
PRELIMINARY DATASHEET

Module information :

Description: The T300-CB-10NRZ-LFF-AA is a NRZ 10 Gb/s Transceiver, compliant to the 300 pin MSA, tunable over the extended C band for DWDM applications. Reliable and low cost solution it is achieved using state of the art technology for wavelength tuning and E/O signal conversion.

This module is composed of a transmitter and receiver section working at all the nominal 10Gbit rates: 9.953Gb/s, 10.3Gb/s, 10.709Gb/s and 11.1Gb/s.

The transmitter section receives 16 parallel differential electrical input data and serializes them into an optical output signal at the nominal 10Gb/s rate at the desired DWDM wavelength: this is achieved inside the module through the use of a C+ band (1529-1569 nm) CW tunable laser, a Mach-Zehnder modulator, a high speed driver and a multiplexer.

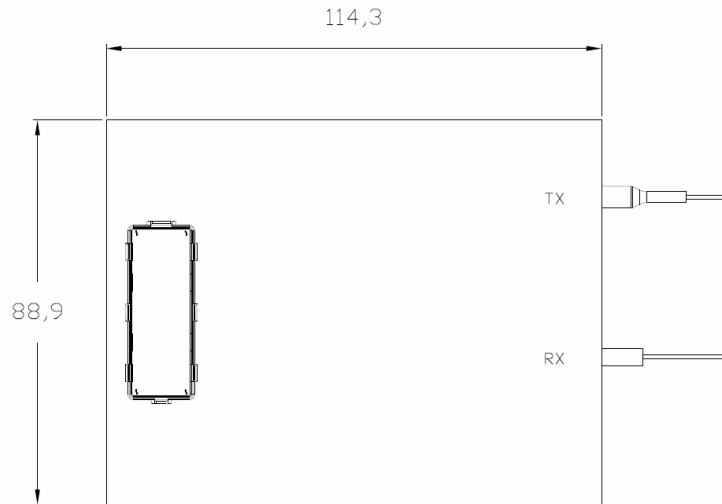
The receiver section takes the nominal 10 Gb/s optical serial data stream, converts it to an electrical signal, amplifies it with automatic gain control and deserializes it to 16 parallel differential output lines: this is achieved inside the module using an APD device, a Variable Optical Attenuator and a demultiplexer.

The module is compliant with ITU-T G.691, STM-64 L-64.2a and Telcordia GR-253 Issue 3 for optical interfaces and with OIF-SFI4-01.0 for the electrical ones.

The module is available in Large Form Factor mechanical package with standard SMF pigtailed using MU/SPC optical connectors. Other optical connectors available on request.

Main Features:

- +5 dBm minimum optical output power
- 50 GHz channel spacing with +/- 2.5 GHz frequency stability
- 40 dB minimum SMSR
- -24 dBm maximum receiver sensitivity
- OSNR > 18.5 dB @ BER 1E-10
- -5 dBm minimum overload
- Chromatic dispersion tolerance of +/- 800 ps/nm
- Receiver decision threshold level adjustable through analog input RxDTV
- Operating case temperature: -5°/70°C
- 10 W typical power dissipation
- -5.2 V, +5.0 V and +3.3V power supplies
- Monitors, controls and alarms compliant with Reference Document for 300pin 10Gb transponder
- SBS suppression feature available
- Jitter tolerance compliant with GR/253

Package Outline


H max 13.45 mm

Connector and Fibre Specification

Parameter	Specification	Unit
Type	SMF	-
Jacket diameter	900	µm
Length	1000 +/- 100	mm
Fibre Bend Radius	25 min	mm
Connector	MU/SPC	-