OPTI-Pack®

Series Optical Transceiver MCM’s and Custom Design, Fabrication, and Packaging Services

General Description

The OPTI-Pack® series products and services provide a wide array of standard and custom multi-chip module (MCM), printed circuit board (PCB), hermetic packaging, and fiber optic coupling and integration solutions, including custom component sub-mounts, MCM’s, PCB’s, fiber seating silicon U-grooves, V-grooves, and groove arrays, etc. Space Photonics, Inc. has full capabilities to bring early concepts to successful product and manufacturing solutions. We pride ourselves in being on the cutting edge of high-speed design and fabrication of photonics devices and systems. Space Photonics also maintains a qualifications test facility for the purposes of testing and qualifying a variety of electronics devices, hybrid circuits, electrical sub-systems, etc. to relevant military, industry, and spaceflight standards.

Capabilities

In-house design, fabrication, prototyping, qualification, and manufacturing of:

- Custom MCM design, fabrication, packaging, and test
- Various substrates materials available – silicon, glass, quartz, ceramics, polyimide, LCP, etc.
- Various metal deposition, and low-k and high-k dielectric deposition options
- Custom test and flight-ready PCB design, fabrication, assembly, and test
- Custom V-grooves, U-grooves, and groove arrays for optical fiber seating, alignment, coupling, and package integration
- Custom packaging solutions for hybrid optoelectronics and microelectronics devices
- Qualifications testing services to MIL-PRF-38534E, MIL-STD-883F, EEE-INST-002, JEDEC,
- IPC, and/or customer-specific standards
The OPTI-Pack series products and services allow for rapid turn prototyping and lean manufacturing of a variety of hybrid circuit devices and device technologies at reasonable cost. Assistance is provided from conceptualization through final prototype testing and qualifications, leading into final commercialization of resulting devices. Many of the products and services mentioned are key to Space Photonics, Inc. in achieving their unprecedented optical transceiver module performance.

**Applications**

**General Design, Fabrication, Packaging, And Qualification Testing Services**

**Information Sheet – Space Photonics, Inc**

**Informational Guidelines**

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