

Product Specification

MFB-TFX

SFP-Port 100Base-FX mini-GBIC Module – 2km

MFB-TF20

SFP-Port 100Base-FX mini-GBIC Module – 20km

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2010/6/18	Marc Liao	Initial Release

Author:	Marc Liao	Editor:	Marc Liao
Reviewed By:	Kent Kang	Approved By:	Tom Shih

1. PRODUCT DESCRIPTION

The MFB-T family consists of Small Form Factor Pluggable (SFP) transceiver modules that are specifically designed for high performance integrated duplex data link over single mode optical fiber. These transceiver modules are compliant with the SFP Multisource Agreement (MSA) and hot pluggable. These modules offer an easy way to be installed in SFP MSA compliant ports at any time without the interruption of the host equipments operation.

The MFB-T SFP transceivers using a long wavelength (1310nm) FP LD enabling data transmission up to 2km on a multimode optical fiber and up to 60km on a single mode optical fiber.

To fill the increase demand of Industrial Ethernet fiber solution, the MFB-T series 100Base-FX transceivers that can operate reliably in electrically harsh, climatically demanding, and wide temperature range (-40°C to 75°C) environment. The MFB-T series 100Base-FX transceivers provide easy and fast 100Base-FX connection for Planet wide temperature Industrial equipments.

The PLANET MFB-T family comes with one of the following models.

MFB-TFX	SFP-Port 100Base-FX Transceiver (1310nm) -2km (-40~75°C)
MFB-TF20	SFP-Port 100Base-FX Transceiver (1310nm) - 20km (-40~75°C)

2. PRODUCT FEATURES

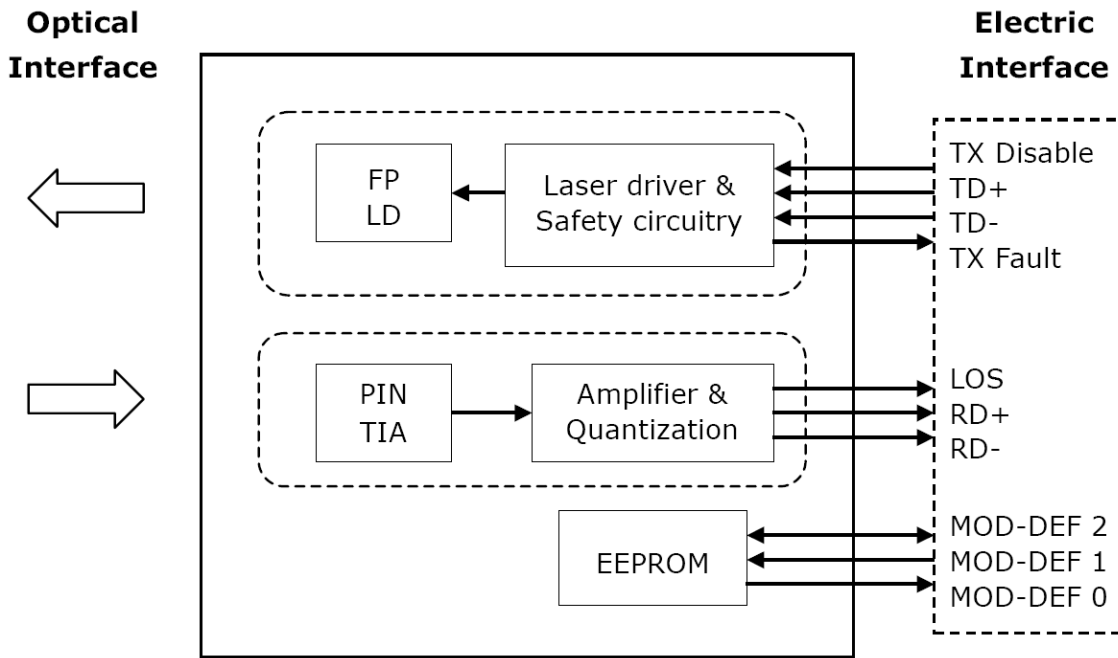
- SFP Multi-Source Agreement compliant
- 125Mbps IEEE 802.3u 100Base-FX compliant
- 1 X 100Mbps LC fiber port
- Industry standard small form pluggable (SFP) package
- 125Mbps FDDI ISO / IEC 9314-1 compliant
- Serial ID functionality support
- AC-coupled differential inputs and outputs
- Class 1 laser safety standard IEC 825 compliant
- 2 km link on a multimode fiber and 60km on a single mode fiber
- Low power dissipation
- -40 to 75 Degree C operation temperature

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

The transceiver is fundamentally consisted by two parts: **transmitter** and **receiver**. The transmitter features a TTL logic level Disable signal and a Fault indicator. The receiver features a TTL logic Loss of Signal (LOS) detection. For the access of serial identification information, an **EEPROM** is used to store the required data via the 2-wire serial CMOS EEPROM protocol. The detailed signal descriptions are listed in the following sections.

■ Block Diagram of Transceiver



3.2 FUNCTION SPECIFICATION

MFB-TFX	
PHY Type	100Base-FX
Fiber Type	Multi-Mode
Connector	LC
Wavelength	1310nm
Maximum Distance	2km
Operating Temperature	-40 ~ 75 Degree C
MFB-TF20	
PHY Type	100Base-FX
Fiber Type	Single Mode
Connector	LC
Wavelength	1310nm
Maximum Distance	20km
Operating Temperature	-40 ~ 75 Degree C

3.3 PHYSICAL SPECIFICATIONS:

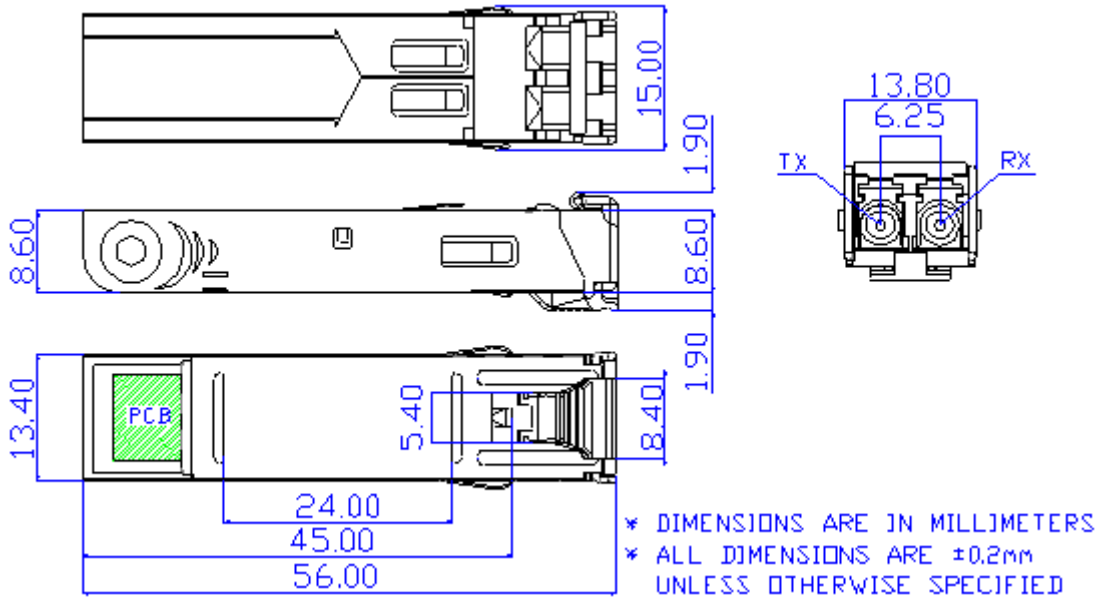
Dimensions:

56 x 15 x 13.4mm (W x D x H)

Weight:

16g

■ **Diagrams:**



3.4 ENVIRONMENTAL SPECIFICATION

Operating:

Temperature: -40°C ~ 75 Degree C
Relative Humidity: 5% ~ 90% (non-condensing)

Storage:

Temperature: -40°C ~ 75 Degree C
Relative Humidity: 5% ~ 90% (non-condensing)

3.5 ELECTRICAL SPECIFICATION

Input Voltage: 3.3V DC

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 Degree C

3.8 BASIC PACKAGING

- The MFB-T family SFP Mini-GBIC Fast Ethernet Module x1
- This User's Manual x

3.9 PACKING DIMENSION

Dimension: 143mm x 100mm x 46mm (W x D x H)

Weight: 76g (Gross Weight)

Unit per carton: 38pcs in one carton