

October 2011

API DELEVAN ANNOUNCES HIGH RELIABILITY S0402 & S0603 INDUCTORS FOR SPACE FLIGHT & DOWN HOLE DRILLING APPLICATIONS



TRUST YOUR MISSION-CRITICAL COMPONENTS TO THE LEADER IN LONG TERM RELIABILITY INDUCTOR INNOVATION!

API Delevan introduces some of the world's smallest space level SMD inductors that are rigorously tested to Mil-STD-981 for High Reliability applications. We have combined our proprietary winding and bonding techniques with our renowned and sophisticated Environmental test lab, capable of performing load life testing, thermal shock, powered burn-in, short time overload, real time x-ray and extreme temperature testing to provide you with the reliability and assurances you need for stringent circuit solutions.

Features and Benefits include:

- Manufactured and Tested in the USA by a qualified Mil-STD-981, Mil-PRF-39010 "R" company for the level of reliability demanded for Space flight
- Fully Documented Baselines in accordance with MIL-STD-981C,
 MIL-PRF-83446C, and Mil-PRF-39010: Customer approved Quality Control,
 Inspection, Materials & Process Traceability
- Group A & B testing regimen
- High-temperature Ceramic Cores & Magnet Wire provide excellent temperature stability and mechanical ruggedness
- Optional water dissolvable top cap for automated pick & place systems
- Low AC & DC Resistance minimizes voltage drops and dissipated power
- High Q & Ultra High SRF values enable stable inductor functionality into GHz range
- Operating Temperature Range of –55 to +125 degrees C with optional higher operating temperatures available
- Low Outgassing Properties

- Applications for the **S0402 and S0603 Inductors** include:
 - 1. Space Flight RF Filters & Oscillators
 - 2. Bias chokes for RF Gain Amplifier Blocks
 - 3. Hi Rel RF Transmitters & Receivers
 - 4. Noise & EMI suppressors for Analog, Digital and Mixed Signal Circuits
 - 5. Frequency Synthesizers & Mixers
 - 6. RF Switched Filter Banks
 - 7. Test Equipment such as: Network & Spectrum Analyzers, Frequency Counters, RF Power meters & LCR Meters.
 - 8. Medical Instrumentation
 - 9. Down Hole and Deep Sea programs
 - 10. HF & RF Impedance & Antenna matching circuits
 - 11. Low-Power Military and Defense ground, sea, and aerospace electrical/electronic power systems
 - 12. Low-Power SMPS, Voltage Regulators and DC-DC converters
 - 13. Microwave signal splitter/distribution systems

All components are made in the USA, and full engineering support is available to assist with your design, assembly and circuit testing needs. Product availability is 4 weeks plus applicable testing time customized to your needs.

API Delevan engineering can tailor the inductor series to your exact specifications or Source Control Drawing (SCD) through our long-standing and proven application specific design process. We will optimize your needs for:

- Customized geometries and sizes
- > Inductances and Ferrite Cores for even higher values
- Customized and Supplemental Environmental testing
- > Inductance tolerances, DC resistance, current, and operating temperature
- Specialized packaging
- Multiple termination materials and finishes

API Delevan, an ISO9001:2008 & AS9100:2004 certified company offers the world's selection of magnetics, including industry standard devices, circuit solution devices and application specific devices. For more information, please contact:

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