

## 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 Gigabit 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  $<\pm 90$  pm), with low hazard rates (~100FIT wearout over 20 yrs.). L band versions are also available, as shown in the Ordering Information tables.

Note: Avago's 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
- 25 $\Omega$  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, GbE & Fibre Channel
- Line cards

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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