

CLEARCOMM INTERMOD TESTING

- Intermods are created by two or more high powered signals mixing creating unwanted frequency products.
- There are 3 major causes of PIM in passive devices:
 - Poor contact junctions
 - Components made with, or plated with materials that exhibit some level of hysteresis, i.e. Nickel, Iron, etc.
 - Contamination

CLEARCOMM INTERMOD TESTING

- Acceptable levels of PIM are extremely low and difficult to measure accurately. Often below -150 dBc
- As compared to S parameters, PIM cannot be simulated or predicted using analytical software.
- The only way to determine if a device generates PIM, and to what level, is to measure it.
- Testing to AQL levels is misleading because PIM is very unpredictable and can be generated in what appear to be perfectly designed and constructed devices.

CLEARCOMM INTERMOD TESTING

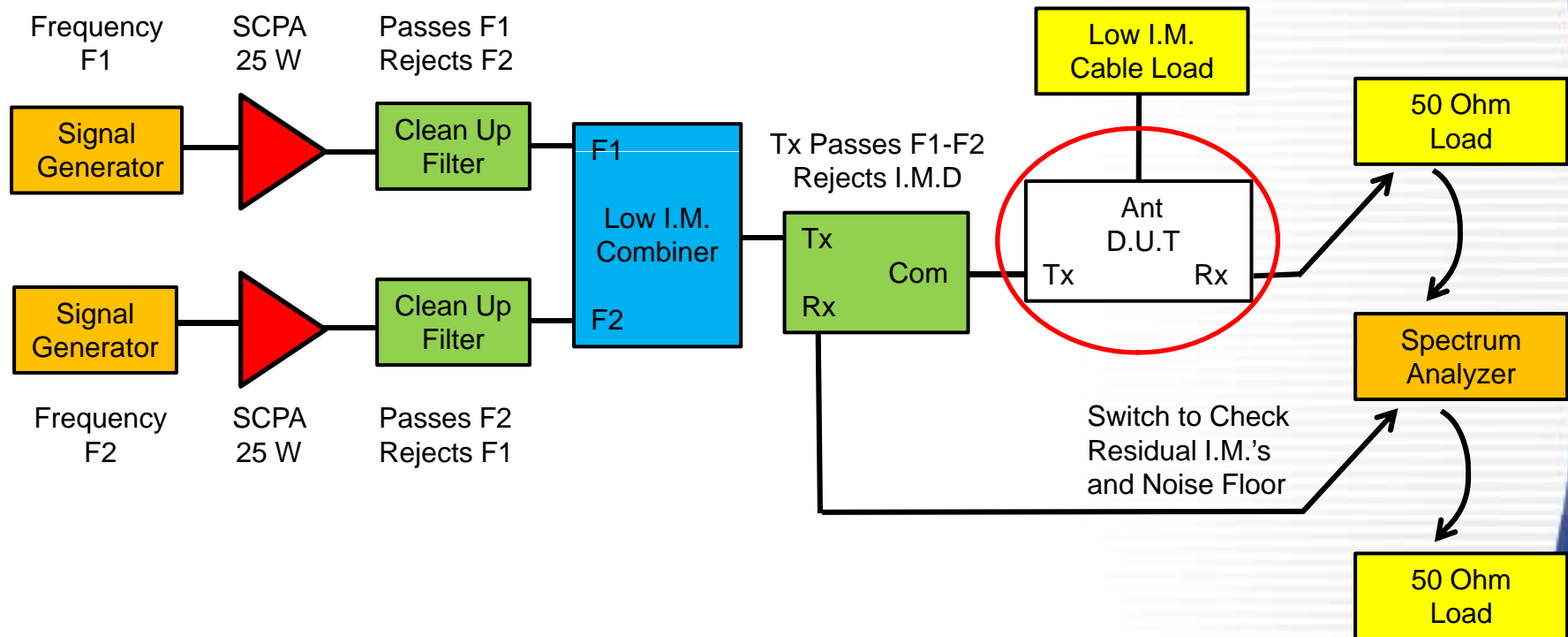
- How to Minimize Passive Intermods
 - Avoid the use of Ferrite materials
 - Minimize the number of contact junctions
 - Design all contact junctions in a way that they are precise and under sufficient pressure to maintain good contact.
 - Solder or Weld all junctions where possible
 - Avoid dissimilar metals in direct Contact
 - Plate all surfaces to prevent Oxidation
 - Make certain Plating is uniformly applied and sufficiently thick

CLEARCOMM INTERMOD TESTING

- ClearComm has custom designed our in house PIM Test Setups for great dynamic range and frequency coverage.
- PIM testing capabilities from 700 – 2200 MHz
- Dynamic Range is >170 dBc



TWO TONE INTERMOD TEST SET



FOUR TONE INTERMOD TEST SET

