SUCCESS STORY

Transient Survival Connectors for Aircraft Lightning Protection

Circular connectors address strict safety requirements for lightning protection on modern aircraft

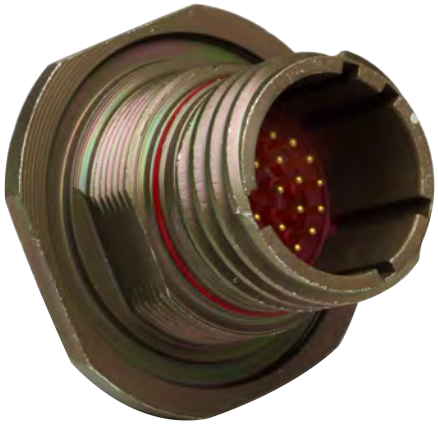
Military and commercial aircraft are likely to be struck by lightning at least once in their lifetime. When this happens mid-flight, lightning protection engineered into the aircraft helps maintain the critical electronic equipment on board. Spectrum Control circular connectors makes this protection possible.

Why Spectrum Control Was Chosen

Spectrum Control manufactures circular connectors that meet the RTCA/DO-160 standard for lightning requirements (1,500 voltage transient). These specifications outline environmental conditions and testing procedures for airborne equipment, particularly for protection against lightning strikes.

Transient survival connectors provide increased safety, system capacity, and overall efficiency in electronics equipment during flight

Spectrum Control connectors feature a specially formulated potting compound and proprietary potting process to seal filter elements. The potting insulates and protects the capacitive filter element, allowing it to withstand very high voltage surges such as those caused by a lightning strike.



High-reliability circular connectors have a proven reputation for superior quality and performance.

Aircraft are struck by lightning once per every 1000 hours of flight

Product Details

Available in custom and standard designs, Spectrum Control's EMI filtered circular connectors can be specified to meet a variety of sizes, shapes, filtering, or material requirements. This includes meeting MIL-DTL-38999, MIL-DTL-26482, MIL-DTL-55116, MIL-PRF-15733, and MIL-DTL-83723 standards. Value-added services include adding wires terminated or non-terminated to all lines or selected lines, twisted pairs, and labeling of wires for easy placement in a system.

Spectrum Control designs and manufactures its circular connector line of products in the USA at our State College, PA facility. Key features include:

- Meets standards for RTCA/DO-160, Level 4
- Withstand up to 1,500 voltage transient surges
- Selective load options with consistent pin-to-pin performance