

# 10GbE SFP+ MMF Optical Transceiver

## MFM1T02A-SR

The Mellanox® MFM1T02A-SR is a pluggable, SFP+ optical transceiver, designed for use in 10GbE Ethernet systems. The transceiver operates over multi-mode (MMF) fiber, using a nominal wavelength of 850nm, and is SFF-8083 compliant.

MFM1T02A-SR has an IEEE 802.3ae compliant standard SFP+ interface on the electrical side towards the host system. The optical interface is composed of two optical channels/fibers, intended for connection of an MMF cable via a standard LC connectors.

Rigorous production testing ensures the best out-of-the-box installation experience, performance, and durability.

Table 1 - Absolute Maximum Ratings

| Parameter               | Minimum | Maximum | Units |
|-------------------------|---------|---------|-------|
| Supply voltage          | -0.3    | 4.0     | V     |
| Data input voltage, Vcc | -0.3    | Vcc+0.3 | V     |
| Control input voltage   | -0.3    | Vcc+0.3 | V     |
| Storage temperature     | -40     | 85      | °C    |

Table 2 - Operational Specifications

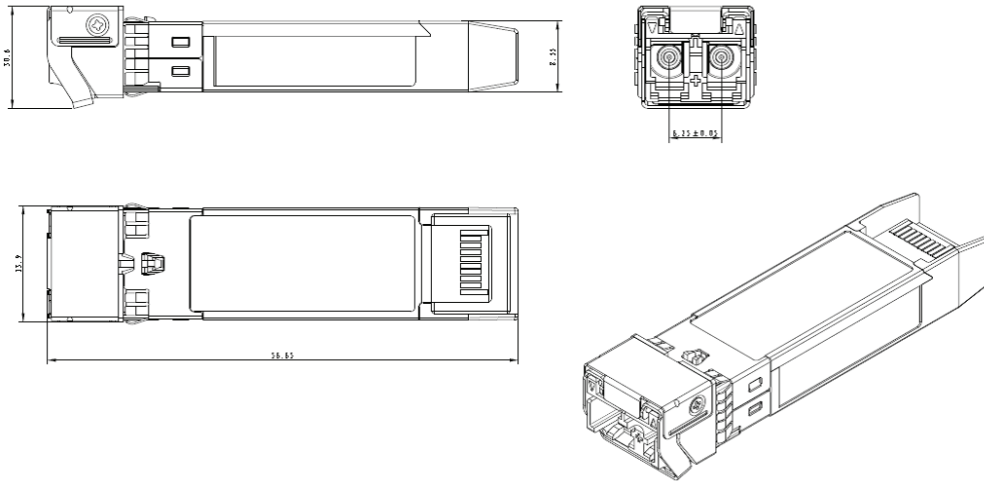
| Parameter                  | Minimum                         | Typical | Maximum | Units |
|----------------------------|---------------------------------|---------|---------|-------|
| Supply voltage             | 3.14                            | 3.3     | 3.46    | V     |
| Power consumption          | ---                             | ---     | 1       | W     |
| Supply noise rejection     | Tolerance according to SFF-8419 |         |         |       |
| Operating case temperature | 0                               | ---     | 70      | °C    |



## HIGHLIGHTS

- Up to 10.3125Gb/s data rate
- SFF-8083 compliant
- IEEE 802.3ae 10GBASE-SR compliant
- 1W maximum power consumption
- 3.3V power supply
- BER better than 1E-15
- Operating case temperature of 0-70°C
- Hot pluggable
- Class 1 laser safety
- Up to 300m link length on OM3 multimode fiber at 10Gb/s
- Up to 400m link length on OM4 multimode fiber at 10Gb/s
- RoHS compliant
- SFF-8083 compliant management interface
- SFF-8472 compliant digital diagnostic monitoring (DDM)

## Mechanical Schematics (Option 1)



Note: Multiple options are specified to ensure supply chain robustness. The provided option depends on availability and may change from shipment to shipment.

## Mechanical Schematics (Option 2)

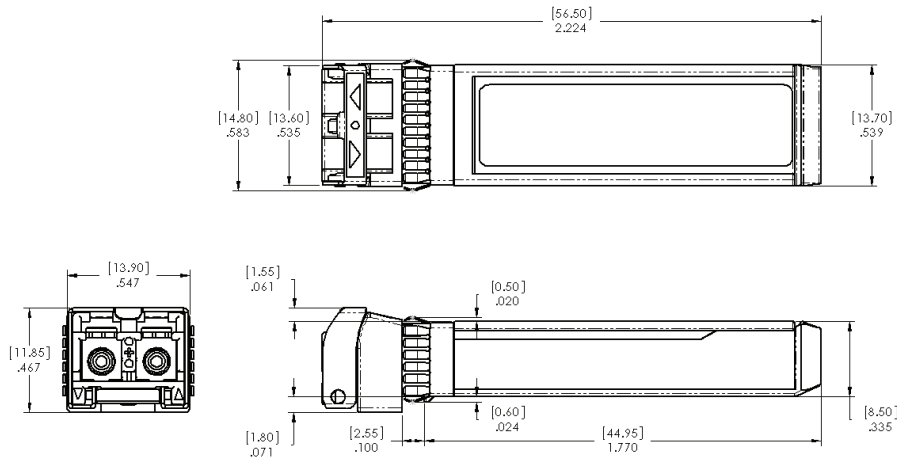


Table 3 - Part Number and Description

| OPN        | Description  |
|------------|--|
| MF1T02A-SR | Mellanox® optical module, ETH 10GbE, 10Gb/s, SFP+, LC-LC, 850nm, SR up to 300m |

### Warranty Information

Mellanox LinkX optical transceivers include a 1-year limited hardware warranty, which covers parts repair or replacement.