







Space Level Inductors

Since our inception in 1963, Piconics has supplied inductors for the most prestigious space applications. From B-series inductors for the Apollo program to Broadband Conicals & PA series for more recent satellite and launch vehicle programs, Piconics has been synonymous with high quality and high reliability inductors. Piconics products are designed to withstand the harshest environments and most demanding applications. Our in house test capabilities allow us to up-screen test inductors to meet space level requirements. Space level designers use Piconics inductors for their high quality and proven reliability.

Design & Manufacturing

Piconics uses MIL-STD-981 as a guideline when designing for a space application. Many inductors offered are already qualified to MIL-PRF-83446 and MIL-PRF-15305 and only require additional testing to meet space level requirements. The material selection process takes into account NASA outgas standards of 1% TML and 0.1% CVCM for space. All wire conforms to NEMA MW1000 standards. Most products adhere to the 44awg minimum wire size requirement for space while finer awgs do require a waiver process. Our encapsulated inductors feature internal weld connections and interlocking cases for enhanced reliability. All products goes through an inspection process after each manufacture step. If we required, Piconics can provide high detail photographs for pre and post encapsulation along with x-ray analysis. Piconcis inductors

Heritage

Apollo

Orion Exomars

TDRSS SOLAR

Qualification Testing

Piconics in house electrical and environment test lab is certified to perform DSSC testing to MIL-PRF-83446 & MIL-PRF-15305. All testing is capable of conforming to MIL-STD-981 and MIL-STD-202. Piconics has partnered with outside test facilities to perform certain environmental tests such as Barometric pressure and Continuity monitored thermal shock. Recorded data, serialization and traceability can be provided with space level product. Piconics works with their customer to create an SCD to meet the requirements of the customer's specific space application. Typical tests performed are:

- Electricals (L,Q,DCR & SRF)
- Thermal Shock
- Load & No-Load Burn-In (96hrs)
- DWV/IR
- Solderabilty
- Overload
- Life Testing (1000 Hrs)
- High Temp Exposure

Specifications

•MIL-PRF-83446

are manufactured in the USA.

- •MIL-PRF-15305
- •MIL-PRF-38534
- •MIL-PRF-27

Standards

- •MIL-STD-981
- •MIL-STD-202
- •MIL-STD-1580
- ASTM-E-595

Space Up-Screen Capable Products



Conicals



Air Coils



Fixed



Tunable



Spirals



www.piconics.com

ISO 9001:2008

RoHs Compliant

