

## SFP-10G-T-CAT

Cisco® SFP-10G-T-CAT Compatible TAA 100/1000/10000Base-TX SFP+ Transceiver (Copper, 30m, RJ-45)

### Features:

- SFF-8432 Compliance
- RJ-45 Connector
- Copper Media Type
- Commercial Temperature 0 to 70 Celsius
- Hot Pluggable
- Metal with Lower EMI
- Excellent ESD Protection
- RoHS Compliant and Lead Free



### Applications:

- 10GBase Ethernet
- Access and Enterprise

### Product Description

This Cisco® SFP-10G-T-CAT compatible SFP+ transceiver provides 100/1000/10000Base-TX throughput up to 30m over a copper connection via a RJ-45 connector. This TX module supports 100/1000/10000Base auto-negotiation and can be configured to fit your needs. It is guaranteed to be 100% compatible with the equivalent Cisco® transceiver. This easy to install, hot swappable transceiver has been programmed, uniquely serialized and data-traffic and application tested to ensure that it will initialize and perform identically. It is built to meet or exceed the specifications of Cisco®, as well as to comply with MSA (Multi-Source Agreement) standards to ensure seamless network integration. This transceiver is Trade Agreements Act (TAA) compliant. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

ProLabs' transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."



### Absolute Maximum Ratings

| Parameter                  | Symbol           | Min.  | Max. | Unit |
|----------------------------|------------------|-------|------|------|
| Maximum Supply Voltage     | V <sub>cc</sub>  | 3.135 | 3.6  | VDC  |
| Storage Temperature        | T <sub>S</sub>   | -40   | 85   | °C   |
| Operating Case Temperature | T <sub>c</sub>   | 0     | 70   | °C   |
| Operating Humidity         | RH               | 5     | 95   | %    |
| Maximum Bitrate            | B <sub>max</sub> |       | 11.4 | Gbps |

### Electrical Characteristics (TOP=25°C, V<sub>cc</sub>=3.3Volts)

| Parameter                        | Symbol          | Min.  | Typ. | Max.                 | Unit | Notes |
|----------------------------------|-----------------|-------|------|----------------------|------|-------|
| Power Supply Voltage             | V <sub>cc</sub> | 3.135 | 3.30 | 3.465                | V    |       |
| Low Speed Input Voltage          |                 | -0.5  |      | V <sub>cc</sub> +0.3 | V    |       |
| Two-Wire Interface Input Voltage |                 | -0.3  |      | V <sub>cc</sub> +0.5 | V    |       |
| Power (30m @ 25C ambient)        |                 |       | 2.3  | 2.5                  | W    |       |

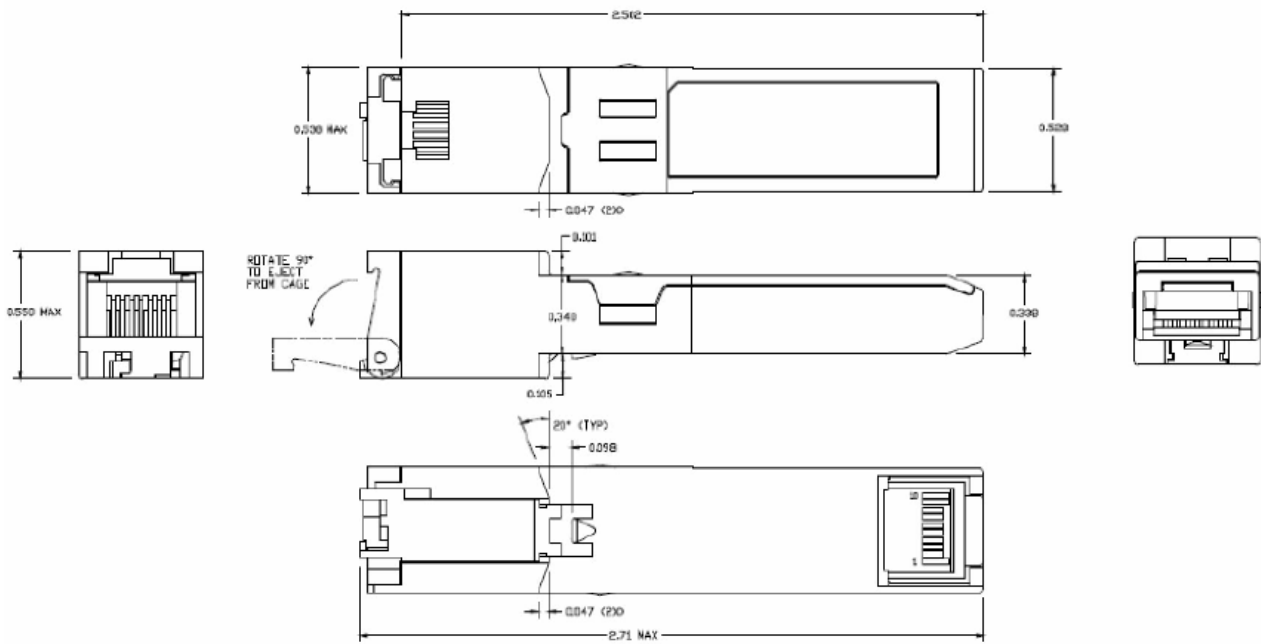
## Pin Descriptions

| Pin | Symbol     | Name/Descriptions                                    | Ref. |
|-----|------------|--|------|
| 1   | VeeT       | Transmitter Ground                                   | 1    |
| 2   | Tx_Fault   | Transmitter Fault LVTTTL-O                           | 2    |
| 3   | Tx_Disable | Transmitter Disable LVTTTL-I                         |      |
| 4   | SDA        | 2-wire Serial Interface Data Line LVTTTL-I/O         |      |
| 5   | SCL        | 2-wire Serial Interface Clock LVTTTL-I/O             |      |
| 6   | Mod_ABS    | Module Absent, connect to VeeT or VeeR in the module |      |
| 7   | RS0        | Rate Select 0 LVTTTL-I                               |      |
| 8   | Rx_LOS     | Receiver Loss of Signal Indication LVTTTL-O          | 2    |
| 9   | RS1        | Rate Select 1 LVTTTL-I                               |      |
| 10  | VeeR       | Receiver Ground                                      | 1    |
| 11  | VeeR       | Receiver Ground                                      | 1    |
| 12  | RD-        | Receiver Inverted Data Output CML-O                  |      |
| 13  | RD+        | Receiver Non-Inverted Data Output CML-O              |      |
| 14  | VeeR       | Receiver Ground                                      | 1    |
| 15  | VccR       | Receiver 3.3V Supply                                 |      |
| 16  | VccT       | Transmitter 3.3V Supply                              |      |
| 17  | VeeT       | Transmitter Ground                                   | 1    |
| 18  | TD+        | Receiver Inverted Data Output CML-I                  |      |
| 19  | TD-        | Transmitter Inverted Data Input CML-I                |      |
| 20  | VeeT       | Module Transmitter Ground                            | 1    |

### Notes:

1. The module signal grounds should be isolated from the module case.

# Mechanical Specifications



## About ProLabs

Our experience comes as standard; for over 15 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with over 90 optical switching and transport platforms.

## Complete Portfolio of Network Solutions

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 400G while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

## Trusted Partner

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure that you get immediate answers to your questions and compatible product when needed. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.



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