Cisco® GLC-T Compatible 1000Base-T Copper SFP (mini-GBIC) Transceiver Module - RJ45 to 100m

PART NUMBER: GLC-T-ALG
BAR CODE: 9350784005557

1 Overview

This SFP (mini-GBIC) transceiver module is designed for use with Cisco network equipment and is equivalent to Cisco part number GLC-T. This transceiver is built to meet or exceed the specifications of the OEM and to comply with Multi-Source Agreement (MSA) standards. This product is 100% functionally tested, and compatibility is guaranteed. The transceiver is hot-swappable input/output device which allows a Gigabit Ethernet port to link with a copper network and is compatible with 10/100/1000BASE-T standards. OEM specific configuration data is loaded on to the EEPROM of the transceiver at the factory, allowing this transceiver to initialize and perform identically to an OEM transceiver. This transceiver may be mixed and deployed with other OEM or third party transceivers and will deliver seamless network performance. A list of compatible network equipment is available on the Specs tab of this page.

2 Features

* Compliant with IEEE 802.3z, IEEE802.3u, IEEE802.3ab compliant
* Compliant with SFP MSA specifications.
* Hot-pluggable SFP footprint
* Support 1000BASE-T full duplex default operating mode
* Support 10/100/1000BASE-T operation in host systems with SGMII interface
* RJ-45 connector
* Auto-sense MDI/MDIX
* Single power supply 3.3V
* RoHS Compliance
* Warranty: 1 year

3 Application

* 10/100/1000Mbps Copper LAN.
* Gigabit Ethernet over copper.
* Switch to switch interface.
* Switched backplane applications.
* Gigabit Ethernet Interface of File Server.

3 Performance

* OP6C-TX1-00-C data link up to 100 m on standard CAT 5 UTP.

4 Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Units
Storage Temperature	T_s	-40	85	°C
Supply Voltage	Vcc	0	5	V

5 Recommended Operating Conditions

Parameter	Symbol	Min.	Max.	Units
Operating Temperature	T_c	0	70	°C
Supply Voltage	Vcc	3.1	3.5	V

6 Transmitter Electro-optical Characteristics

Vcc = 3.1 V to 3.5 V, T_c = 0°C to 70°C

Parameter	Symbol	Min.	Typ.	Max.	Units	Note
Supply Current	I_{CC}	---	350	400	mA	
Transmitter						
Data Input Differential Voltage	$V_{D,TX}$	0.5	---	2.4	V	1
Differential Input Impedance	Z_{TX}	80	100	120	Ohm	
Transmitter Disable Input-High	V_{DISH}	2.0	---	VCC+0.3	V	
Transmitter Disable Input-Low	V_{DISL}	0	---	0.8	V	
Receiver						
Data Output Differential Voltage	$V_{D,RX}$	0.35	---	2	mV	3
Differential Output Impedance	Z_{RX}	80	100	120	Ohm	
Data Output Rise/Fall Time	$t_{r,Rx}$ /$t_{f,Rx}$	---	180	---	ps	4

Notes:
1. Internally AC coupled and terminated to 100-Ohm differential.
2. Pull up to VCC with a 4.7K – 10K Ohm resistor on host.
3. Internally AC coupled, but requires a 100-Ohm differential termination at MAC side.
4. These are unfiltered 20%~80% values.