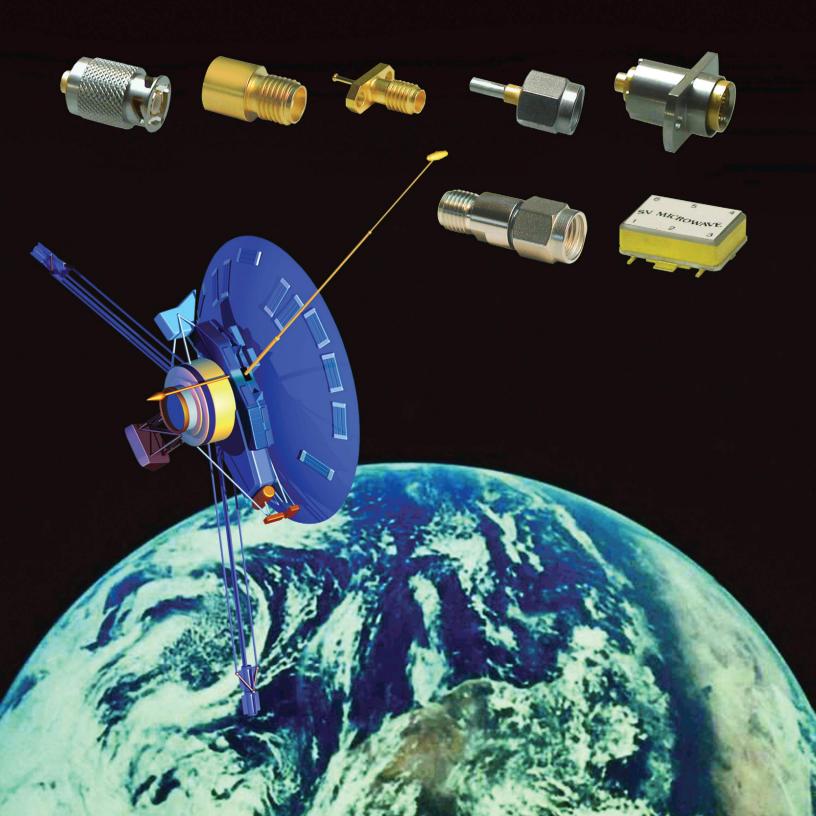
Amphenol MICROWAVE

Hi-Rel Connectors & Components



Hi-Rel Connectors and Components

For Low-, Medium- and High-Earth Orbit Applications

SV Microwave is a leader in the design and manufacture of S-level qualified RF, microwave and millimeter wave coaxial connectors, cable assemblies, attenuators, terminations and signal processing components.

SV Microwave offers innovative solutions to satisfy your requirements. We have invested in a talented engineering staff, supported by stateof-the-art, high-frequency 3D RF simulation design software. Our fullservice laboratories perform comprehensive environmental mechanical and electrical testing. We control virtually all processes with in-house machining, fabrication, assembly and acceptance and qualification testing. Full performance characteristics at various temperatures and altitudes are available for each product.

Our capabilities assist you from concept through launch and include: Qualification Test Planning, Traceability and Process Controls, Acceptance Testing for In-Process, Final and Destruct Physical Analysis. SV Microwave's products have proven themselves reliable throughout the lifetime of many missions, providing accurate performance for decades.

Space-Qualified Products:

- SMA Connectors
- SSMA Connectors
- SMC Connectors
- TNC Connectors
- High-Power Connectors/End Launchers
- BMA and Other Blindmate Connectors
- SMP Connectors
- Millimeter Wave Connectors 2.92mm, 2.4mm and 1.85mm
- Cable Assemblies* dc to 50 GHz
- Attenuators* dc to 50 GHz
- Terminations* dc to 50 GHz
- Mixers
- Custom Interfaces and Configurations
- * Available in all connector series.



A Partial List of Platforms Containing SV Microwave Products:

Advanced EHF APSTAR Asia SAT ATS Direct TV EchoStar Galaxy 4 GBS GlenStar Global EHF Global Star GMS GPS Intelsat MBSAT MIL-STAR MIL-STAR 2 MW Imagers Space Way Spain SAT STSS TDRS TACSAT TelStar WGS Wideband Gap Filler Classified Programs



Machine Shop:

SV Microwave's Machine Shop provides complete short-run and quick-turn capabilities. In-house CNC Turning Center complies with strict dimensional tolerances held to \pm .0001 inch (.0025 mm).

In-house equipment includes:

- 1 C16 9-Axis CNC Machining Center
- 4 Star SV32 8-Axis CNC Machining Centers
- 2 Star SR20R 6-Axis CNC Machining Centers
- 5 Citizen 6-Axis CNC Machining Centers, especially developed for manufacturing connector components

Our Processes and Systems Conform To:

- ISO 9000:2000 Registration
- Lean Six Sigma Manufacturing
- MIL-STD 790 Certified
- IPC/EIA J-STD-001 Soldering
- AS 9100 • EIA-364
- MIL-STD-1344
- MIL-STD-202 Testing Approval

Hi-Rel Screening Includes:

External Visual Inspection and Photographs for DPA, including:

- External Dimensions
- Assembly
- Coupling Mechanism Proof Torque Test
- Contact Stress
- Separating Forces
- Axial Contact Retention
- Rotational Contact Retention
- Solderability
- Plating Adhesion
- Design Verification
- Internal Dimensions
- Internal Visual

Acceptance and Qualification Test Planning:

- Thermal Cycling
- Engagement Forces
- Separation Forces
- VSWR
- Durability
- Coupling Mechanism Proof Torgue Test
- Dielectric Withstanding Voltage
- RF High Potential Withstanding Voltage
- Contact Retention
- Industrial Corrosion
- Cable Pull-Out
- Vibration
- Physical Shock

Approved DPA Lab for Space-Qualified Products

For customers who require a complete Destructive Physical Analysis (DPA) prior to shipment, SV Microwave provides documented verification for the following:

- Adhesion
- Axial Contact Retention
- Contact Engaging and Separation
- Coupling-Proof Torque

Test Capabilities Include:

- Capacitance
- Contact Chatter Monitor
- · Corona & Altitude
- Cross-Section
- High Potential and RF High Potential
- · HFSS / CST Simulation Software and **Optimization Software**

Solderability

Humidity

- Joint Destruct Torque
- Epoxy Captivation

Mechanical Shock

Megohm Meters

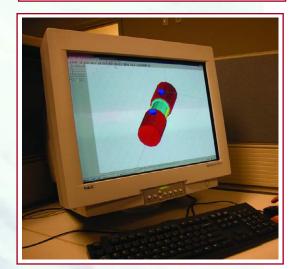
Mechanical Vibration

Non-Destruct Analysis

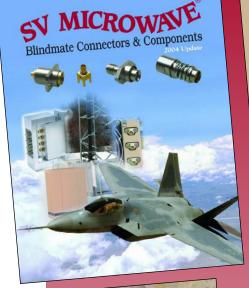
(Random & Sinusoidal)

• Network Analyzers: 8510, 8720 and 8753

- Plating Thickness (xrf- or x-section)
- Rotational Contact Retention
- Design Review and Verification
- - Real-Time X-Ray
 - Salt Fog Chamber
 - Solid Works
 - Steam-Age Chamber
 - Thermal Shock

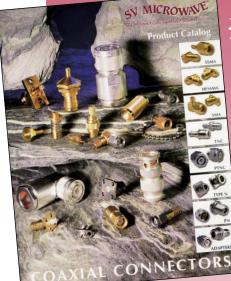


Visit www.svmicrowave.com

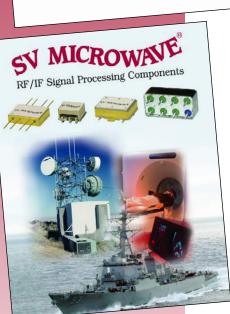


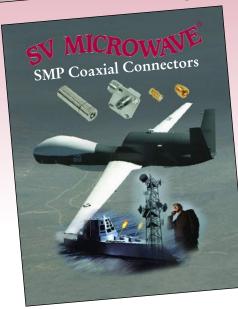














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