

# XG-PON ONU BOSA (OC5280AX030) 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 2.488 Gbps upstream TX and 9.953 Gbps downstream RX
- Operating case temperature: -5°C to 85°C
- SC/UPC pigtail type
- RoHS-6 compliant

### Applications

- XG-PON ONU
- 10G EPON ONU Asymmetric
- FTTX application

### 1. Descriptions

OC5280AX030 is a 1270 nm (TX)/1577 nm (RX) Bi-direction Optical Subassembly (BOSA) for Gigabit passive optical network (XG-PON) application. It complies with the ITU-T G.987.2 standard. It can support 2.488 Gbps upstream and 9.953 Gbps downstream. This BOSA contains a 1270 nm DFB laser diode as transmitter, an 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 a 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.





2. Mechanical Specifications (Unit:mm)



## 3. Ordering Information

Part Number	Description
OC5280AX030	XG-PON ONU BOSA

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