

## SFP-10GBASE-T-80M-FT-AO

Fortinet® Compatible TAA 10GBase-TX SFP+ Transceiver (Copper, 80m, RJ-45)

### Features

- SFF-8432 and SFF-8431 MSA Compliant
- Copper Media Type
- RJ-45 Connector
- Support Hot Pluggable
- Metal with lower EMI
- Commercial Temperature 0 to 70 Celsius
- RoHS compliant and Lead Free
- Excellent ESD protection



### Applications

- 10GBase Ethernet
- Access and Enterprise

### Product Description

This Fortinet® SFP+ transceiver provides 10GBase-TX throughput up to 80m over a copper connection via a RJ-45 connector. This TX module supports 10GBase auto-negotiation and can be configured to fit your needs. It is guaranteed to be 100% compatible with the equivalent Fortinet® 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 Fortinet®, 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.

AddOn's 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.	Typ.	Max.	Unit	Notes
Data Rate	BR		10		GB/s	1
Bit Error Rate	BER			10 <sup>-12</sup>		
Storage Temperature	Tstg	-40		85	°C	2
Operating Case Temperature	Tc	0		70	°C	
Maximum Voltage	Vcc	-0.5		4	V	

### Notes:

1. IEEE 802.3ae.
2. Ambient temperature.

### Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Input Voltage	V <sub>cc</sub>	3.14	3.3	3.46	V	
Supply Current	I <sub>cc</sub>		590		mA	1
Surge Current	I <sub>surge</sub>			30	mA	

### Notes:

1. Test at 10Gbps rate using 80m CAT 6A cable.

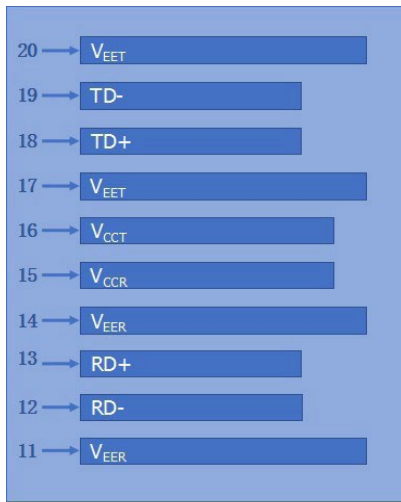
## Pin Descriptions

Pin	Symbol	Description	Ref.
1	VeeT	Transmitter Ground (Common with Receiver Ground).	1
2	TX_Fault	Transmitter Fault. Not supported.	
3	TX_Disable	Transmitter Disable, PHY disabled on high or open.	2
4	SDA	2-Wire Serial Interface Data.	3
5	SCL	2-Wire Serial Interface Clock.	3
6	MOD_ABS	Module Absent. Grounded within the module.	3
7	RS0	No Connection Required.	
8	LOS	Loss of Signal Indication, Logic 0 indicated normal operation.	
9	RS1	No Connection Required.	
10	VeeR	Receiver Ground (Common with Transmitter Ground).	1
11	VeeR	Receiver Ground (Common with Transmitter Ground).	1
12	RD-	Receiver Inverted DATA out. AC coupled.	
13	RD+	Receiver Non-Inverted Data Out. AC coupled.	
14	VeeR	Receiver Ground (Common with Receiver Ground).	1
15	VccR	Receiver Power Supply.	
16	VccT	Transmitter Power Supply.	
17	Veet	Transmitter ground (Common with Receiver Ground).	1
18	TD+	Transmitter Non-Inverted Data In. AC coupled.	
19	TD-	Transmitter Inverted Data In. AC Coupled.	
20	Veet	Transmitter Ground (Common with Receiver Ground).	1

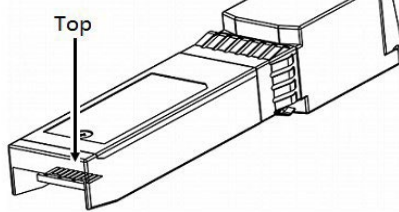
### Notes:

1. Circuit ground is connected to chassis ground.
2. Disabled  $T_{DIS} > 2V$  or open, Enabled  $T_{DIS} < 0.8V$
3. Should be pulled up with 4.7K $\Omega$ -10K $\Omega$  on host board to a voltage between 2V and 3.6V

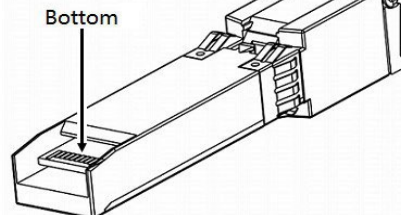
## Electrical Pad Layout



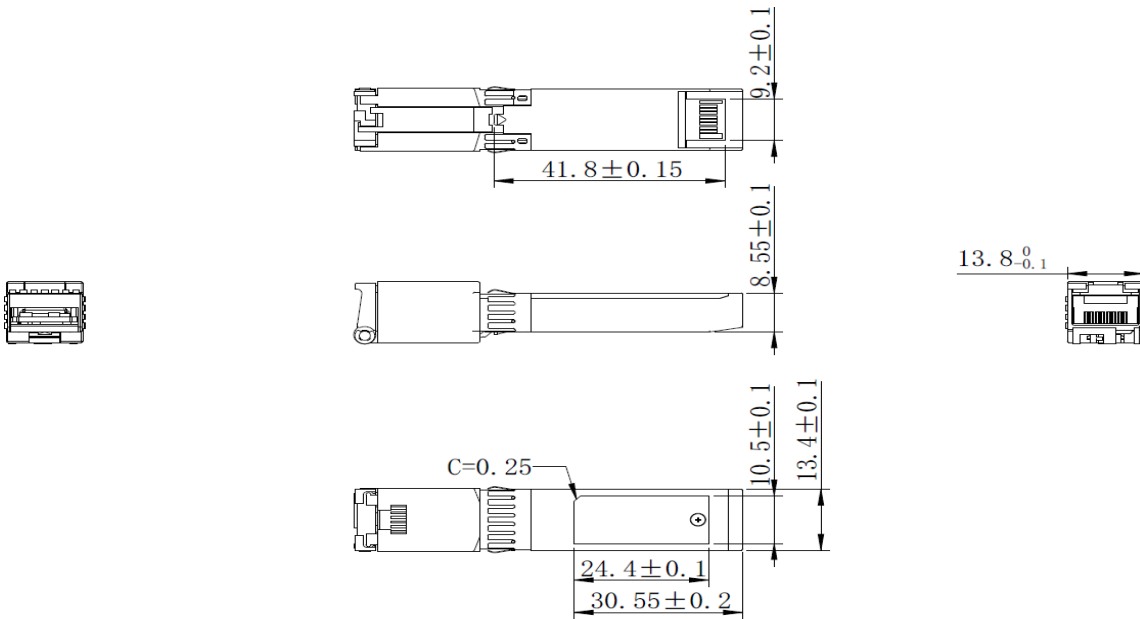
Top of Board



Bottom of Board



## Mechanical Specifications



## About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is engrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.



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