

TRA-SFP-10G-RJ

10G-Copper / 30m / Gigabit Ethernet 10GBASE-T

Features

- Electrical interface specification as per SFF-8431
- Hot pluggable SFP+ footprint
- Management interface specification as per INF-8074i
- Compact RJ45 connector assembly
- Access to Physical Layer IC via 2-wire serial bus
- 30m reach over Cat6a/7 cable
- Operating temperature range 0°C to 70°C
- Power dissipation < 3W
- Auto-negotiation function implemented

Applications

- 10GBase - T



Description

TRansceiver is a high performance transceiver module for 10' Gigabit Ethernet data links over Category 6a/7 cable. The maximum reach is 30m. This transceiver module is compliant with the Small Form-factor Pluggable (SFP+) Multisource Agreement (MSA) and hot pluggable. Always contact **TRansceiver.Asia** commercial agents for compatibility with different equipment platforms.

Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Power Supply Voltage	Vcc	3.135	3.3	3.465	V	
Power Supply Current	Icc			910	mA	
Case Operating Temperature	Tc	0		70	°C	Standard
		5		85	°C	Extended
Relative Humidity		5		95	%	
Storage Temperature		-40		85	°C	

Transmitter Optical Specifications

Parameter	Min	Typ	Max	Units
Data Rate		103.125		Gbps
Distance			30	nm

High-speed Electrical Interface, Host-SFP

Parameter	min	Typ	max	unit	note
Differential Input Voltage Swing	190		700	mV(p-p)	3
Input Signal Rise/Fall Time	34			Ps	5
Differential output Voltage Swing	300		850	mV(p-p)	4

Module Electrical Pin Definition

Pin Number	Name	Function
1	VeeT	Transmitter Ground
2	TX Fault	Transmitter Fault Indication
3	TX_Disable	Transmitter Disable
4	MOD-DEF2	2-Wire Serial Interface Data
5	MOD-DEF1	2-Wire Serial Interface Clock
6	MOD-DEF0	Grounded in Module
7	Rate Select	Not Connected
8	LOS	Loss of Signal
9	VeeR	Receiver Ground
10	VeeR	Receiver Ground
11	VeeR	Receiver Ground
12	RD-	Inverted Received Data Out
13	RD+	Received Data Out
14	VeeR	Receiver Ground
15	VccR	Receiver Power
16	VccT	Transmitter Power
17	VeeT	Transmitter Ground
18	TD+	Transmit Data In
19	TD-	Inverted Transmit Data In
20	VeeT	Transmitter Ground

Ordering information

Part Number	Description
TRA-SFP-10G-RJ	10G Single Mode SFP+ Transceiver,Tx : , 30m, LC, DDM, 0°C~+70°C

Warnings

Process plug

The transceiver optics is supplied with a dust cover. This plug protects the transceiver optics during standard manufacturing processes by preventing contamination from air borne particles. It is recommended that the dust cover remain in the transceiver whenever an optical fiber connector is not inserted.

Handling Precautions

The transceiver optics is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Laser Safety

The transceiver optics is a Class 1 laser product per international standard IEC 60825-1. Radiation emitted by laser