

# THE PERFORMANCE LEADER IN MICROWAVE CONNECTORS



18 GHz

Keyed  
Connectors



27 GHz

SuperSMA  
Connectors



40 GHz

2.92 mm (K)  
Connectors



50 GHz

2.40 mm  
Connectors



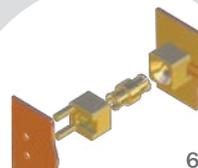
67 GHz

1.85 mm (V)  
Connectors



67 GHz

0.9 mm SuperMini  
Connectors



67 GHz

SuperMini  
Board-to-Board  
Connectors



up to 67 GHz

SSBP MultiPort  
Cable Harnesses



110 GHz

1.0 mm (W)  
Connectors



up to 110 GHz

Board Mount  
Connectors



up to 110 GHz

Precision  
Adapters

- Lowest VSWR and Insertion Loss
- Excellent Repeatability
- Rugged and Durable
- Field Replaceable / Serviceable
- Transmission Line Design Approach
- Space / Hi-Rel Qualified
- Materials Traceability and Lot Control

**Southwest Microwave, Inc.**

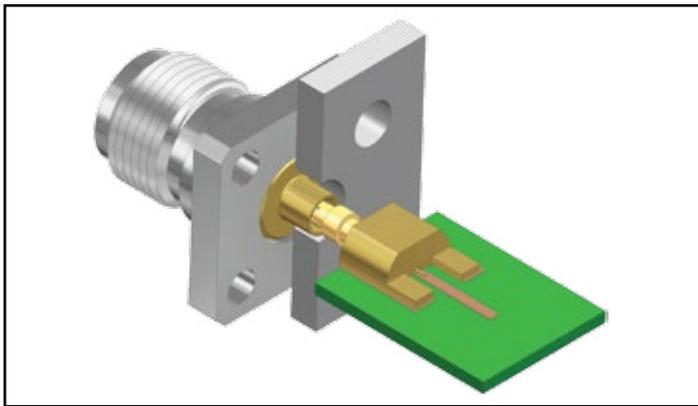
+1 (480) 783-0201 | [www.southwestmicrowave.com](http://www.southwestmicrowave.com)

# ABOUT SOUTHWEST MICROWAVE

Established in 1981, Southwest Microwave, Inc. is a privately held Arizona, USA corporation owned and operated by engineers, including founding members of Omni Spectra®, inventors of the original precision SMA connector. In 1987, Southwest Microwave established the Microwave Products Division (MPD) and began manufacture of high performance microwave connectors for millimeter wave applications. Southwest Microwave has a proven record of understanding microwave transitions and supplying the best-performing connectors in the industry.

## MARKETS SERVED

Southwest Microwave serves commercial, military and Space / Hi-Rel markets. Our high performance connectors are used worldwide in satellite communications, radar, defense systems and aerospace programs as well as for instrumentation, integrated-circuit and PCB test applications.



## PRODUCTS

Southwest Microwave incorporates proven microwave transmission line principles into all connector designs. These structural features minimize transmission loss and reflection, and along with robust housing design, provide reliable field-serviceable connectors with the industry's lowest typical VSWR, insertion loss and RF leakage. Our Super SMA, N, TNC, SSMA, 2.92 mm (K), 2.40 mm, 1.85 mm, 1.0 mm and 0.9 SuperMini connectors - along with our precision adapters - are recognized as the highest performing solutions on the market.

Southwest Microwave also offers a broad array of innovative specialty connectors, including SSBP multipoint cable harnesses, SuperMini board-to-board connectors, SMKey keyed connectors, microwave switch and waveguide launch connectors and board mount (end launch, vertical launch) connectors. A complete array of installation tools, launch accessories and instructions help optimize connector performance.

Southwest Microwave has been delivering S-Level and Hi-Rel connectors for spaceflight and military applications since 1991. All materials used in Southwest Microwave's connectors are lot-traceable to raw materials and meet NASA outgassing requirements.

## TECHNICAL SERVICES

As demand grows for higher-frequency applications, lower frequency launches become ineffective. In effect, the launch structure becomes very sensitive to mechanical tolerances, which can limit operation. At Southwest Microwave, we take care in understanding our customer's circuit structure to provide proper transmission line step down to match the circuit. This helps eliminate transmission line mismatch at the launch point and allows for broad band operation. Our engineers are experts in microwave technology and can tailor a connector that will meet your needs.

## QUALITY

Our Microwave Products Division is ISO 9001 certified and in compliance with EU directives for RoHS II and WEEE. In addition to performing standard quality tests, SMI offers special Hi-Rel testing to meet the most stringent SCD and DPA requirements. We use MIL-PRF-39012 as a reference for interface specifications and test methods, but recommend additional testing to ensure optimal connector performance, including electrical and mechanical testing before and after thermal shock to guarantee that interface and electrical performance are stable over temperature.

## OPERATIONS

Southwest Microwave's state-of-the-art 50,000 sq. ft. (4,645 sq. m.) facility houses product design and engineering (including 3D CAD, FEA analysis and RF simulation), manufacturing (with CNC machining), assembly, inspection, test with VNAs to 110 GHz, technical sales and product support.

