AFBR-700SDZ

10Gb Ethernet, 850 nm, 10GBASE-SR, RoHS Compliant Optical SFP+ Transceiver with Diagnostic Monitors



Product Brief



Description

Avago's AFBR-700SDZ optical transceiver supports highspeed serial links over multimode optical fiber at signaling rates up to 10.313 GBd.

The AFBR-700SDZ is compliant with SFF-8431 Specifications for Enhanced 8.5 and 10 Gigabit Small Form Factor Pluggable Module "SFP+" and SFF-8472 Specification for Diagnostic Monitoring Interface for Optical Transceivers. Real time temperature, supply voltage, laser bias current, laser average output power and received input power information is provided with the two-wire interface defined in SFF-8472. This information is in addition to conventional SFP base data. The digital diagnostic interface also adds the ability to disable the transmitter (TX_DISABLE), monitor for Transmitter Faults (TX_FAULT), and monitor for Receiver Loss of Signal (RX_LOS).

Features

- Compliant to Restriction on Hazardous Substances (RoHS) directive
- Diagnostic features per SFF-8472
- Real time monitoring of:
 - Transmitted optical power
 - Received optical power
 - Laser bias current
 - Temperature
 - Supply voltage
- Transceiver specifications per SFF-8431 (revision 2), IEEE Std. 802.3ae Clause 52 and SFF-8472 (revision 10.1)
- Link lengths at 10.3125 GBd:
 - 82 m with 50 μm OM2, 300 m with 50 μm OM3
- LC Duplex optical connector interface conforming to ANSI TIA/EIA604-10 (FOCIS 10A)
- 850 nm Vertical Cavity Surface Emitting Laser (VCSEL) source technology
- IEC 60825-1 Class 1/CDRH Class 1 laser eye safe
- Enhanced EMI performance for high port density applications