

## **Topic 1: Tantalum Capacitors: High Reliability Product Hierarchy and New Advance Products**

Ed Jones  
KEMET  
[edjones@kemet.com](mailto:edjones@kemet.com)

Mission Critical Applications in the Aerospace and Defense Industry have been challenged with the increase in the number of satellites, improvements in technology to support the war fighter and pressure for improved reliability, smaller size, and cost reduction. Usage of automotive grade and standard COTS products have been heavily discussed during the last years. KEMET has introduced establish reliability MnO<sub>2</sub> and Polymer Tantalum technology several years ago and during this presentation we will touch following topics:

- Existing Ta Polymer and MnO<sub>2</sub> Portfolio
- Reliability Hierarchy and Reposition of COTS nomenclature
- Key Tantalum MnO<sub>2</sub> and Polymer benefits
- New Advance Products under development (Construction, Spectrum Offering and New key benefits)

## **Topic 2: Commercialization of Space: Industry Trends, Component Selection, and how Ceramic Capacitors from KEMET can address these future needs**

Wilson Hayworth  
KEMET  
[WilsonHayworth@kemet.com](mailto:WilsonHayworth@kemet.com)

The rapidly evolving trend in the space industry continues to adopt a commercial model where miniaturization, cost, and shorter life expectancy are driving design decisions to material grades deemed unacceptable just a few years ago. While there are many benefits to adopting these changes, the community needs a clearer understanding of product grades that aligns with the expectations for each application.

The nature of this industry does not readily share application requirements that allows the supply base to participate in these decisions.

- Industry Trends

- Choosing the correct ceramic grade
- What is the real definition of COTS
- The future – The introduction of Hi Rel Alternatives
- Benefits of using Established and Hi Reliability Mil Spec products