

Microstrip Filters for RF Applications

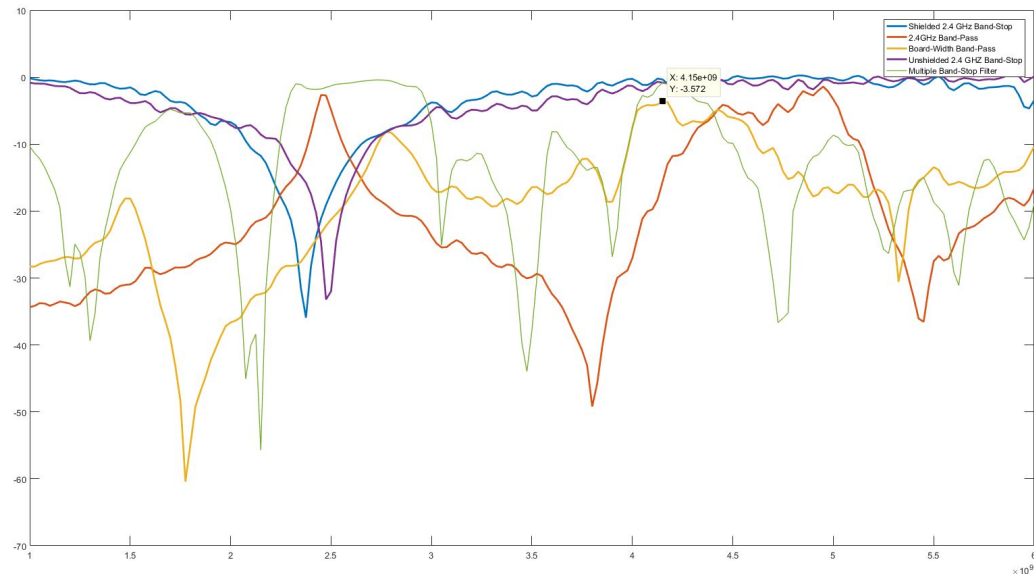
Andres Erbsen

Justin Graves

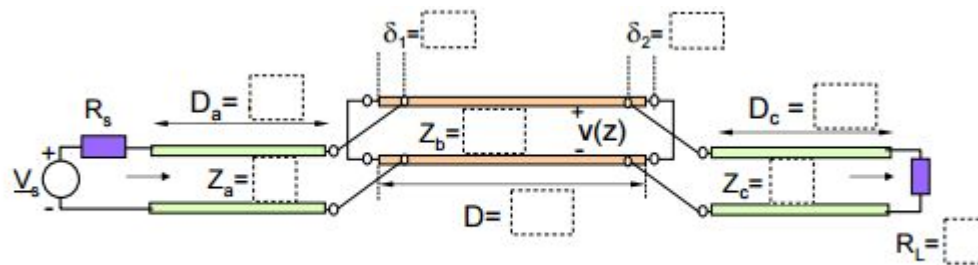
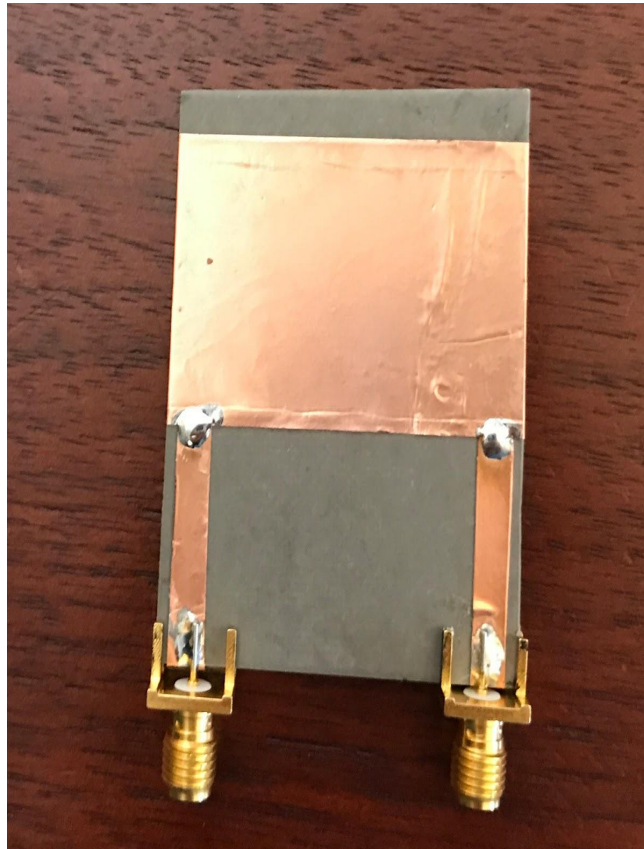
Dimitris Koutentakis

Filters Are Important

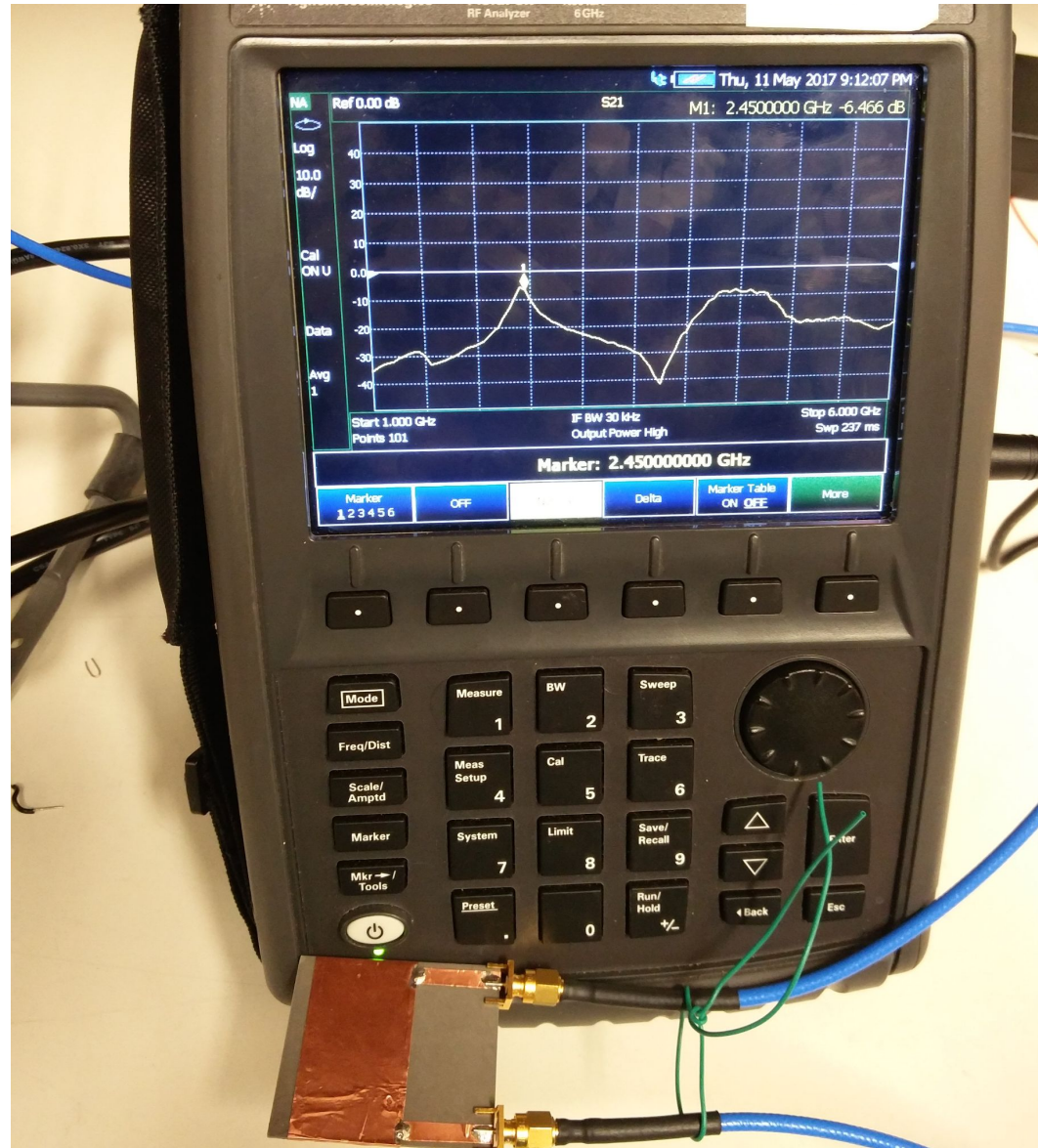
- Radio, Television, Wifi, cellphones
- Select receiving frequencies
- Avoid unwanted transmission
- Block interference
- RLC not easy at GHz



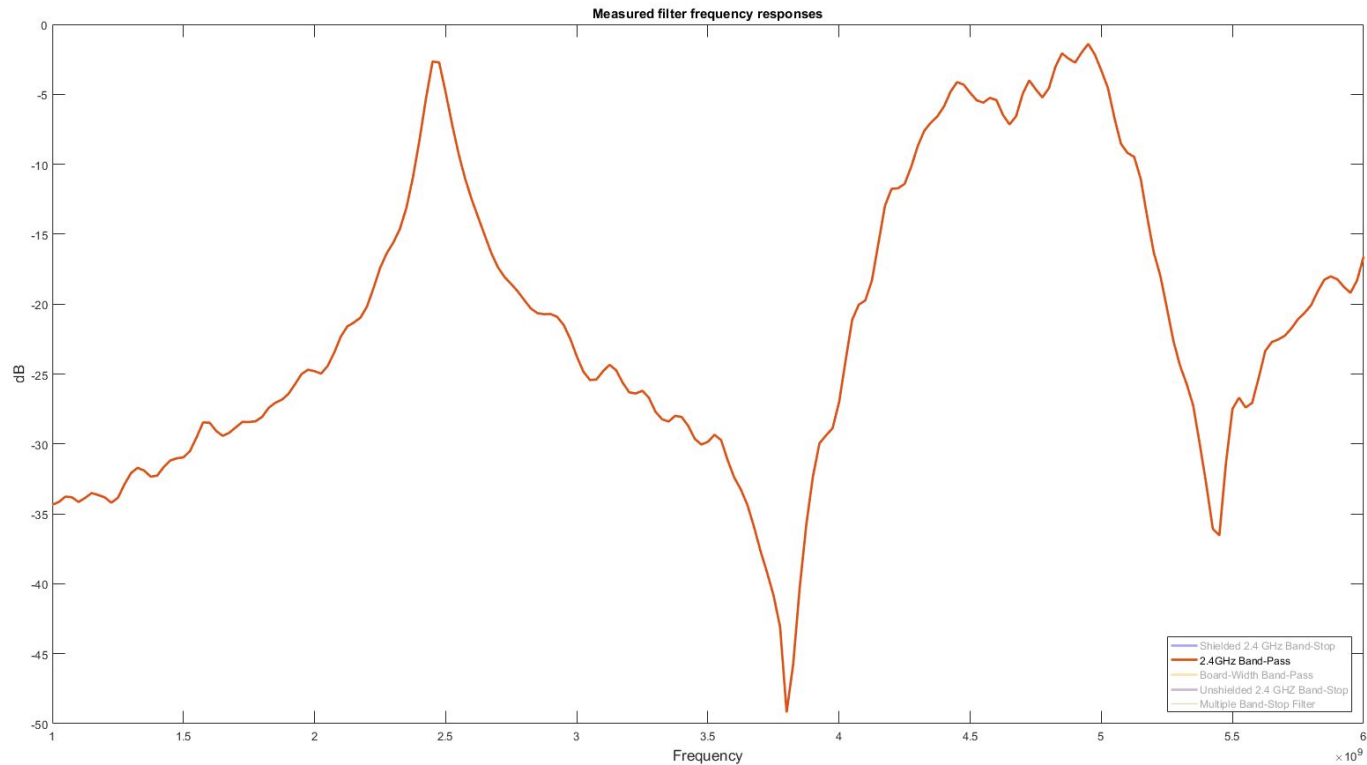
2.4 GHz Band-Pass Filter



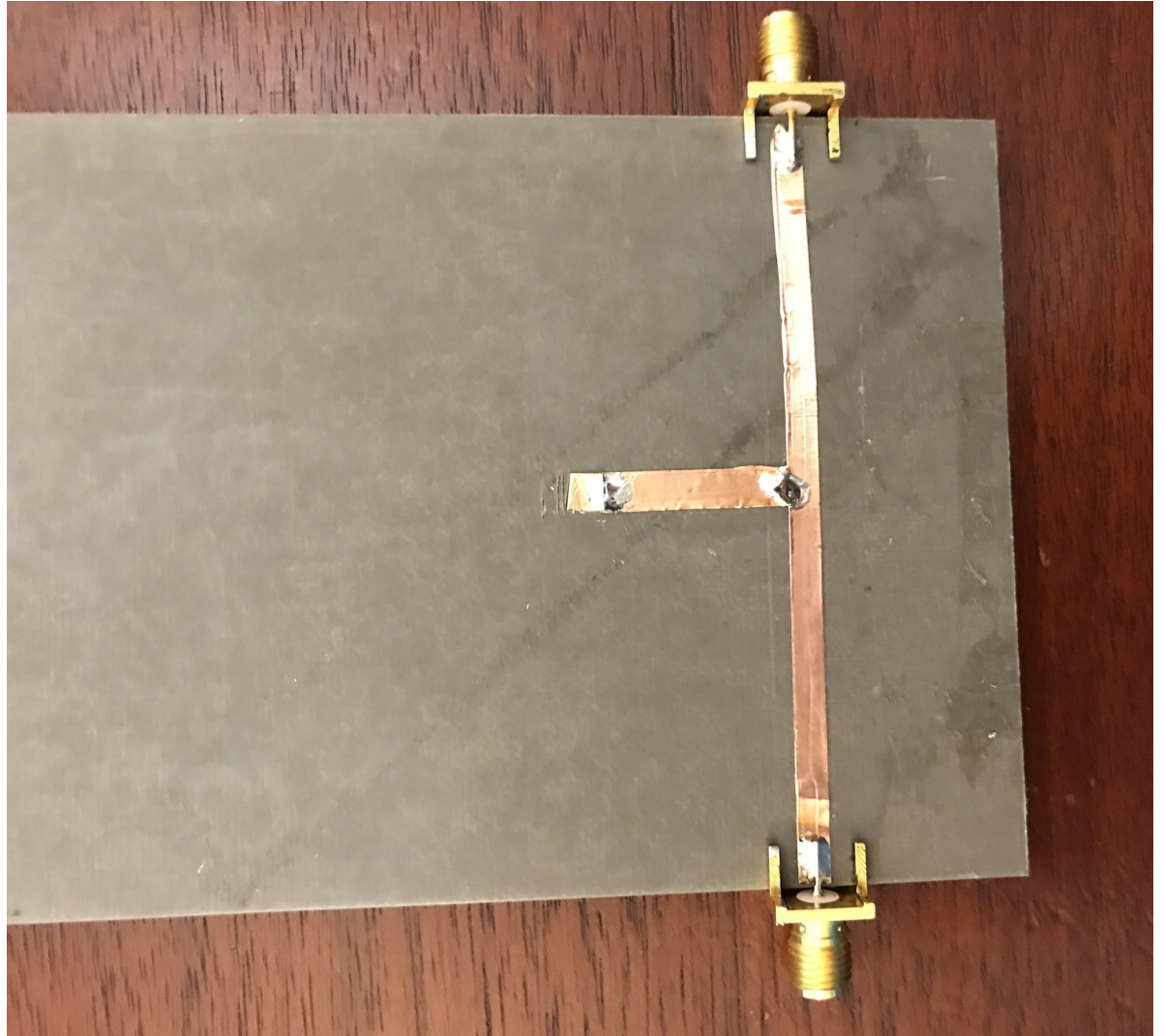
2.4 GHz Band-Pass Filter



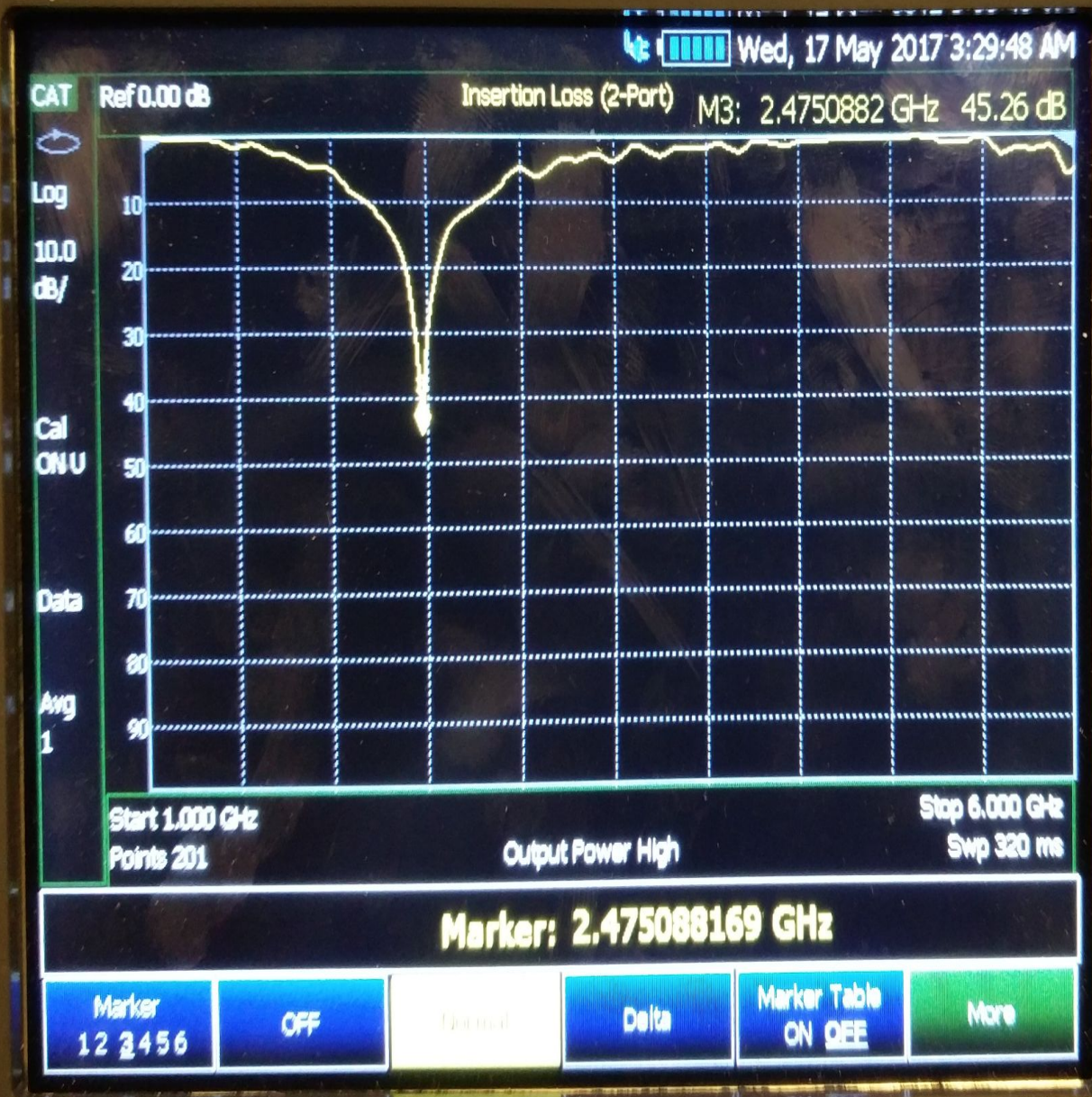
2.4 GHz Band-Pass Measured Frequency Response



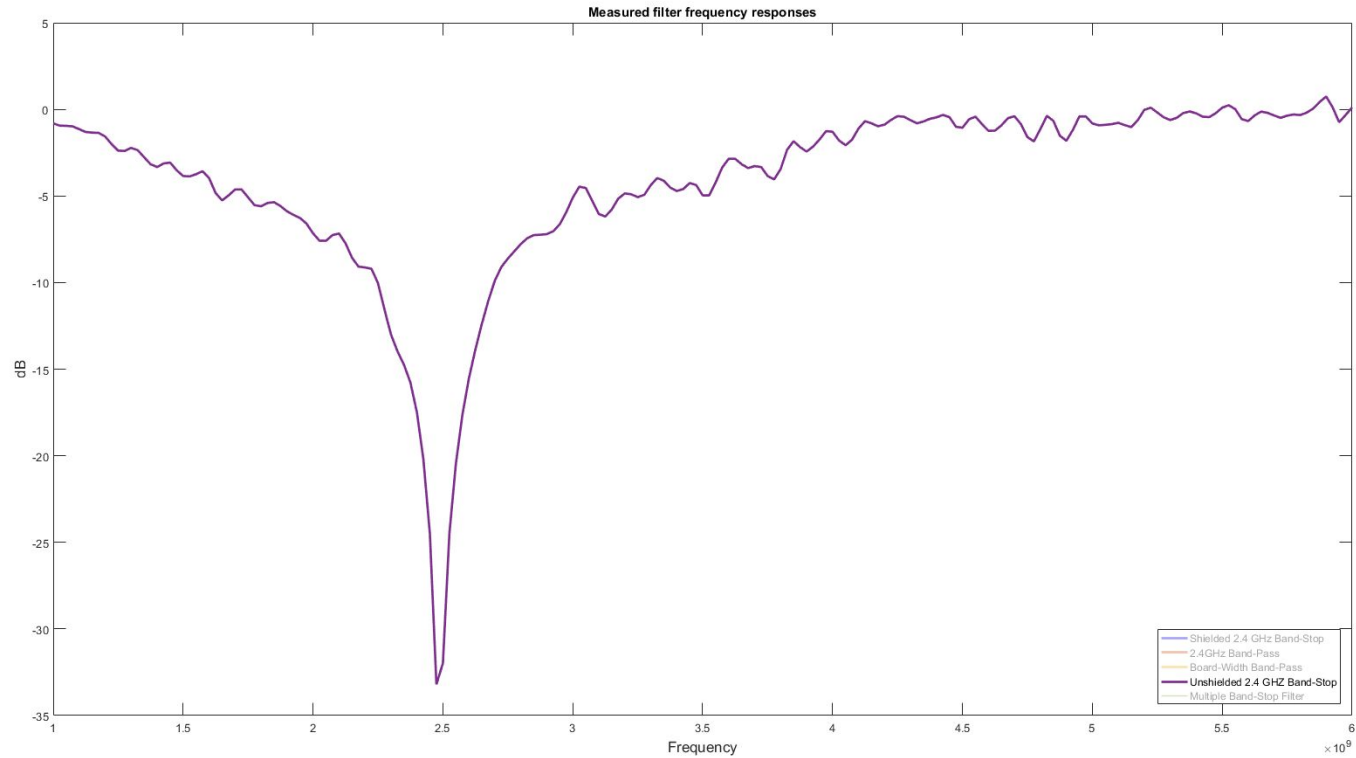
2.4 GHz Band-Stop Filter



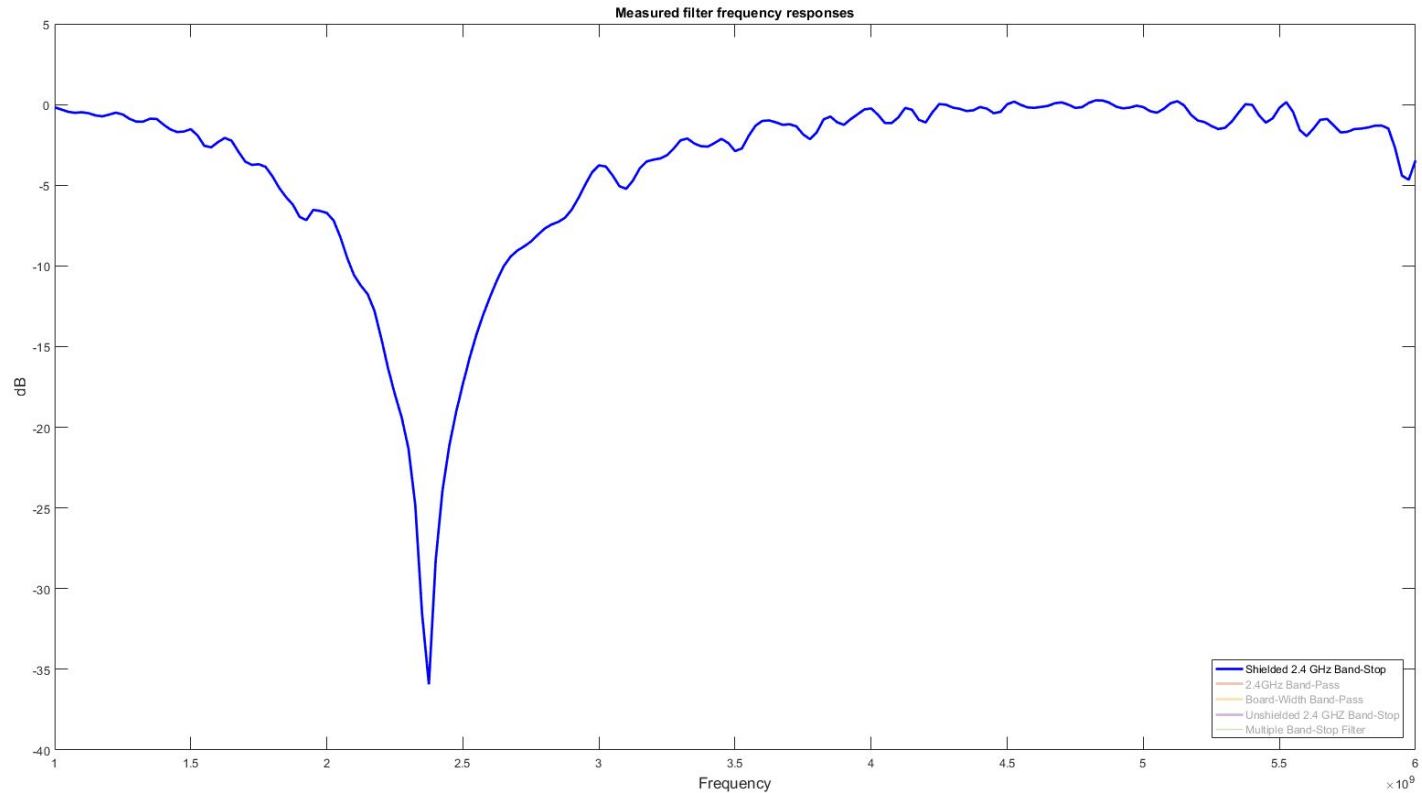
2.4 GHz Band-Stop Filter



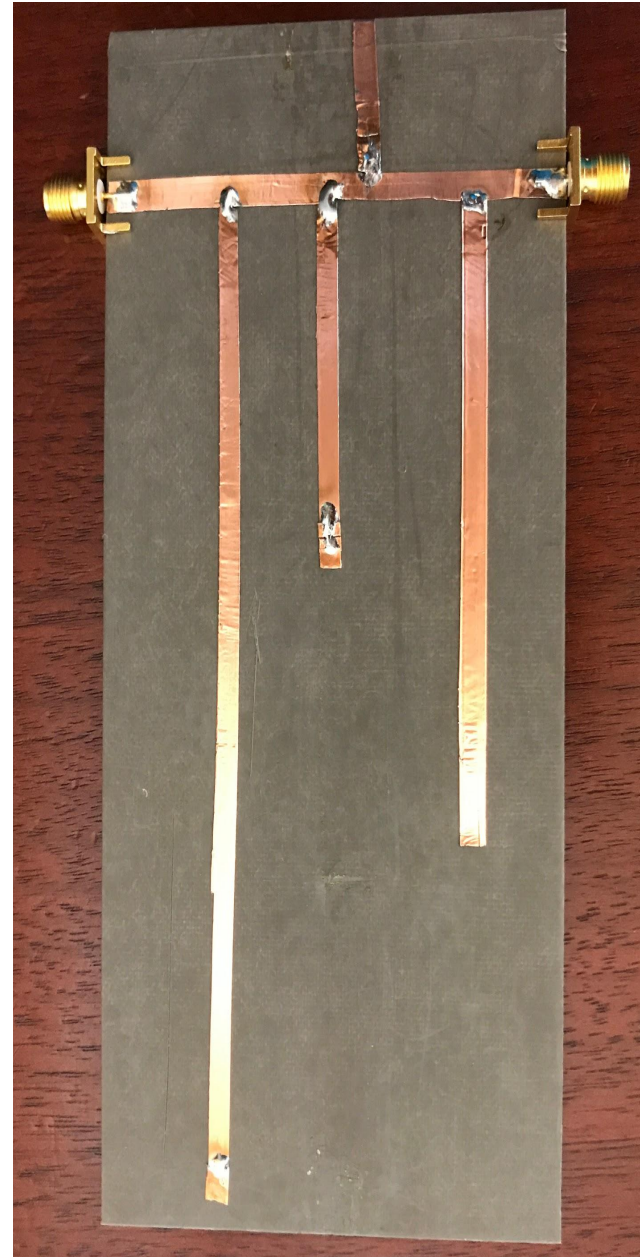
2.4 GHz Band-Stop Filter Frequency Response



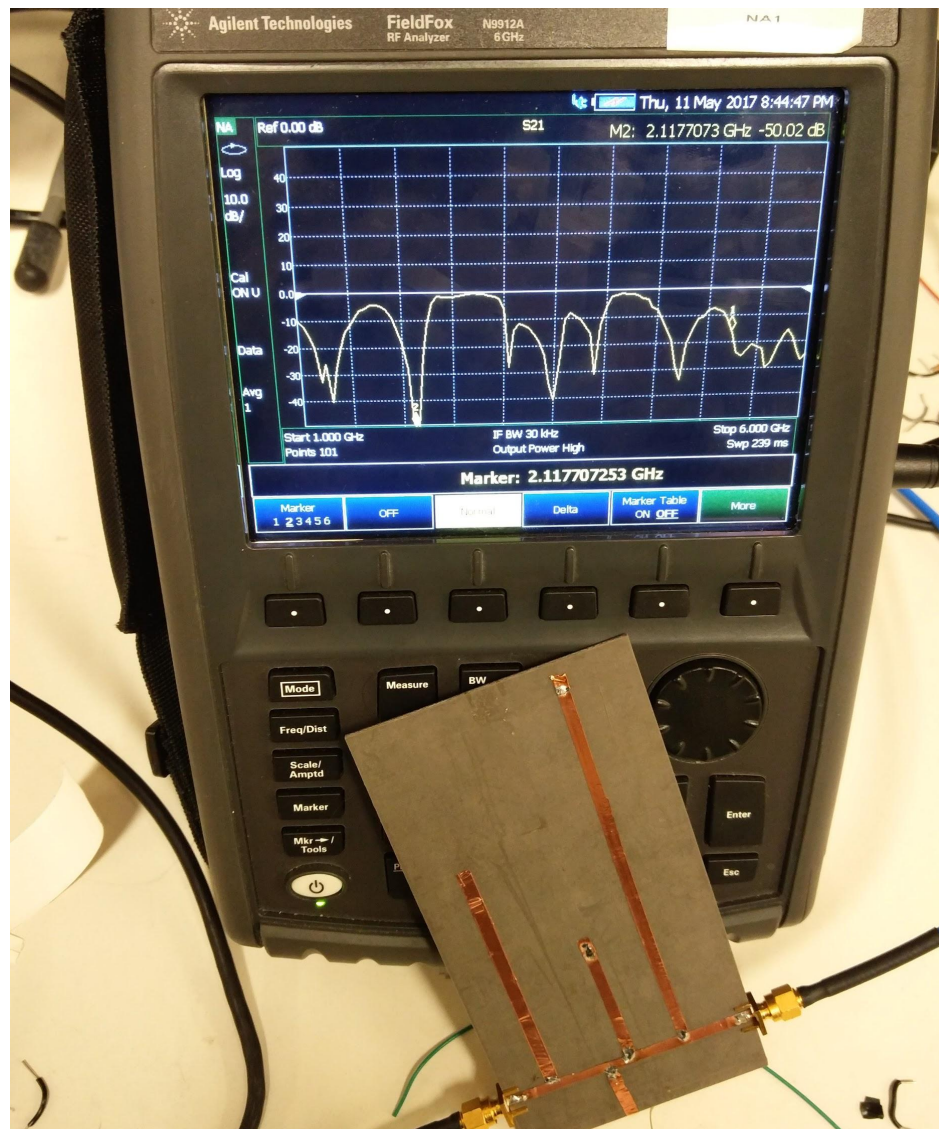
2.4 GHz Band-Stop Filter in Paper and Al Foil



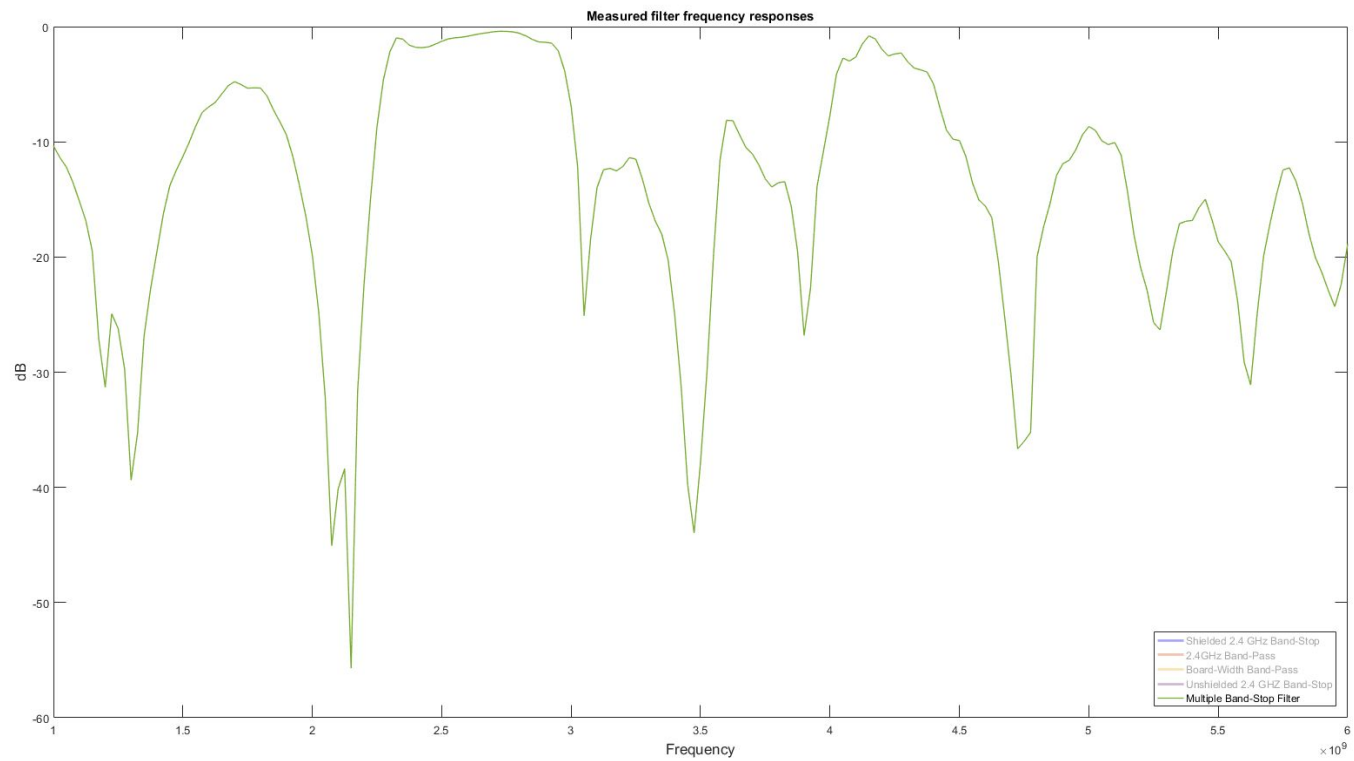
Multiple Band-Stop Filter



Multiple Band-Stop Filter



Multiple Band-Stop filter



Questions?