

### MFM1T02A-T-PRO

Mellanox® MFM1T02A-T Compatible TAA Compliant 100/1000/10000Base-TX SFP+ Transceiver (Copper, 30m, 0 to 70C, RJ-45)

#### Features

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



#### Applications:

- 10GBase Ethernet
- Access and Enterprise

#### Product Description

This Mellanox® MFM1T02A-T 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 Mellanox® 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 Mellanox®, 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.

Proline'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.	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	
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	
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 Us:**

Proline Options is one of North America's leading providers of transceivers and high speed cabling. With a reputation for quality, tested products that cover the connectivity spectrum, Proline Options has a solution for you regardless of the specification.

At Proline Options, every product is tested in its intended application - never batch or spec tested only. We run bandwidth, distance and IOS network tests. We have documented an impressive 0.03% failure rate over the last 10 years. To continue this rate of success we invest millions annually in our own on-site testing lab.



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