

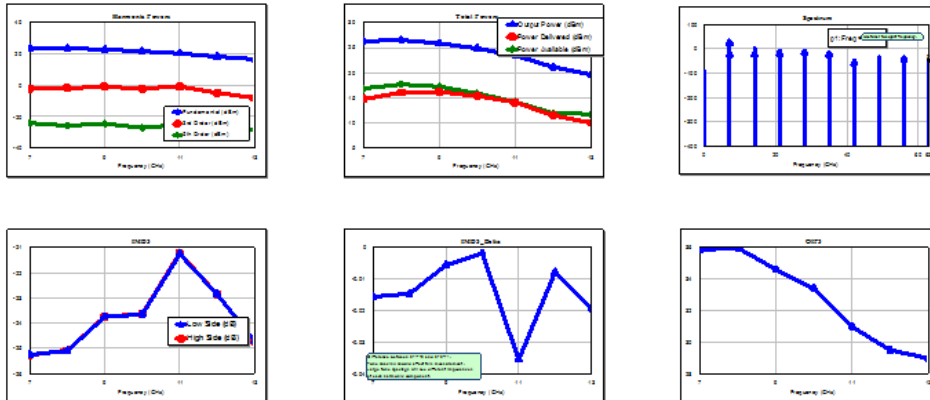
PA_Two_Tone_Sweep_Freq_P1dB

This test bench project shows a two tone swept frequency test bench for power amplifiers at P1dB output power level. XDB element, which controls the simulation can be changed to be any amount of compression (not just 1 dB).

This test bench includes: PA_Two_Tone_Sweep_Freq_P1dB

Schematics:

- **PA_Two_Tone_Sweep_Freq_P1dB_Display** - embeds all graphs into one display.



- **PA_Two_Tone_Sweep_Freq_P1dB** - the test bench setup. Includes notes on where to change settings specific to your design.

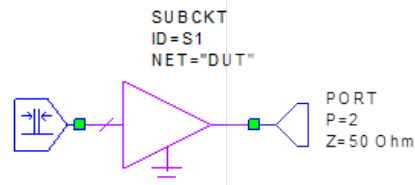
- Set frequency on schematic options, right click on the schematic. Select "Options". On the "Frequencies" tab, enter frequency range.
- Harmonic Settings are set to reasonable levels. Right click on schematic select "Options". On the "AplacSim" tab, you can change tone 1 and tone 2 harmonics.
- Set tone spacing here.

- Set each input tone power level here, should be set well below saturation.

- Currently set to 1 dB. Change the XDB parameter to be any amount of compression.

PORT2
P=1
Z=50 Ohm
Fdel=0.001 GHz
P wr1=0 dBm
P wr2=0 dBm

XDB
ID=P02
XDB=1 dB



Graphs

- Harmonic Powers
- Total Powers
- Spectrum
- OIP3
- IMD3_Delta
- IMD3

Project Folders

- **PA_Two_Tone_Sweep_Freq_P1dB** - Folder containing all the schematics, graphs and equations for this project.

Importing the Test Bench

If you are unable to import the test bench automatically by clicking the Import test bench button above, click [How To Import Test Benches Manually](#) to do that manually.