# SUMITOMO ELECTRIC

#### **Sumitomo Electric Industries**

### **Blind-Mate Optical Connector for ELSFP**

Sumitomo blind-mate optical connector enables blind-mate optical connectivity for the CPO external light source module (ELSFP). The connector is designed to house up to two ferrules, this enables mating of up to two pairs of MT-like ferrules in a single connection. One of the connectors is integrated into the ELSFP module, while the other is attached to the host electrical connector, both with multi-step alignment features to provide accurate and low-loss mating of the optics. The connectors are able to support polarization maintaining fibers.

### **AirMT Optical Connector**

Sumitomo AirMT connector is an air-gap type optical connector for multi-fiber MT-like optical ferrules. The AirMT connector forms a small air-gap between the ferrules when mated. This air-gap makes the AirMT dust resistant and easy to clean with just air-blow, unlike standard physical contact (PC) connectors where particles can be grinded into the ferrule surfaces. In addition, the AirMT enables low mating force independent of the number of fibers in the ferrule, creating a more compact connector compared to traditional MPOs, making it the ideal solution for high-density front-panel connectivity. In the context of ELSFP, AirMT enables the implementation of 12/24/36ch ferrules at low mating force of 5N, which significantly eases the connector and module latching requirements.

## High-Power Continuous Wave (CW) Lasers.

Sumitomo high-reliability, high-power CW DFB lasers operating at both C- and O-bands are critical elements for silicon photonic based transmission approaches such as those used in this co-packaging demonstration. They can be operated in an uncooled environment emitting up to 200mW of power from a single optical fiber at CWDM wavelengths from 1271nm to 1331nm as well as 1550nm.

#### **About Sumitomo Electric Industries, Ltd.**

Sumitomo Electric Industries, Ltd. was established in 1897. With its history in electric wire and cable manufacturing, the company has invested heavily in research and development to establish and expand new businesses. These efforts have allowed it to create new products and new technologies, as well as diversify its business fields. Currently, the company operates on a global basis in five business segments: Automotive; Infocommunications; Electronics; Environment & Energy; and Industrial Materials. Sumitomo Electric will continue to contribute to society through environmentally friendly and fair business activities.

For more information: http://global-sei.com

SEI Optical fiber connector products visit, https://sumitomoelectric.com/fiber\_optic\_interconnect

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