AFBR-703SNZ

10Gb Ethernet, 850 nm, 10GBASE-SR, mini-SFP+ (mSFP) Transceiver

AVAGOTECHNOLOGIES

Product Brief



Description

The Avago AFBR-703SNZ transceiver is with a mini-SFP+ (mSFP) form factor that is smaller than the standard SFP+ form factor defined by the SFF 8432 mechanical specs. This product is part of a family of SFP+ products, but can be used for even higher density 10Gb Ethernet application than what the SFP+ form factor can serve today. Both the mSFP and the SFP+ form factors share the same management interface specs and optical specs. Both the mSFP SR transceiver and the SFP+ SR transceiver utilize Avago's 850nm VCSEL and PIN detector technology to provide an IEEE 10GbE design compliant with the 10GBASE-SR standard.

Related Products

- The AFBR-703SDZ (AFBR-703ASDZ) is a SFP+ 10 Gigabit Ethernet 10GBASE-SR transceiver with case temperature operated at 0-70 (0-85) °C for use on multimode fiber cables. It is best suited for OM3 high bandwidth MMF link applications with link lengths up to 300 meters.
- The AFBR-707SDZ (AFBR-707ASDZ) is a SFP+ 10 Gigabit Ethernet 10GBASE-LRM transceiver for 220 meter operation in all MMF link applications including OM1 and OM2 legacy fiber cables and new high bandwidth OM3 fiber cables.
- The AFCT-701SDZ (AFCT-701ASDZ) is a SFP+ 10 Gigabit Ethernet 10GBASE-LR transceiver with case temperature 0-70 (0-85) °C for operation in SMF link applications to 10 km

Features

- Avago 850nm VCSEL source and Transmitter Optical Subassembly technology
- Avago PIN detector and Receiver Optical Subassembly technology
- Typical power dissipation 600mW
- Full digital diagnostic management interface
- Avago mSFP package design enables equipment EMI performance in high port density applications with margin to Class B limits

Specifications

- Optical interface specifications per IEEE 802.3ae 10GBASE-SR
- Electrical interface specifications per SFF Committee SFF 8431 Specifications for Enhanced 8.5 and 10 Gigabit Small Form Factor Pluggable Module "SFP+"
- Management interface specifications per SFF Committee SFF 8431 and SFF 8472 Diagnostic Monitoring Interface for Optical Transceivers
- LC Duplex optical connector interface confirming to ANSI TIA/EA 604-10 (FOCIS 10A)
- Compliant to Restriction on Hazardous Substances (RoHS) per EU and China requirements
- Class 1 Eye safe per requirements of IEC 60825-1 / CDRH

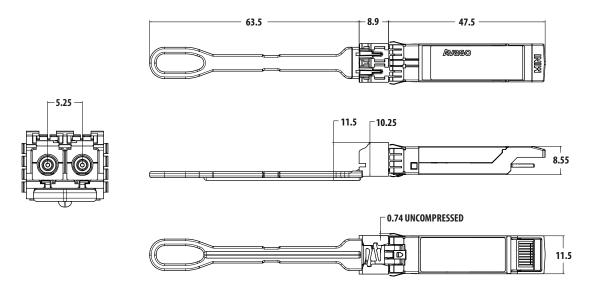


Figure 7. Module drawing

Patch Cables for mSFP Connection

The mSFP patch cables listed below.

| Туре | Description | Length | Corning Part Number | Molex Part Number | Amphenol Part Number |
|--------------|---|--------|------------------------|----------------------|-------------------------|
| mSFP to LC | mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125 | 1m | S50502S5120001M | 106273-0525 | 943-99865-10001 |
| mSFP to LC | mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125 | 2m | S50502S5120002M | 106273-0526 | 943-99865-10002 |
| mSFP to LC | mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125 | 3m | S50502S5120003M | 106273-0527 | 943-99865-10003 |
| mSFP to LC | mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125 | 5m | S50502S5120003M | 106273-0528 | 943-99865-10005 |
| mSFP to LC | mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125 | 10m | S50502S5120010M | 106273-0529 | 943-99865-10010 |
| mSFP to mSFP | mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125 | 1m | S5S502S5120001M | 106273-0560 | 943-99866-10001 |
| mSFP to mSFP | mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125 | 2m | S5S502S5120002M | 106273-0561 | 943-99866-10002 |
| mSFP to mSFP | mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125 | 3m | S5S502S5120003M | 106273-0562 | 943-99866-10003 |
| mSFP to mSFP | mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125 | 5m | S5S502S5120005M | 106273-0563 | 943-99866-10005 |
| mSFP to mSFP | mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125 | 10m | S5S502S5120010M | 106273-0564 | 943-99866-10010 |

For product information and a complete list of distributors, please go to our website: **www.avagotech.com**

