

XGS-PON ONU BOSA (OC5280SX020)

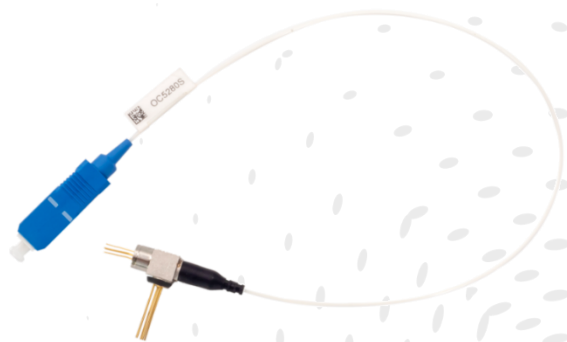
Databrief

Product Features

- 1270 nm burst-mode transmitter with uncooled DFB-LD
- 1577 nm continuous-mode receiver with high sensitive APD-TIA
- Single-mode fiber pigtail packaged
- Low optical crosstalk
- Up to 10.3125 Gbps upstream TX and 10.3125 Gbps downstream RX
- Operating case temperature: -20°C to 85°C
- SC/UPC pigtail type

Applications

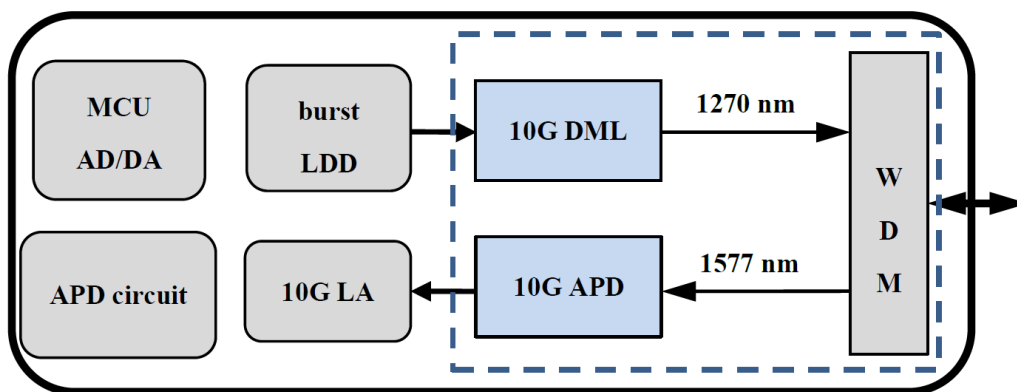
- XGSPON ONU
- 10G EPON ONU
- FTTX application



1. Descriptions

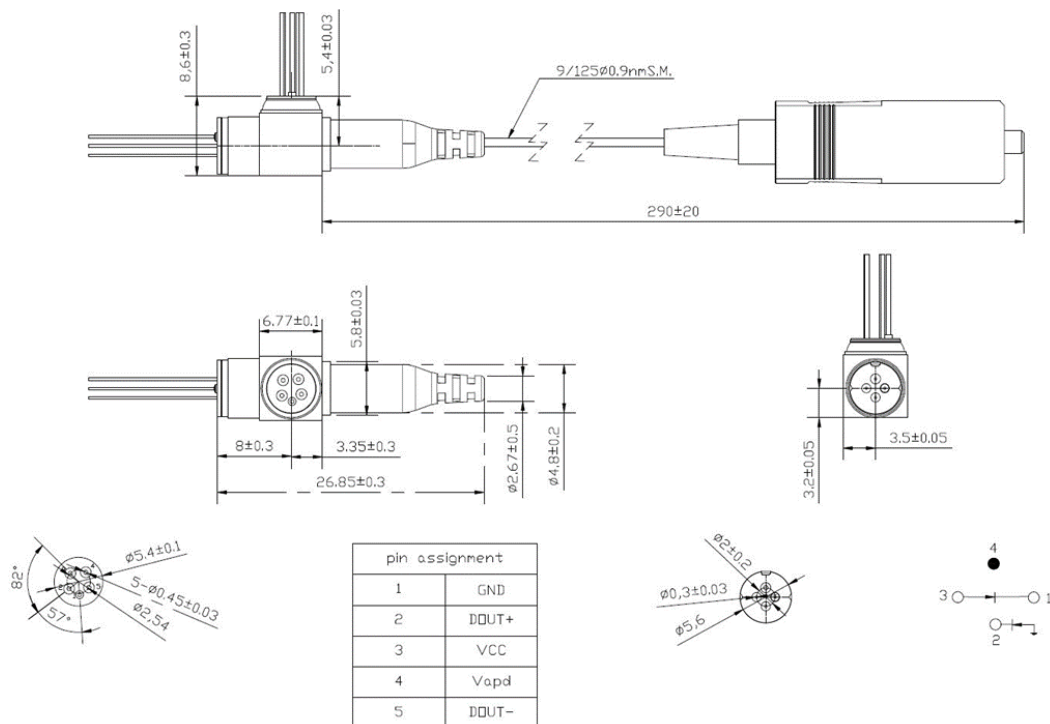
OC5280SX020 is a 1270 nm (TX)/1577 nm (RX) Bi-direction Optical Subassembly (BOSA) for Gigabit passive optical network (XGSPON) application. It complies with the ITU-T GPON standard G987.2 operation at 10.3125 Gbps upstream and 10.3125 Gbps downstream. This module contains a 1270 nm DFB laser diode as transmitter, an InGaAs/InP APD-TIA as receiver, a tilted filter (1270 nm transmit / 1577 nm reflect) to separate 1270 nm and 1577 nm laser. The most compacted and cost-effective 1270/1577 nm WDM can be provided in a single fiber. The DFB with an InGaAs monitor PD, it can be used with appropriate feedback control circuitry to set optimal power level for each DFB laser, The DFB laser is designed to convert electrical current into optical power that can be used in fiber optic communications and other applications. As the current changed above the threshold, the optical power will change accordingly. The APD transduces incident light into optical current with high efficiency. The TIA converts the current signal into a voltage signal with a very low input noise current contribution. The TIA also can decrease the light to voltage conversion factor when the average incident optical power is relatively high.

Figure 1-1 Transceiver Block Diagram



2. Mechanical Specifications

Figure 2-1 Mechanical dimensions



3. Ordering Information

Part Number	Description
OC5280SX020	XGS-PON ONU BOSA

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