

## AFBR-703SNZ

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



## 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 conforming 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

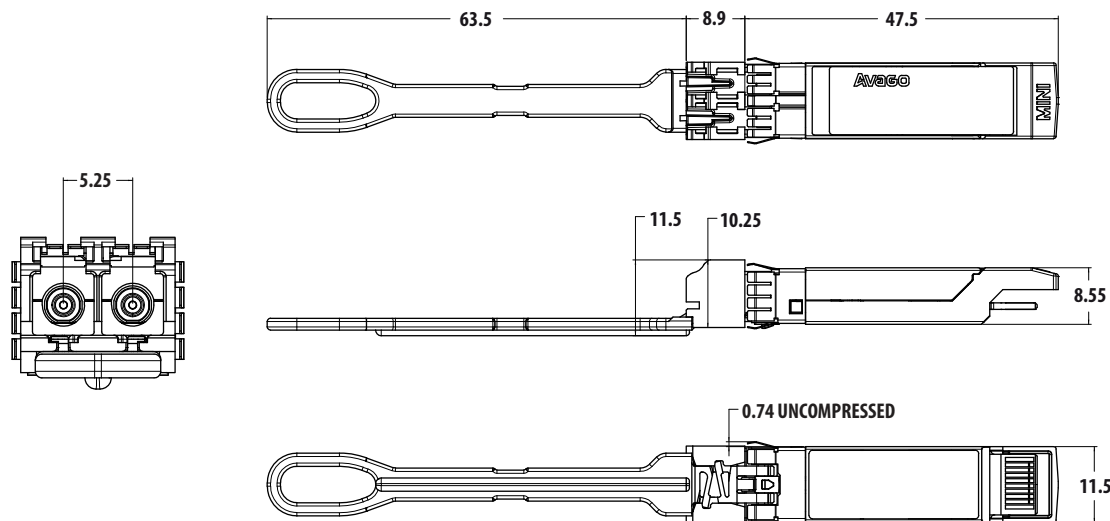


Figure 7. Module drawing

### Patch Cables for mSFP Connection

The mSFP patch cables listed below.

Type	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	S55502S5120001M	106273-0560	943-99866-10001
mSFP to mSFP	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	2m	S55502S5120002M	106273-0561	943-99866-10002
mSFP to mSFP	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	3m	S55502S5120003M	106273-0562	943-99866-10003
mSFP to mSFP	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	5m	S55502S5120005M	106273-0563	943-99866-10005
mSFP to mSFP	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	10m	S55502S5120010M	106273-0564	943-99866-10010

For product information and a complete list of distributors, please go to our website: [www.avagotech.com](http://www.avagotech.com)

Avago, Avago Technologies, and the A logo are trademarks of Avago Technologies in the United States and other countries. Data subject to change. Copyright © 2005-2011 Avago Technologies. All rights reserved. AV02-2827EN - February 21, 2011

