# Defense, Avionics and Space High Reliability Services



# Services:

- Mil-Standard
- Custom Products
- RF Testing Capabilities
- · Quality Certifications
- Environmental Testing
- Special Testing Capabilities

Johanson provides both Mil-Standard screening and COTS Ceramic Chip Capacitors, RF Passives, RF Inductors to high reliability applications globally.

In addition to manufacturing, our Camarillo facility has a complete High Reliability department with in-house testing capabilities.

#### **Analytical Testing**

- · Destructive Physical Analysis (DPA)
- Radiographic Inspection
- SEM Inspection
- · Solderability Testing
- Acoustic Microscopy (Sonoscan) Inspection
- XRF Analysis

#### **Electrical & Mechanical Inspections**

- 100% Electrical Testing
- · Cap, DF, IR, DWV, Voltage Breakdown
- 100% Visual Inspection (Mil 883 Class K or S Options)
- Full Data on Serialized Units
- Hot IR Testing
- Temperature Capacitance Coefficient (TCC)
- Temperature Voltage Coefficient (TVC)

#### **RF & Microwave Testing Expertise**

- Vector Network Analyzer (VNA) Measurements
- · Resonant Line Measurements for ESR at frequency

#### Simulation Software and Designer Libraries

### **Environmental Testing**

- Burn In / Voltage Conditioning
- · Life Testing
- Class H, K or S Element Evaluation
- · HALT / HASS Testing
- Humidity Testing
- Moisture Resistance
- · Resistance to Solder Heat
- · Shear Test / Bond Pull Test
- · Bend Testing
- Steam Age
- Temperature Cycling
- Thermal Shock Testing
- Shock / Vibration Testing
- Wire Bond Testing

## CONTACT OUR ENGINEERS FOR YOUR HIGH-RELIABILITY REQUIREMENTS

https://www.johansontechnology.com/ask-a-question

