

# SFP100RJ-I

## 100Base-FX to 100Base-TX SFP Transceiver, Industrial Grade

### Highlights

- 125 Mbps Links up to 100m with four-pair Cat.5 UTP Cable
- Compliant with IEEE802.3u Standard
- Compliant with SFP MSA
- RJ-45 connector
- Single power supply 3.3VDC



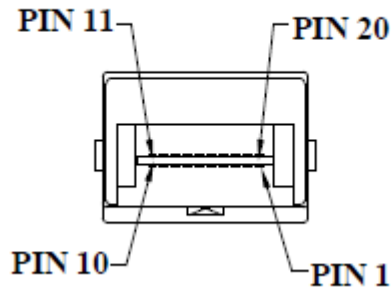
### Features

- 125Mbps Links up to 100m with four-pair Cat.5 UTP Cable
- RJ-45 connector
- Hot Pluggable
- Single power supply 3.3V

### Application

- Switch/router to switch/router interface
- High speed I/O for file server
- Gigabit Ethernet
- Channel extender, data storage
- Bus extension application

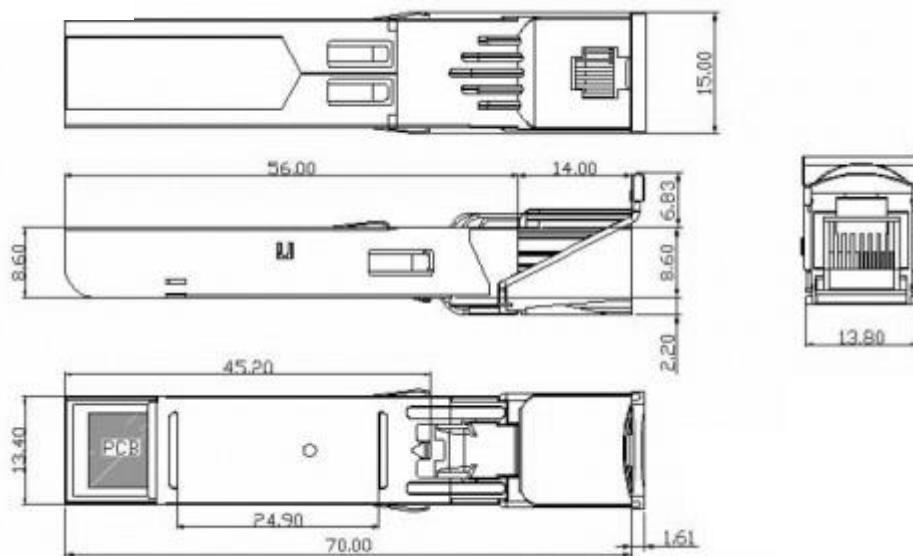
## Pin-Assignment



Pin	Signal Name	Description
1	T <sub>GND</sub>	Transmit Ground
2	TX_FAULT	Transmit Fault
3	TX_DISABLE	Transmit disable
4	MOD_DEF (2)	Data Line for Serial ID
5	MOD_DEF (1)	Clock Line for Serial ID
6	MOD_DEF (0)	Tied to Vee in SFP
7	RATE SELECT	Open Circuit
8	RX_LOS	Receiver Loss of Signal
9	R <sub>GND</sub>	Receiver Ground
10	R <sub>GND</sub>	Receiver Ground
11	R <sub>GND</sub>	Receiver Ground
12	RX-	Inverted Received Data out
13	RX+	Non-Inverted Received Data out
14	R <sub>GND</sub>	Receiver Ground
15	V <sub>CCR</sub>	Receiver Power Supply
16	V <sub>CCT</sub>	Transmitter Power Supply
17	T <sub>GND</sub>	Transmit Ground
18	TX+	Non-inverted Data In
19	TX-	Inverted Data In
20	T <sub>GND</sub>	Transmit Ground

## Dimension

Unit = mm



\* All specifications are subject to change without notice.

## Specifications

<b>ABSOLUTE MAXIMUM RATINGS :</b>						
Parameter	Symbol	Min	Max	Units		
Storage Temperature	Ts	-40	85	°C		
Supply Voltage	Vcc	-0.5	4.0	V		
Storage Relative Humidity	RHs	5	95	%		
<b>RECOMMENDED OPERATING CONDITIONS :</b>						
Parameter	Symbol	Min	Max	Units		
Case Operating Temperature	Tc	SFP100RJ= 0 SFP100RJ-I = -40	SFP100RJ= 70 SFP100RJ-I= 85	°C		
Supply Voltage	Vcc	3.1	3.5	V		
Supply Current	Is		250	mA		
<b>High-Speed Electrical Interface, Host to SFP (VCC= 3.1V to 3.5V, Top=-40 °C to 85 °C)</b>						
Parameter	Symbol	Min	Typ.	Max	Units	Note
TD+, TD- Input Voltage	Vin+ / Vin-	250	-	1200	mA	Single ended
RD+, RD- Output Voltage	Vout+ / Vout-	250	-	800	mA	Single ended
Rise Time (Receiver)	Tr	-	-	2	ps	
Fall Time (Receiver)	Tf	-	-	2	ps	
Tx Input Impedance	Zin	-	50	-	Ohm	Single ended
Rx Output Impedance	Zout	-	50	-	Ohm	Single ended
<b>High-Speed Electrical Interface, Cable to SFP (VCC= 3.1V to 3.5V, Top=-40 °C to 85 °C)</b>						
Units	Units	Min	Typ.	Max	Units	Note
Transmission Frequency	Ft	-	125	-	MHz	
TX Output Impedance	Zout.TX	-	100	-	Ohm	
RX Output Impedance	Zin.RX	-	100	-	Ohm	

## Ordering Information

### SFP100RJ-A

Code Definition	Transceiver Interface	Operating Temperature Range
Option	Copper Transceiver/RJ-45	-I: Industrial model :-40 ~ 85°C * Regular model : 0 ~ 70°C

	Model Name	Description
Available Model	SFP100RJ	100Base-FX to 100Base-TX SFP transceiver, 0 ~ 70°C
	SFP100RJ-I	100Base-FX to 100Base-TX SFP transceiver, Industrial grade, -40 ~ 85°C