

Failure Modes (and Avoidance) of Space Grade Magnetics

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We are seeing an increase in space applications and requests to screen cores as well as reports of cracked cores in magnetics that have gone through testing and failed at the box level. So much so that some customers have created quality notes requiring cores to be screened. I would like to discuss.

1. History of high reliability magnetics and the products (cores) used.
2. Methodology for inspection of cores. What works, what doesn't, what is needed.
3. Alternate methods of designing and packaging the product to reduce/eliminate the failure.
4. New products (cores) and techniques that reduce/eliminate the issue as well as provide alternate benefits (smaller, more efficient, more robust, etc.).
5. Other failure modes.