

# AFBR-4536EZ, -4536BZ, -4536DZ

## Plastic Optical Duplex Bulkhead Connector

### Suitable For Duplex Connector AFBR-452xZ



## Data Sheet



Lead (Pb) Free  
RoHS 6 fully  
compliant



### Description

Avago Technologies' AFBR-4536xZ duplex bulkhead connectors are designed for use with Avago Technologies' duplex connectors AFBR-452xZ. Its rugged design contains a latching mechanism for an increased retention force. The simple snap-together concept saves the user labor and tool cost.

The connectors are made of a rugged, flame retardant plastic which is suitable for industrial and other harsh environments. The AFBR-4536xZ duplex bulkhead connectors are for use with Plastic Optical Fiber (POF) only.

The AFBR-4536EZ uses standard black port color, AFBR-4536BZ has a blue colored port and AFBR-4536DZ has one black and one blue port. This product is lead free and compliant with RoHS.

### Features

- Thermocomp<sup>®</sup> Plastic Material (UL File #E121562)
- Available in two colors: black and blue
- Excellent Retention Force
- Symmetry in Non-latching Connector Gives Simplex/Duplex Functionality with the Same Part

### Applications

- Industrial Control and Voltage Isolation
- Automotive Networks
- Proprietary System Interconnects
- Gaming Equipment
- Medical Equipment
- Telecommunications
- Data Communications

### Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Notes
Storage Temperature	T <sub>ST</sub>	-40	+85	°C	1
Recommended Operating Temperature	T <sub>OP</sub>	-40	+85	°C	1
Installation Temperature	T <sub>INST</sub>	0	+70	°C	1

#### Notes:

1. Storage and operating temperatures refer to the ranges over which the connectors can be used when not subjected to mechanical stress. Installation temperature refers to the ranges over which connectors may be installed onto the fiber and over which connectors can be connected and disconnected from the transceiver.

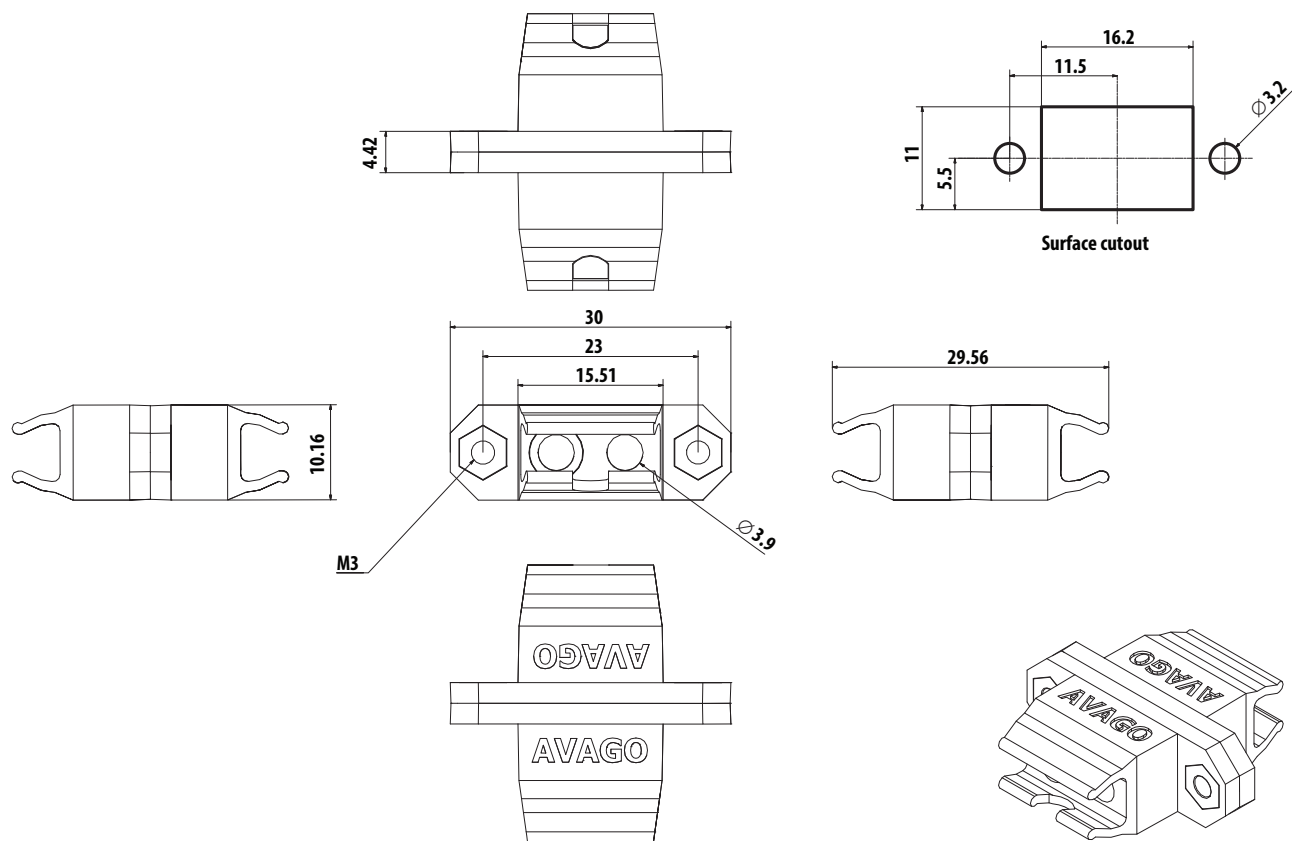
## Mechanical and Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Temp. [°C]	Notes
Retention force, bulkhead to duplex connector; latching button pressed	F <sub>RP</sub>	15	35		N	25	1
Retention force, bulkhead to duplex connector; latching button NOT pressed	F <sub>RNP-25</sub>		45		N	25	1
Retention force, bulkhead to duplex connector; latching button NOT pressed	F <sub>RNP</sub>	20			N	-40 to 85	2
Insertion force, bulkhead to duplex connector	F <sub>I</sub>		30		N		1
Insertion loss using AFBR-4526Z duplex connector	P <sub>ATT</sub>		1.5	2.5	dB	-40 to 85	3

### Notes:

1. Typical data are at 25°C.
2. Usually, the button of the latching mechanism shall be pressed when disconnecting the fiber. If the connector is pulled out of the bulkhead connector while the lever is not pressed, the latching mechanism will degrade significantly after the first cycle
3. Well polished POF surfaces, measured at beginning of life (0hrs) using original Avago 1m cable assembly. The typical value is valid for room temperature.

## Package Dimensions



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

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