# 1610/11-Series MSA-compatible 2.5 Gb/s Cooled DFB TOSA



# **Product Brief**



## Description

The 1610/11-Series 2.5 Gb/s transmitter optical subassembly (TOSA) integrates a high-speed laser, a monitor photodiode and a micro-TEC in a small form-factor metallized ceramic package. It is designed for use in small form-factor pluggable (SFP) transceivers and other types of optical modules for high-speed telecommunication and data applications including WDM SONET OC-48, SDH STM-16, Fiber Channel and Gibabit Ethernet.

The 1610/11-Series is available in the full range of C band ITU-T wavelengths operating at 2.5 Gb/s per channel. The device exhibits excellent wavelength stability, supporting operation at 100 GHz channel spacing over 15 years (assuming an end-of-life aging condition of <±90 pm), with low hazard rates (~100FIT wearout over 20 yrs.). L band versions are also available, as shown in the Ordering Information tables.

Note: Avagos' 1610 and 1611 type TOSA is available with LC receptacle (for use in DWDM SFP and other pluggable transceivers) or fiber pigtail (for use on line cards)

### **Features**

- Ultra small form factor 9-pin MSA DFB TOSA
- Data rates up to 2.7Gb/s
- For use up to 200 km (4000 ps/nm) at 2.5 Gb/s
- +6 dBm typical optical output power (200km version)
- Wavelength selectable to ITU-T grid wavelengths, C band and L band wavelengths
- Suitable for use in 100GHz channel spacing DWDM systems
- Temperature stabilized; can also be operated in partially cooled mode for CWDM applications
- Maximum power consumption less than 0.2W
- LC receptacle or pigtailed versions available
- 25Ω single-ended data input
- Case operating temperature ranges: -5 to +75°C (standard) -40 to +85°C (extended)

#### **Applications**

- SFP Transceivers for DWDM, CWDM and SONET/SDH, GbF & Fibre Channel
- Line cards

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