



Noise circles will be calculated for each point in the frequency sweep. Note the ns_circle function uses the *normalized* equivalent noise resistance, so Rn must be divided by Z0.

N1

 $Noise Circles = ns_circle(\{1.5, 2, 2.5, 3, 3.5\}, NFmin, Sopt, Rn/50, 51)$

specify values for noise circles in dB here (default is NFmin+{0,1,2,3})

SIMULATIONS



S Param SP1

Start=1.9 GHz Stop=2.2 GHz

Step=1 MHz CalcNoise=yes Noise analysis is set in the "S_Param" simulation component. At each frequency, rn: - effective noise resistance Sopt - optimum noise match

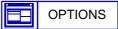
NFmin - minimum noise figure are calculated.

This options block is used to set the ambient temperature for

the simulation. The default value of "Temp" is 25C, which is a convenient value for semi-

"temp" should be set to 16.85C.

conductors. However, for the most accurate noise analysis,



Options1 Temp=16.85

Tnom=25 TopologyCheck=yes V RelTol=1e-6 V

I_RelTol=1e-6 A GiveAllWarnings=yes

MaxWarnings=10

RESULTS
Results are written to SparamsNoise.ds and displayed in SparamNoise.dds