

## PRELIMINARY DATASHEET

**Description:** The T300-1550-40NRZ-LFF-AA is a 40 Gb/s NRZ Transceiver, compliant to the 300 pin MSA, suitable for single channel Very Short Reach application. The use of proprietary optical components internally manufactured is the key factor to offer reliable and low cost solution for the 40 Gb/s emerging market.

This transceiver is composed of a transmitter and receiver section working at the nominal 40Gbit rates: 39.9Gb/s and 43 Gb/s.

The transmitter section receives 16 parallel differential electrical input data and serializes them into an optical output signal at the nominal 40Gb/s rate: this is achieved inside the module through the use of an Electro-Absorption Modulated DFB laser with emitting wavelength around 1550 nm, a high speed driver and a multiplexer.

The receiver section takes the 40 Gb/s optical serial data stream, converts it to an electrical amplified signal, and deserializes it to 16 parallel differential output lines: this is achieved inside the module using an integrated PIN+Transimpedance Amplifier+Limiting Amplifier device and a demultiplexer.

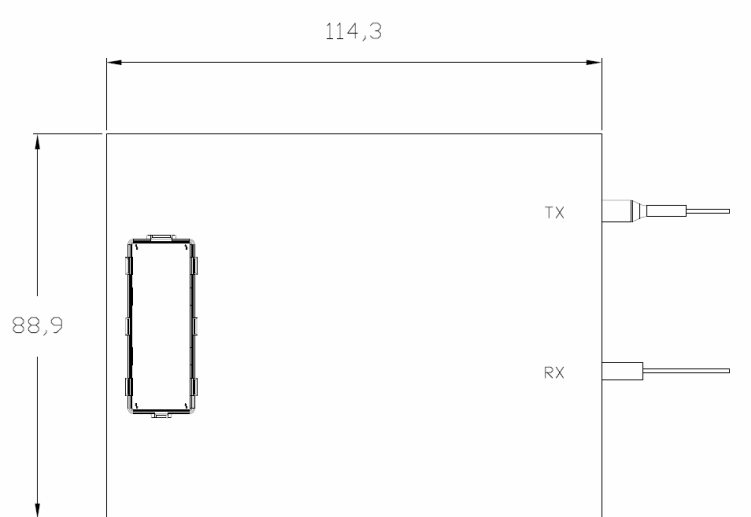
Low speed electrical interface is compliant with OIF-SFI5.

The module is compliant with ITU-T G.693, VSR2000-3R2.

The module is available in Large Form Factor mechanical package with standard SMF pigtailed.

### **Main Features:**

- +0 dBm minimum optical output power
- 8.2 dBm minimum dynamic Extinction Ratio
- 35 dB minimum SMSR
- -5 dBm minimum sensitivity (BER 1E-12)
- 40 ps/nm maximum chromatic dispersion
- Operating case temperature: 0°/70 °C
- 12 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 40Gb transponder

**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