



NsCircle
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.

NsCircle
N1
NoiseCircles=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-PARAMETERS

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.



OPTIONS

Options
Options1
Temp=16.85
Tnom=25
TopologyCheck=yes
V_RelTol=1e-6 V
I_RelTol=1e-6 A
GiveAllWarnings=yes
MaxWarnings=10

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-conductors. However, for the most accurate noise analysis, "temp" should be set to 16.85C.

RESULTS
Results are written to SpamsNoise.ds and displayed in SpamsNoise.dds