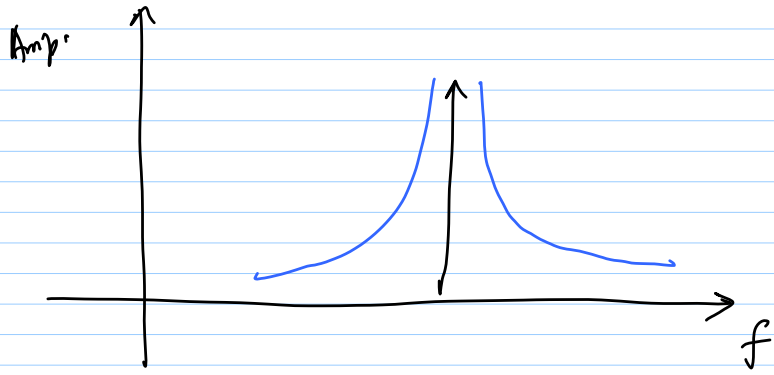


30/10/13

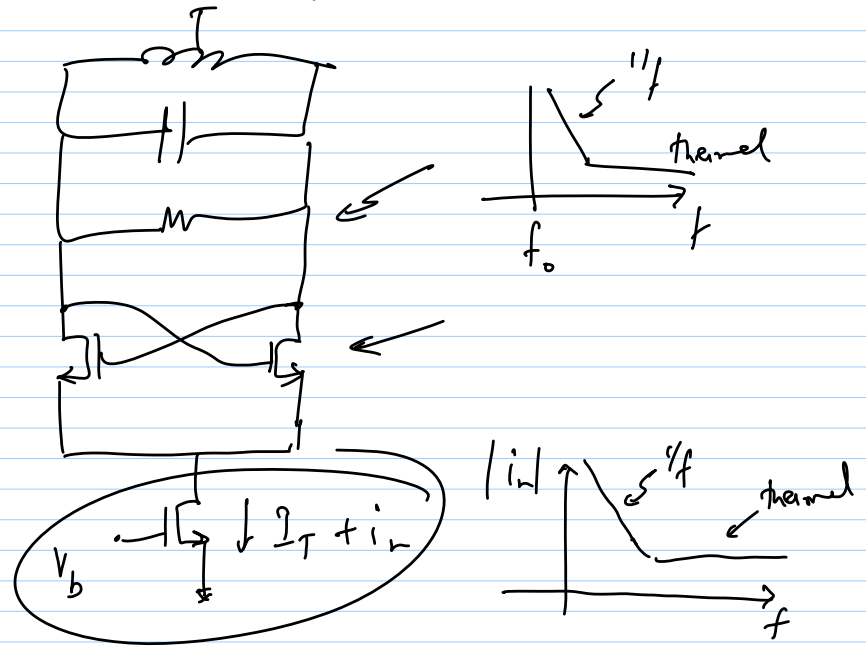
Lec 36

Phase Noise

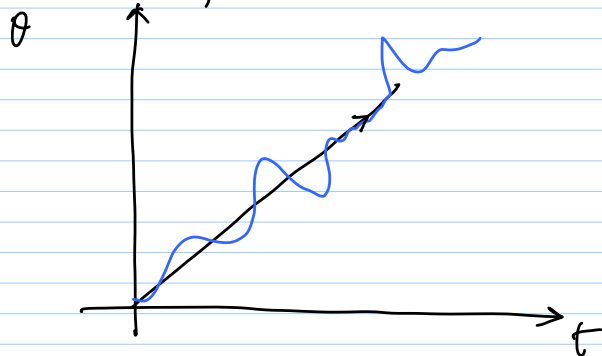


- 1) It should look like an Osc.
- 2) Mixer action from tail C.S. to output

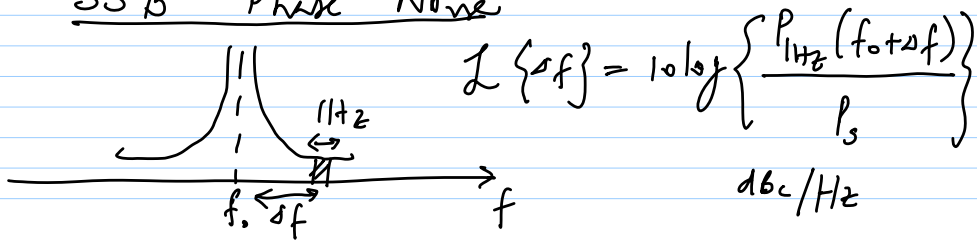
3) Freq. response of RLC tank



Phase of Osc.

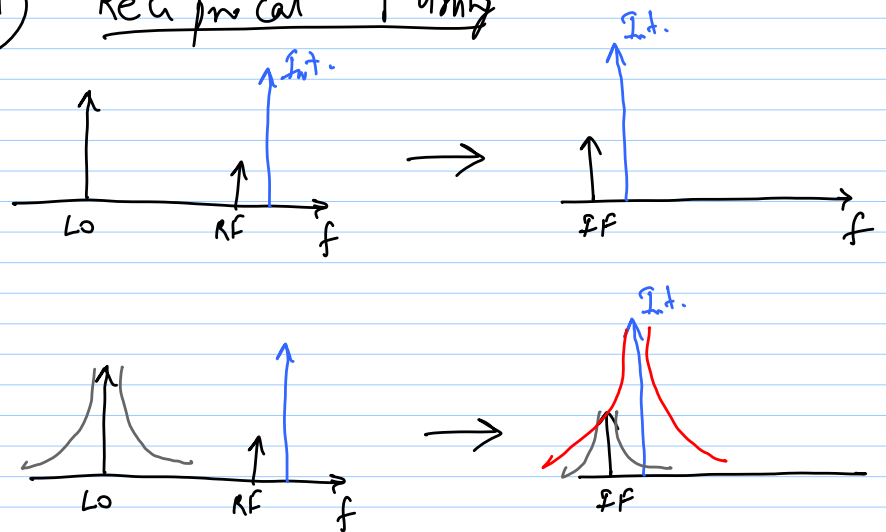


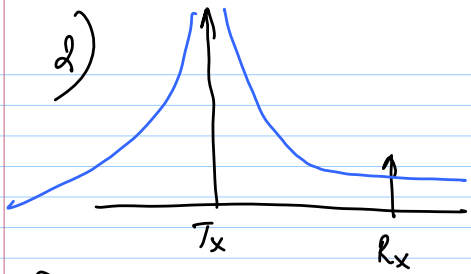
SSB Phase Noise



Effects of PN

1) Reciprocal Mixing





Powerful Tx could
draw out Rx signal
in presence of PN

3) OFDM



I.C.I.

Noise - LTV
Signal - NLTI

LTI Analysis of Noise in OSC

- 1) DB Leeson, "A simple model of feedback oscillator noise spectrum", Proceedings of the IEEE, pp 320-330, Feb. 1966.

