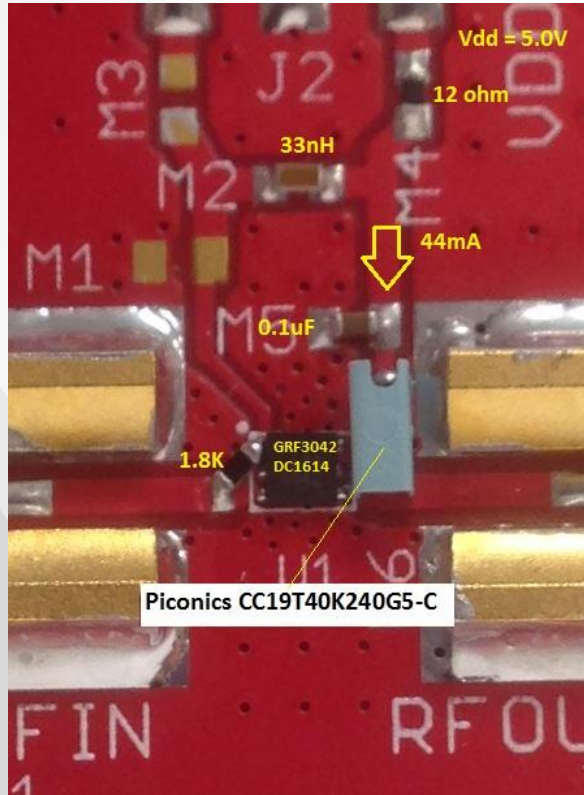




GRF3042 5.0V vs. 7.0V Configuration

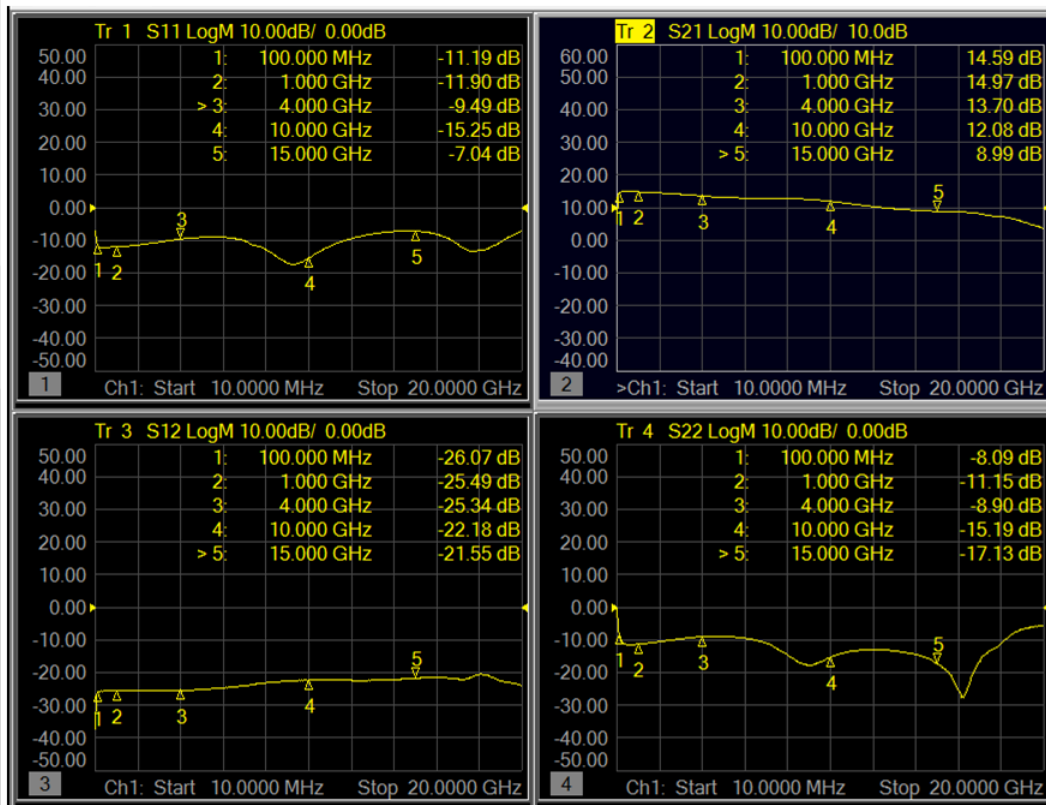
GRF3042 Schematic:



Vdd = 5.0V configuration shown. In order to configure for Vdd = 7.0V:

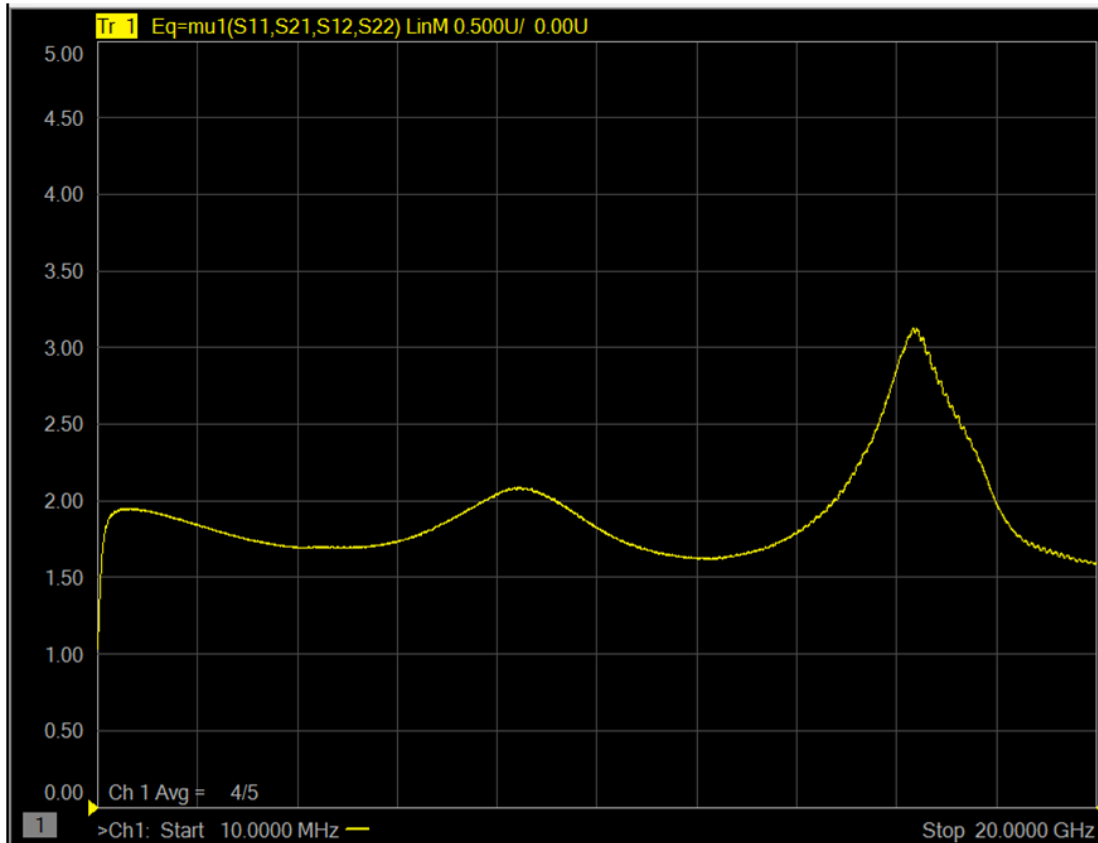
- Set Vdd = 7.0V
- Change 12 ohm at M4 to 22 ohm, yielding Iddq = 45mA (same Iddq as 5.0V config).
- Remove 33nH at M2 and 1.8K

GRF3042 Response:

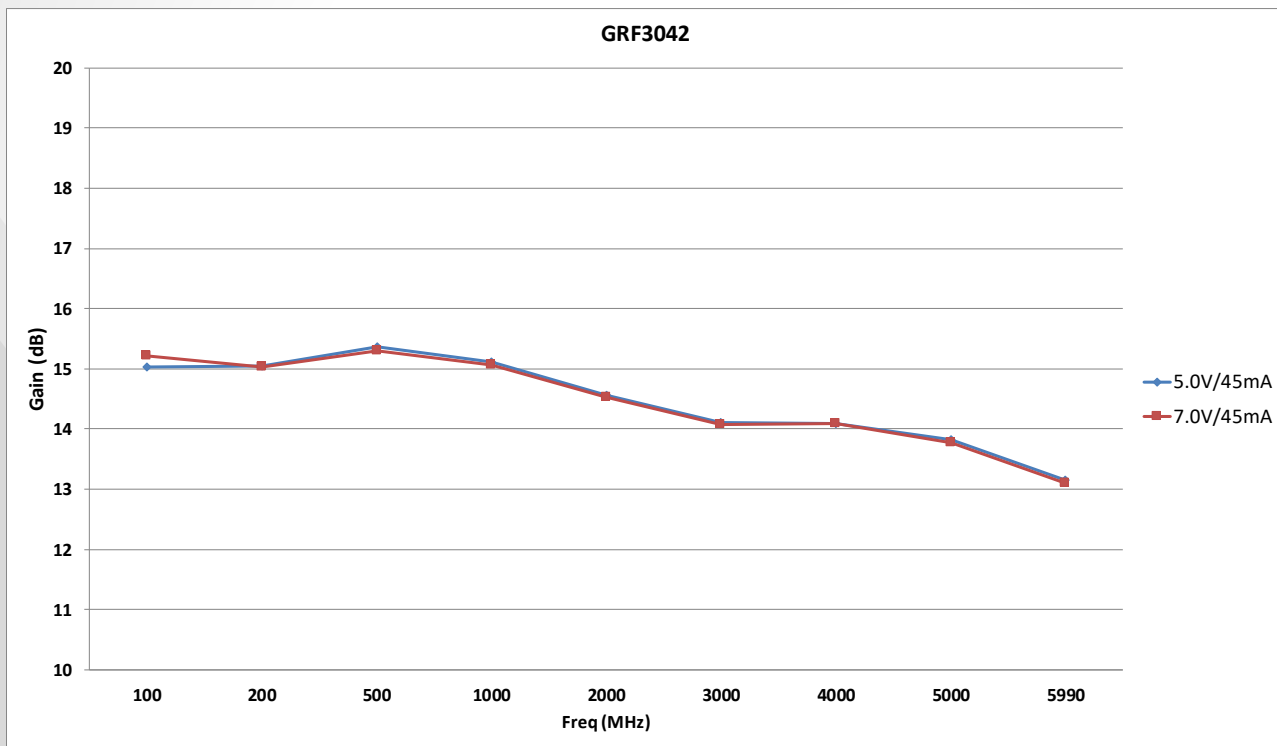


Response unchanged vs. configuration.

GRF3042 Stability Mu Factor:

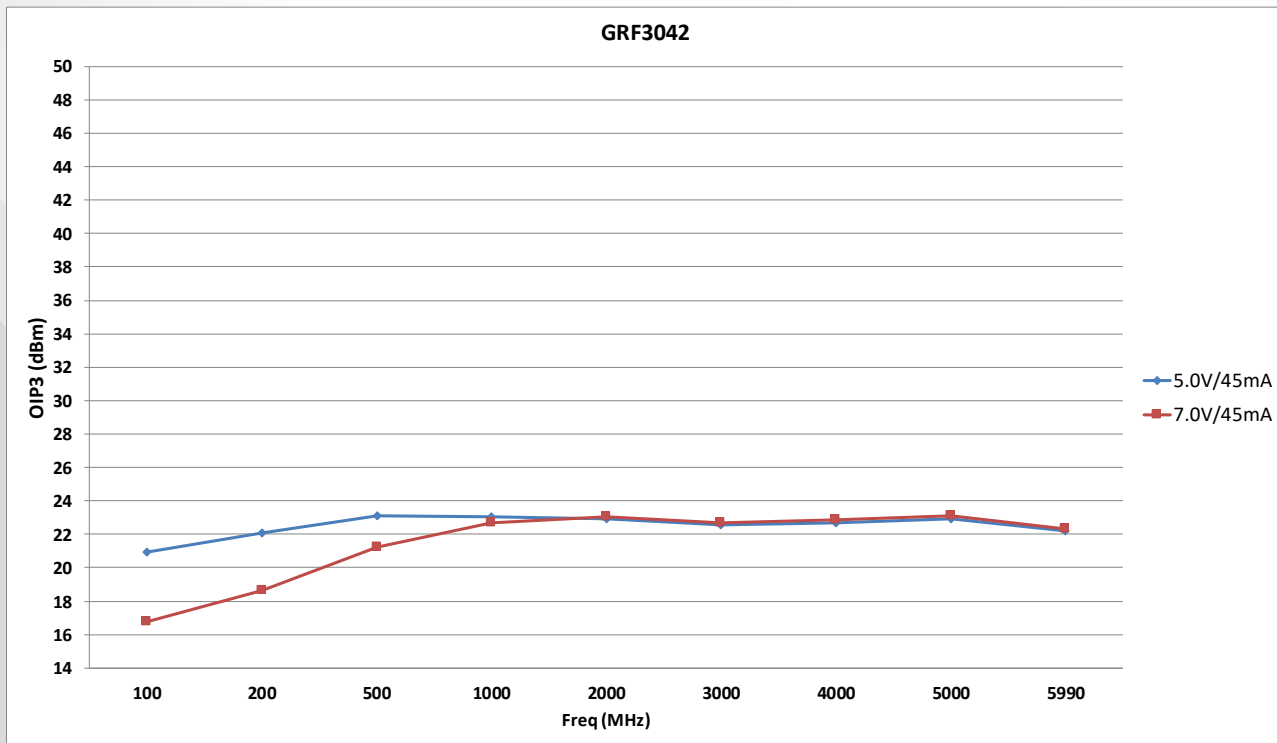


GRF3042 Gain:



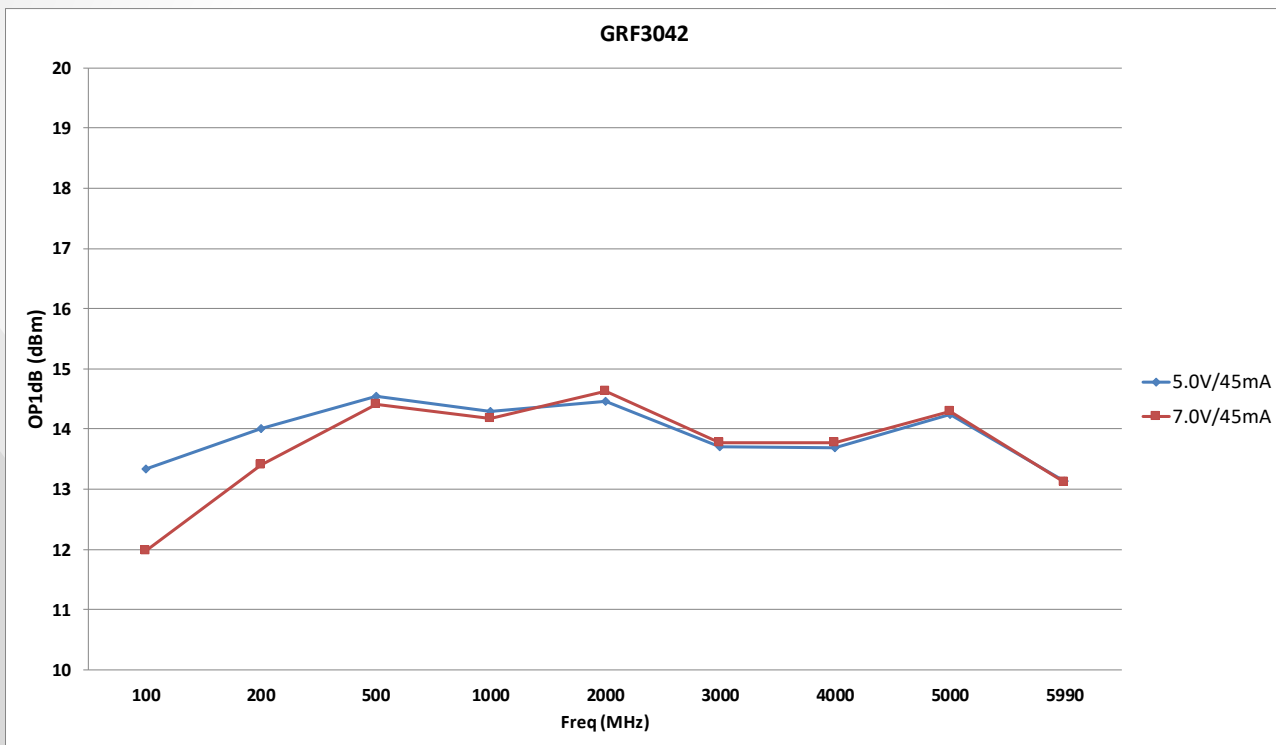
Now compare data between the two configurations. Gain shows no delta.

GRF3042 OIP3:



OIP3 better on low end with 5.0V config, otherwise the same.

GRF3042 OP1dB:



OP1dB better on low end with 5.0V config, otherwise the same. 5.0V config, then, appears superior in that it does better on low end of band and there is no delta after that.



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