

LO-SF-1G-RJ

SFP RJ45 10/100/1000 TX UTP 100m

Product Features

- Up to 1.25Gb/s bi-directional data links
- SFP form with compact RJ-45 connector
- +3.3V single power supply
- 0 to 70°C operating case temperature
- -10 to 85°C operating case temperature
- Intelligent Auto-Negotiation support for automatic duplex, speed and flow control resolution
- 10/100/1000 BASE-T operation in host systems with SGMII interface
- Fully metallic enclosure for low EMI
- Access to physical layer IC via 2-wire serial bus
- RoHS compliant and Lead Free

Applications

- Switch to Switch interface
- 1.25 Gigabit Ethernet over Cat 5 cable

Ordering information

Part Number	Product Description
LO-SF-1G-RJ	SFP RJ45 10/100/1000 TX UTP 100m

Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Units
Storage Temperature	T _s	-40	85	°C
Supply Voltage	V _{cc}	-0.5	4.0	V
Operating Relative Humidity	RH	5	95	%

Recommended Operating Conditions

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating Case Temperature	T _c	0	25	70	°C
Supply Voltage	V _{cc}	3.135	3.3	3.465	V
Data Rate PER Channel	-	-	10/100/1000	-	Mb/s

Transceiver Electrical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes	
Module Supply Current	I _{cc}	-	-	400	mA	-	
Transmitter Differential Input Voltage (TD +/-)	-	500	-	2400	mV _{P-P}	1	
Receiver Differential Output Voltage (RD +/-)	-	500	-	2000	mV _{P-P}	2	
Differential Input Impedance	Z _{TX}	80	100	120	Ω	-	
Low speed output	TX_FAULT	V _{OH}	2.0	-	V _{CC}	V	3
	Loss of signal (LOS)	V _{OL}	0	-	0.8	V	-
Low speed input	TX_DISABLE	V _{IH}	2.0	-	V _{CC}	V	4
	MOD_DEF 1, MOD_DEF 2	V _{IL}	0	-	0.8	V	-

Notes:

- Internally AC coupled and terminated to 100Ω differential load.
- Internally AC coupled, but requires a 100Ω differential termination or internal to Serializer/Deserializer.
- Pulled up externally with a 4.7KΩ-10KΩ resistor on the host board to V_{CCTR}.
- Mod_Def1 and Mod_Def2 must be pulled up externally with a 4.7KΩ-10KΩ resistor on the host board to V_{CCTR}.

Mechanical specifications

