

## 1655/ 56- Series

XMD MSA-compatible 10 Gb/s Cooled EML TOSA



## Product Brief



### Description

The 1655 (40km) and 1656 (80km) - Series XMD MSA compatible 10 Gb/s transmitter optical subassembly (TOSA) integrates a high-speed electroabsorptive (EML) laser, a monitor photodiode and a micro-TEC in a small form-factor metallized ceramic package. It is designed for use in SFP+ 10Gb/s transceivers and other types of optical modules for high-speed telecommunication and data applications.

The 1655/ 56 -Series is available in the full range of C-band ITU-T wavelengths operating at 10 Gb/s per channel. The device exhibits excellent wavelength stability, supporting operation at 100 GHz channel spacing over 20 years (assuming an end-of-life aging condition of  $<\pm 90$  pm), with low hazard rates (~100FIT wearout over 20 yrs.).

1655/ 56 -Series uses Avago's newest iteration of EML chip, which operates at a higher temperature than its predecessor, and therefore reduces TEC power dissipation when in cooling mode. Overall power dissipation in SFP+ and other transceivers can therefore be reduced significantly.

### Features

- Ultra small form-factor 8-pin XMD MSA TOSA
- Supports data rates up to 11.3Gb/s
- For use up to 80km (1600 ps/nm) at 10 Gb/s
- Up to +2 dBm typical optical output power
- Wavelength selectable to ITU-T standards covering the full C-band with extended channels
- Suitable for use in 100GHz channel spacing in DWDM systems
- Temperature stabilized
- Very low TEC power consumption
- LC receptacle, with standard and short flex options
- 50 $\Omega$  single-ended data input
- Case operating temperature ranges:
  - 5 to +75°C (standard)
  - 40 to +90°C (extended)

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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AV02-4119EN - June 5, 2013

