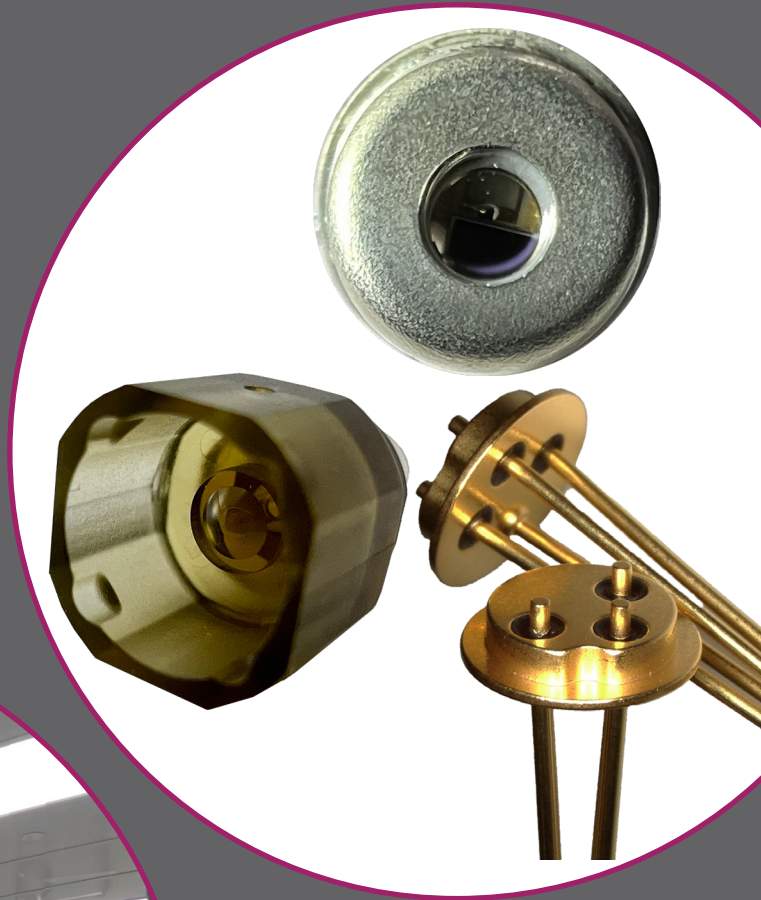


OPTICAL SUB-ASSEMBLY PRODUCT PLATFORM

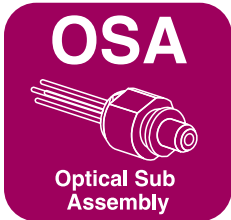
Rugged Fiber Optics for Harsh Environments



OPTICAL SUB-ASSEMBLY PRODUCT PLATFORM

The Moog Optical Sub Assembly Product Platform includes TOSAs, ROSAs, BOSAs and configurable optical sub assemblies. Optical Sub Assemblies (OSAs) products operate from 1-28 Gbps and are used to convert optical signals to electrical signals and vice versa. Moog controls the OSA Product Platform from design to integration, and utilizes dual-source vendor list for all raw materials and sub-assemblies.

Fiber Optic Research Center of Excellence



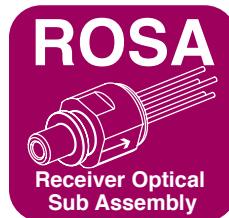
Moog Fiber Optics Research Center of Excellence (FORCE) is an ISO 7, Class 10,000 Cleanroom that houses precision optical alignment, encapsulation, and test equipment capable of producing OSAs with industry standard and/or unique functionality, performance, and mechanical characteristics.

- Processing capabilities: burn-in, active alignment and capping, curing, performance testing, harsh-environment reliability testing, visual and optical inspection
- Next generation capabilities: die attach, fiber metalization, micro-welding, wire bonding, TO-can welding, mechanical test, and hermeticity test
- Design engineering: optical paths including lens creation, selection, forming, silicon bench, chip on board taking light from a solid-state semiconductor to precise fiber coupling

TOSAs

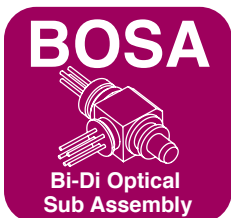


- Converts electrical signal into optical pulse
- 5G/10G/28 Gbps data rates
- 850nm, 980nm, SWDM, CWDM4, LR4, CWDM, DWDM
- High Power variants for 5G and 10G
- -55 to 100°C operating temperature

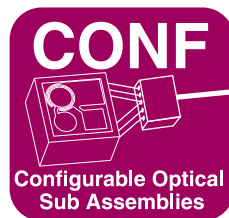


- Converts the optical pulse to electrical signal
- 5G/10G/28 Gbps data rates
- 850nm, 980nm SWDM, CWDM4, LR4, CWDM, DWDM
- High performing RX sensitivity
- -40 to 95°C operating temperature

BOSAs



- Transmits and receives light at two wavelengths in single mechanical package
- 1310/1550nm FP and DFB, 1270/1330nm DFB, SWDM
- Hermetic package seals TO can into metal block by welding and/or epoxying



- Moog designs and develops unique optical sub-assemblies using in-house optical design and TO-level prototyping
- Configurable thermoset or metal caps, and Kovar butterfly packages for hermetic packages
- Variety of transmitter light sources, receiver communication, and sensing diodes

Custom

MOOG

Moog's Product Platforms include Opto-Electronic, Interconnect, Test Equipment and Optical Sub-Assemblies. For more information regarding any of these product lines, please reach out to cotsworkssales@moog.com.