Bandpass filter Failure Analysis- Supplier, Production & Rework Challenges

Aaron Dermarderosian
Raytheon Technologies- Intelligence & Space
adermarder@raytheon.com

When it comes to secure communication systems, there are several specialized processes which must be followed in order to integrate components within a circuit card assembly. Due to complex mixed component technology (SMT, Through-hole, Digital, Analog, Power, RF connectors, grounding & Isolation) only a portion of the assembly process can be automated. Bandpass filters are one example of a customized, application specific components used in these assemblies which have to be carefully integrated and tested in sequential stages. In this presentation, we will review an instance of unreasonably high Bandpass failure rate and the level of analysis required to determine root cause.