTL/LVTTL	Data input of transmitter section
9	GNDT		Signal ground for Transmitter



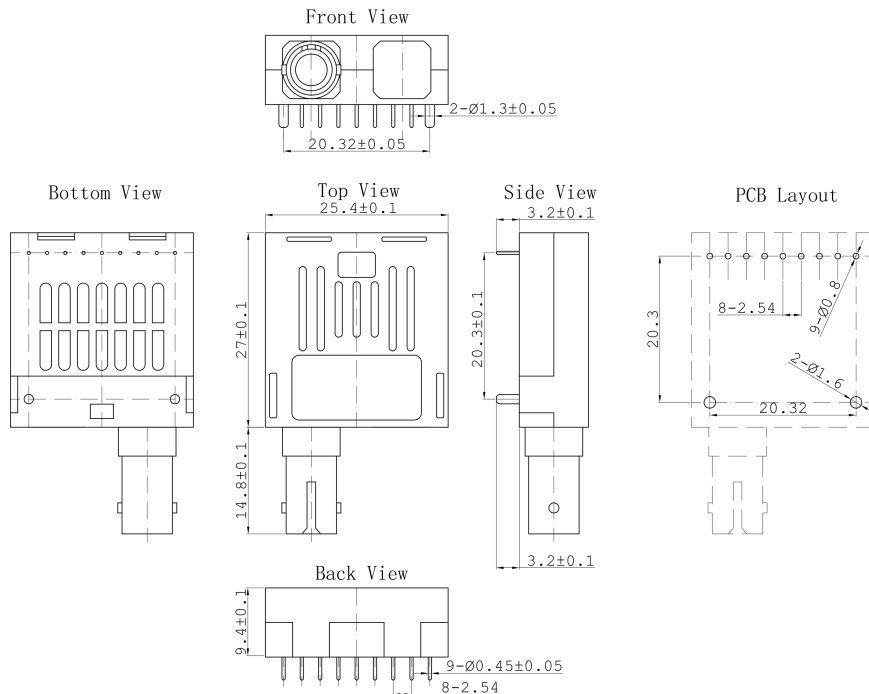
### Topview

Optics transmitter  
(Optics receiver)



### Dimension and optical interface

BIDI ST optical interface on the edge:





### BIDI FC optical interface on the edge

