

Modeling and Characterization Requirement

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Characterization Requirement

1. Characterization & modeling of baluns (x3):

- Frequency: DC~20GHz,
- Temperature: -30 ~ +125°C
- S-parameter & Spice model for ADS & Spectre
 - 4-port de-embedded balun S-parameter
 - 5-port ADS, Spectre lumped-model

1. Load pull of high power device (x1)

- Frequency: 2.4~2.5GHz (x1) & 4.8~5.8 (x1)
- Temperature: room temp

2. Characterization of MOS device at high DC voltage (x8)

- Temperature: room temp & high temp (+125degC)
- Id vs Vds (0~2V) plot with different Vgs(0~1.6V)

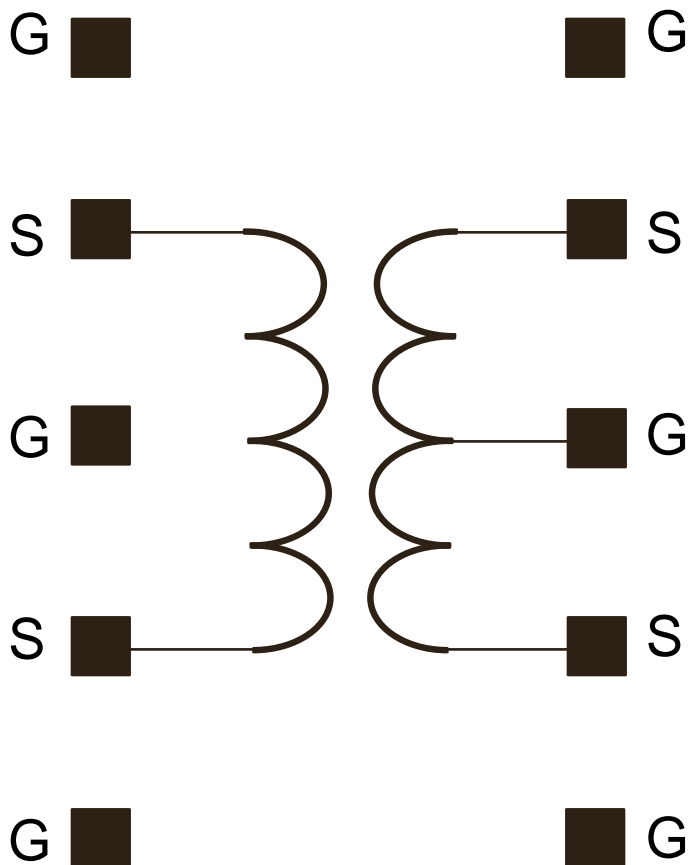
3. 5 samples (min.) for each of the above

Delivery Requirement

- 1. Characterization & modeling of baluns (x3):**
 - Report
 - All raw data
 - 4-port de-embedded balun S-parameter
 - 5-port ADS, Spectre lumped-model
- 2. Load pull of high power device (x1)**
 - Report & all raw data
- 3. Characterization of MOS device at high DC voltage (x8)**
 - Report & all raw data

Note: All delivery should be completed 2 months after the start of project. (Expected start of project ~Jan)

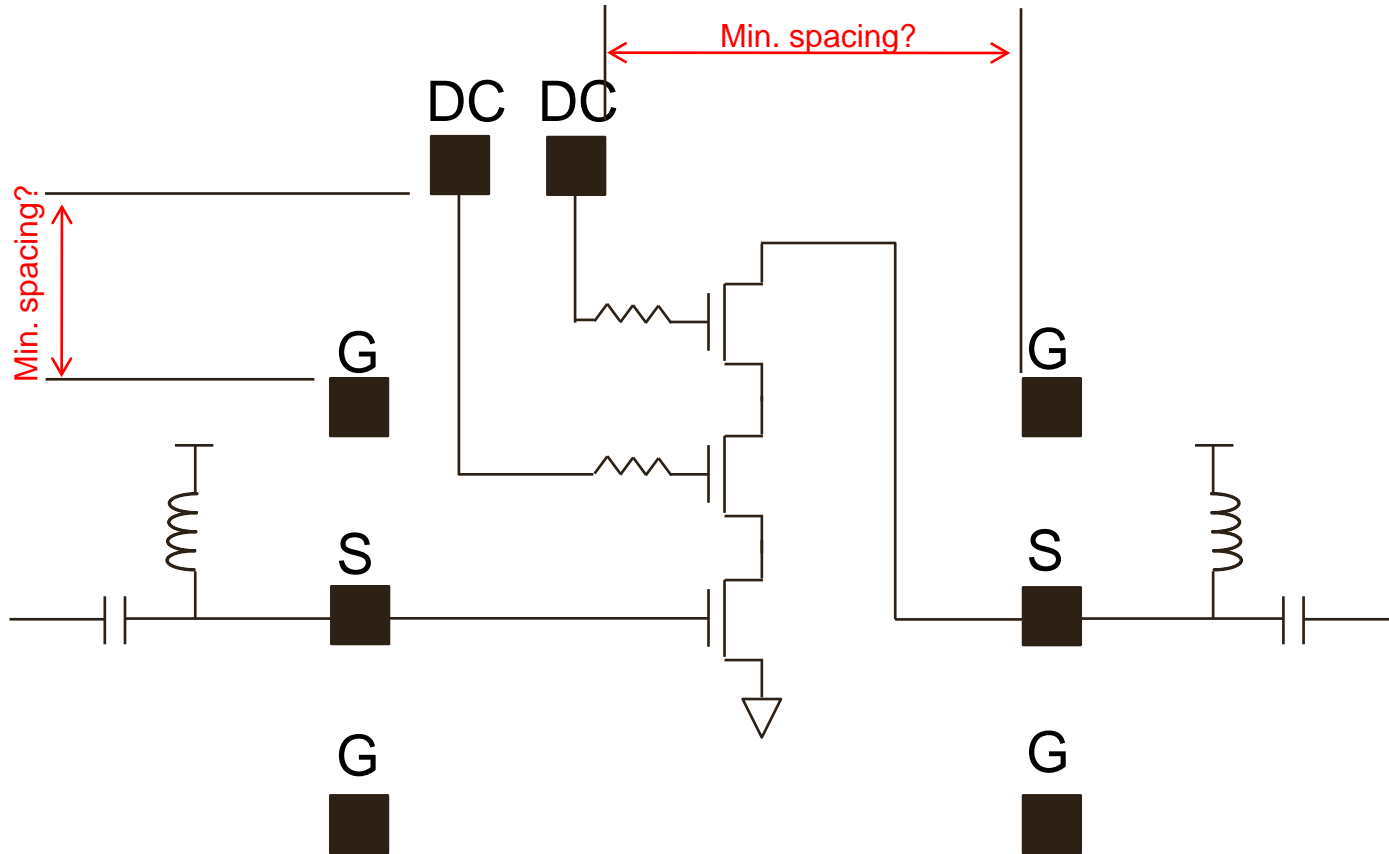
1. Characterization and Modeling of Balun



Question

- What type of de-embedding structure is required?
- What is the probe head pitch?
- What is the min. probe pad size?
- What is the probe head configuration? Eg. GSGSG.

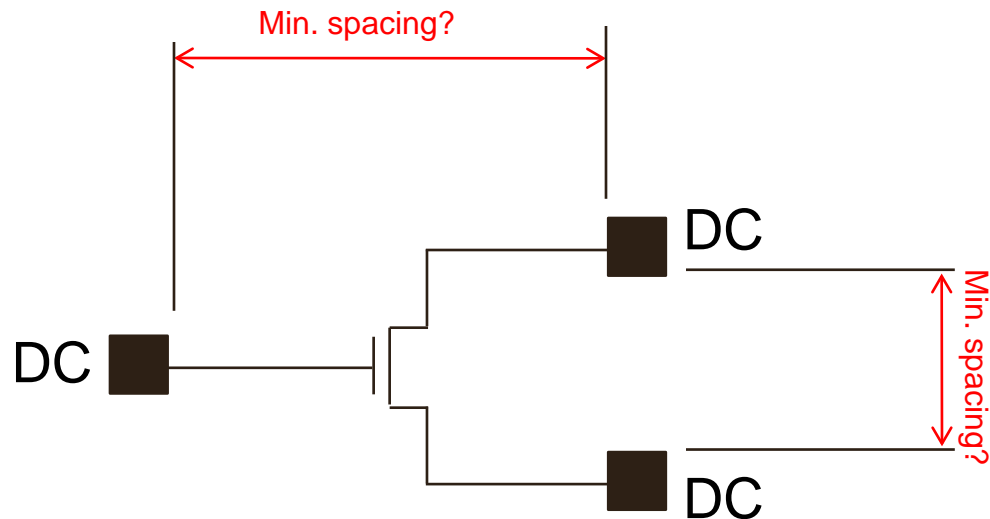
2. Load Pull of high power device



Question:

- What is the probe head pitch?
- What is the probe head configuration? Eg. GSG.

3. Characterization of 1.2V device at high DC voltage



Thank you

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