

2.5Gb/s 单模单纤光收发一体模块

2.5Gb/s PECL SINGLE MODE BI-DIRECTIONAL SINGLE FIBER TRANSCEIVER

特点:

- 双波长复用单模单纤收发一体模块，发射、接收独立工作
- 发射器件可分别选用 1310nm FP 或 1490nmDFB 或 1550nm DFB
- +3.3V /+5V 供电
- SC/FC/ST 插拔式或尾纤型光接口
- 接口电平标准 PECL 电平
- 标准 1×9 管脚封装



Feature:

- Single Fiber Bi-Directional SM optical Transceiver
- Transmitter section Selects 1310nm FP or 1490nm DFB or 1550nm DFB
- Standard +3.3V /+5V Power Supply
- SC/FC/ST or pigtail optical interface
- Standard PECL data output with signal detect indication
- Standard 1×9 package

应用:

- 2.5Gb/s 及以下速率的光纤接入网，如 ATM、SDH、以太网等光纤传输系统

Applications

- Applied to optics fiber transmission systems, such as SDH\ATM\Gigabit Ethernet with bit rate up to 2.5Gbps.

技术指标: Specifications

参数 Parameter	条件 Condition	最小 Min	典型 Typ	最大 Max
工作波长 (nm) Wavelength	1310nm	1270	1310	1350
	1490nm	1480	1490	1500
	1550nm	1530	1550	1570
电源电压 (V) Power Supply	Vcc	3.135	3.3	3.465
		4.75	5	5.25
信号电平 Signal Level	PECL		3.2~4.0	
	LVPECL		1.5~2.3	
输出谱宽 (nm) Output Spectral Width	FP-LD,RMS			4
	DFB-LD,-20dB			1
消光比(dB)Extinction Ratio	EX	10		
发送电流 (mA) Current of transmitter section	Vcc=5V			100
	Vcc=3.3V			100

接收电流 (mA) Current of receiver section	Vcc=5V			110
	Vcc=3.3V			110

速率、激光器、模式及波长、发射功率、灵敏度与传输距离
Data Rate, LD, Wavelength and Mode, Po, Sen, Reach

速率 Data rate	激光器 LD	模式及波长 Wavelength and Mode	输出平均光功率 P0 (dBm)	灵敏度 Sensitivity (dBm)	传输距离 Reach
2.5Gb/s	1310nm FP	SM 1310nm	≥-8	≤-18	10km
	1550nm DFB	SM 1550nm	≥-9		
2.5Gb/s	1490nm DFB	SM 1490nm	≥-7	≤-18	20km
	1550nm DFB	SM 1550nm	≥-7		
2.5Gb/s	1490nm DFB	SM 1490nm	≥-2	≤-18	40km
	1550nm DFB	SM 1550nm	≥-2		

极限值 Absolute Maximum Ratings

工作温度 (°C) Operating temperature (°C)	0 ~ +70 (商业级) Commercial Level	引线焊接温度 (°C) Lead soldering temperature (°C)	<260
	-40 ~ +85 (工业级) Industrial Level		
储存温度 (°C) Storage temperature (°C)	-40 ~ +85	引线焊接时间 (Sec) Soldering duration (Sec)	<10

光模块管脚定义

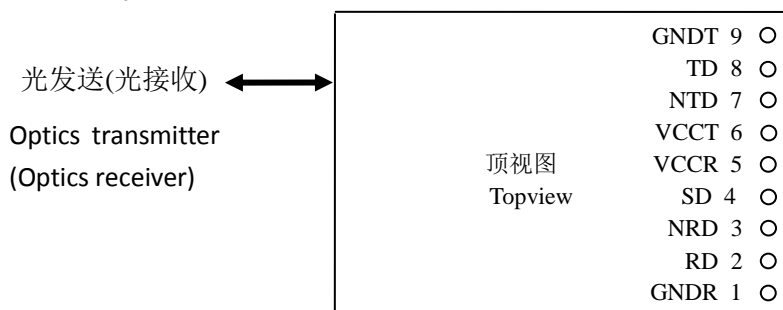
Pin definitions for transceiver

管脚 Pin	管脚名称 Name	电 平 Level	说 明 Description
1	GNDR		接收部分接地脚 Signal ground for Receiver
2	RD+	PECL/LVPECL	接收部分数据输出 Data output of receiver section
3	RD-	PECL/LVPECL	接收部分反向数据输出 Reverse data output of receiver section
4	SD* SD-T**	PECL/LVPECL TTL	接收部分无光告警。 Signal Detect. Customers have options for PECL or TTL SD.
5	VccR		接收部分正电源 Power supply for receiver
6	VccT		发送部分正电源 Power supply for transmitter
7	TD-	PECL/LVPECL	发送部分反向数据输入 Reverse Data input of transmitter section
8	TD+	PECL/LVPECL	发送部分数据输入 Data input of transmitter section
9	GNDT		发送部分接地脚 Signal ground for Transmitter

SD* : Default Signal Detect. PECL mode.

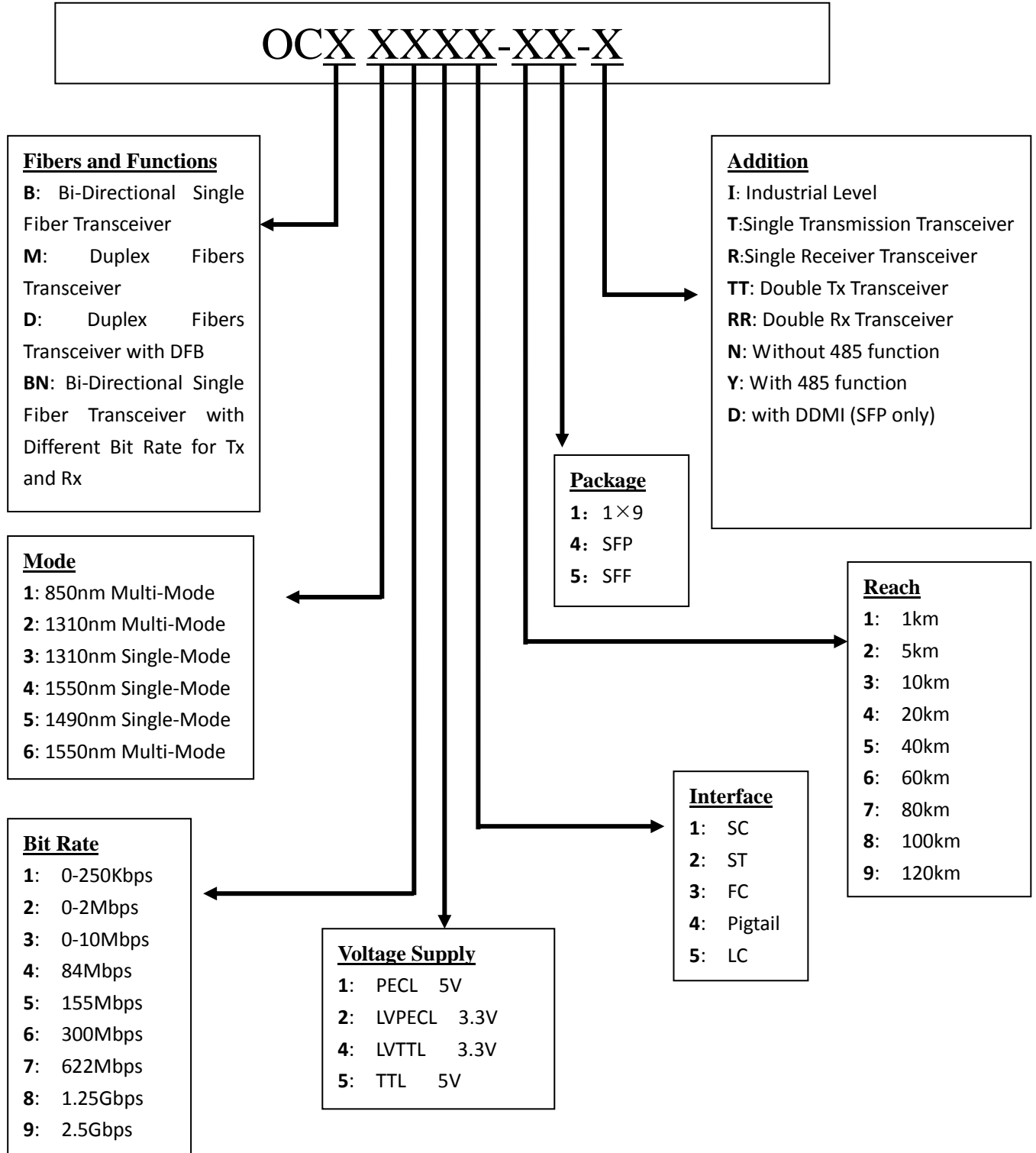
SD-T : Optional Signal Detect. Compatible with TTL SD .**

顶视图 Topview



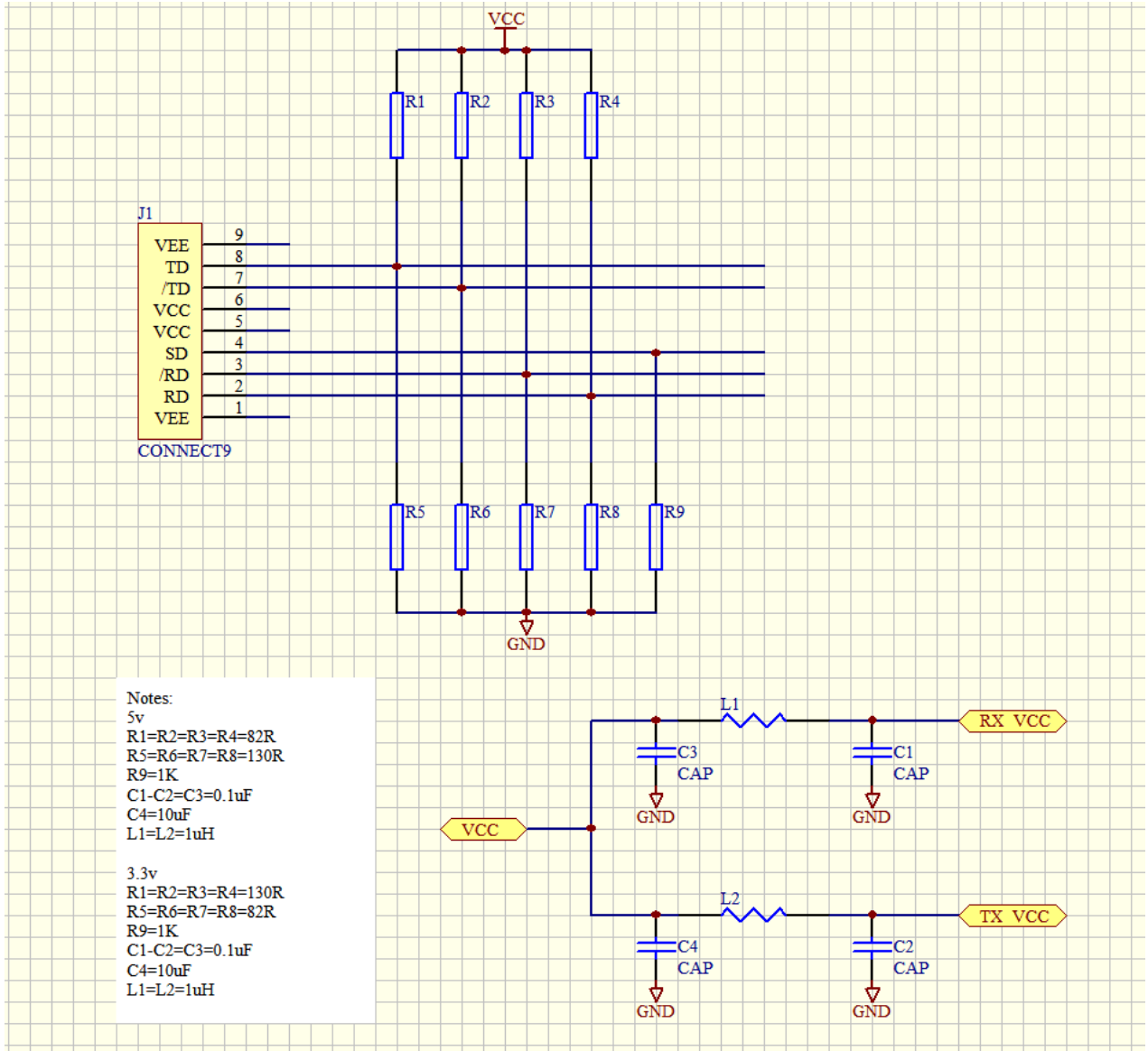
订购信息

Order Information



外围电路推荐:

Recommended Application Configuration:

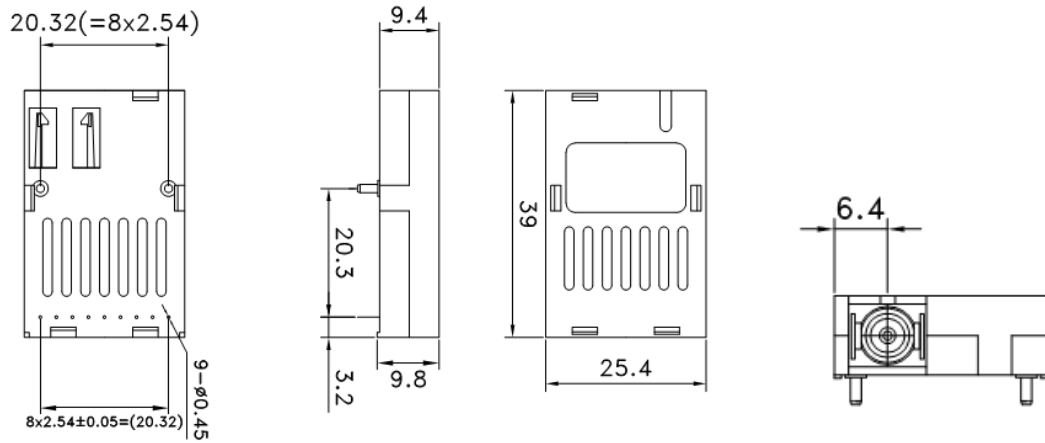


外形尺寸及接口定义

Dimension and optical interface

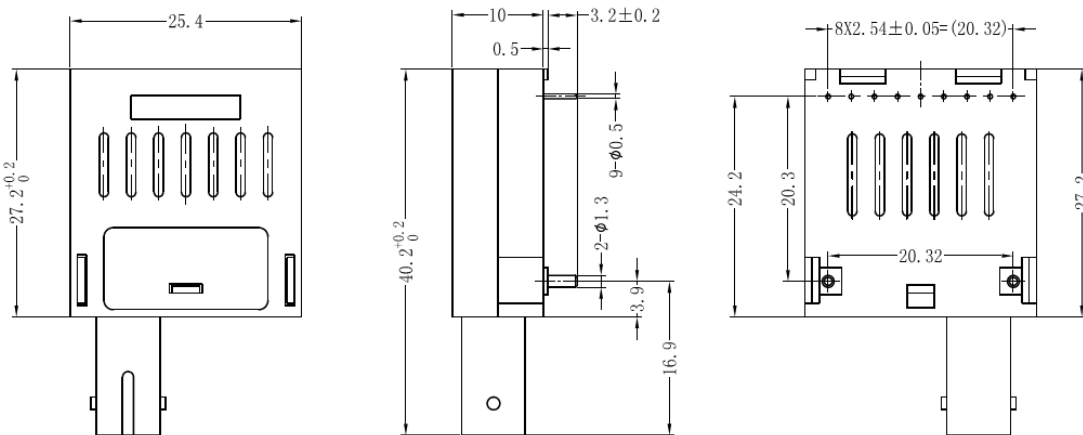
BIDI 边开口 SC 型接口:

BIDI SC optical interface on the edge:



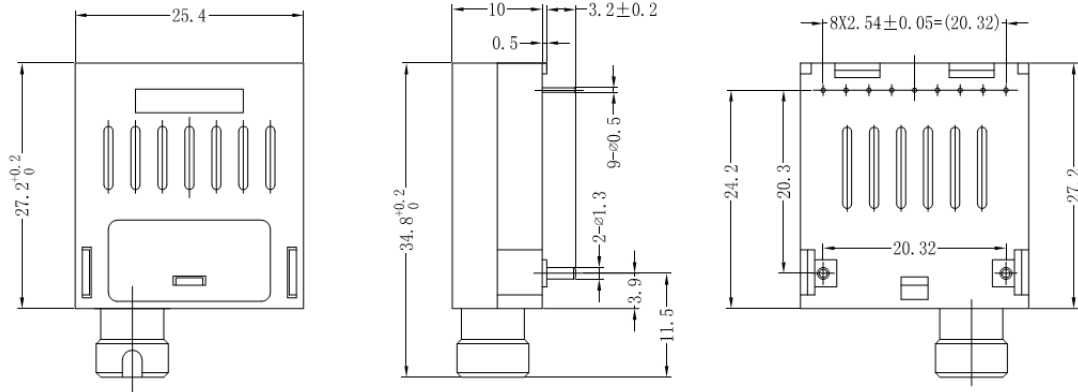
BIDI 边开口 ST 型接口

BIDI ST optical interface on the edge:



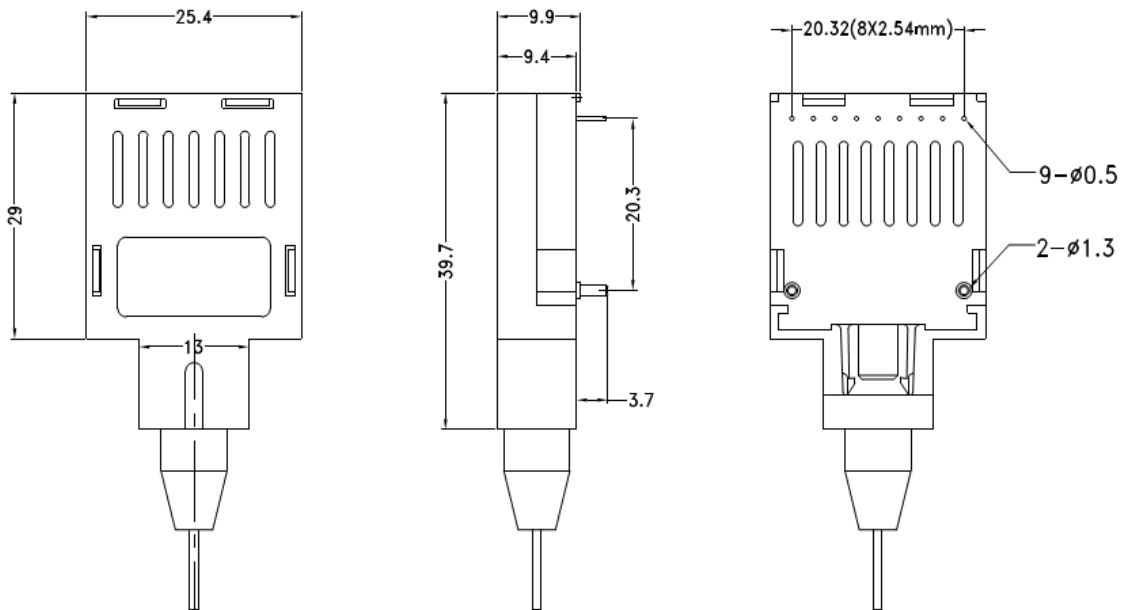
BIDI 边开口 FC 型接口

BIDI FC optical interface on the edge:



BIDI 尾纤型接口

BIDI pigtail optical interface in the middle



BIDI 中开口 SC 型接口

BIDI SC optical interface in the middle

