

# RF Microwave & Metal-Backed

ASC Sunstone specializes in advanced RF microwave and RF metal-backed PCBs, catering to high-frequency and high-power applications in telecommunications and aerospace industries.

Our RF microwave PCBs utilize high-frequency materials from suppliers like Rogers, Isola, AGC Taconic, and AGC Nelco, incorporating heat sink technologies for effective thermal dissipation and grounding. We offer advanced capabilities like blind and buried vias, conductive and non-conductive via fill, and laser cut vias.

Our RF metal-backed PCBs include a metal layer, typically aluminum or copper, enhancing thermal management and mechanical stability.

Both types are available in single, double-sided, and multilayer designs, leveraging pre-bonded and post-bonded materials, and proprietary adhesives, ensuring optimal performance in critical RF applications and industries!

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## STRONG SOLUTIONS FOR STRONG SIGNALS

#### **MATERIALS**

We utilize premium materials from reputable suppliers like Rogers, Isola, AGC Taconic, and AGC Nelco for our RF microwave PCBs. These materials ensure low dielectric loss and stable dielectric constants, which are crucial for maintaining signal integrity at high frequencies.

### ADVANCED THERMAL MANAGEMENT

Our RF metal-backed PCBs include metal backing, such as aluminum or copper, which provides superior thermal dissipation. This helps prevent overheating, ensuring reliable performance and longevity of the circuits in high-power applications.

#### **PRECISION**

We offer advanced manufacturing capabilities, including blind and buried vias, laser cut vias, and precision pocket machining. These features contribute to precise impedance control and minimal signal loss, essential for strong and consistent signal transmission.

## PROPRIETY PERFORMANCE

By using both pre-bonded and post-bonded materials, along with proprietary adhesives, we can create customizable solutions tailored to specific RF applications, ensuring optimal performance in single, double-sided, and multilayer designs.

# **FULL CAPABILITIES**



## RF MICROWAVE

- High frequency and heat sink tech
- Proprietary adhesive bonded laminates
- Blind & Buried Vias



## **RF METAL-BACKED**

- Pre- and post-bonded materials Al, Cu, and Brass Composites
- In-house plating and precision machining



### **FUNDAMENTALS**

A guide by our experts, exploring optimal design and material choices for RF Microwave PCBs to balance cost and performance.



## THERMAL MANAGEMENT

A guide by our CEO, detailing current thermal management techniques for PCB designers in telecom, auto, consumer electronics, and medical.



Durable, highperformance for avionics, satellite communication, and radar systems.



High-frequency for robust, réliablé signal transmission in communication networks and devices.



Advanced thermal management for automotive electronics, ensuring stability in highpower applications.



Precision for medical devices, supporting highfrequency and thermal management needs in critical applications.

# **FOR MORE INFORMATION**

#### **TECH TEAM**

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hwww.asc-i.com/products

