Qucs device model parameter extraction system: Mike Brinson, April 2014 --          RF RESISTOR MODEL          Version 0.0.4
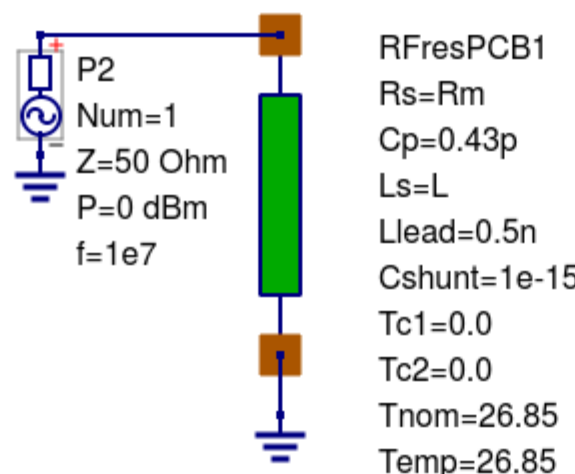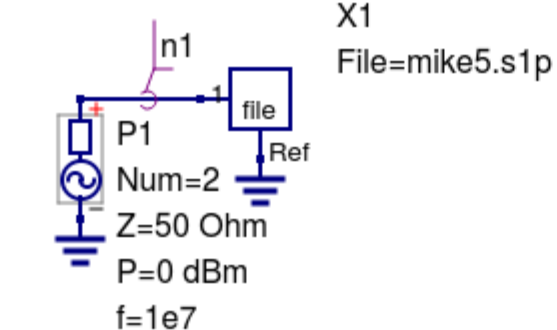
**Optimization**

Opt1

**dc simulation**

DC1

Equation

Eqn3
Cf1=A*(real(S[2,2])-real(S[1,1]))^2
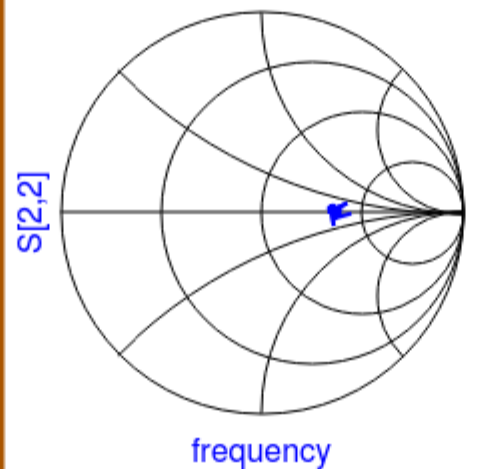Cf2=B*(imag(S[2,2])-imag(S[1,1]))^2

**S parameter simulation**

SP1
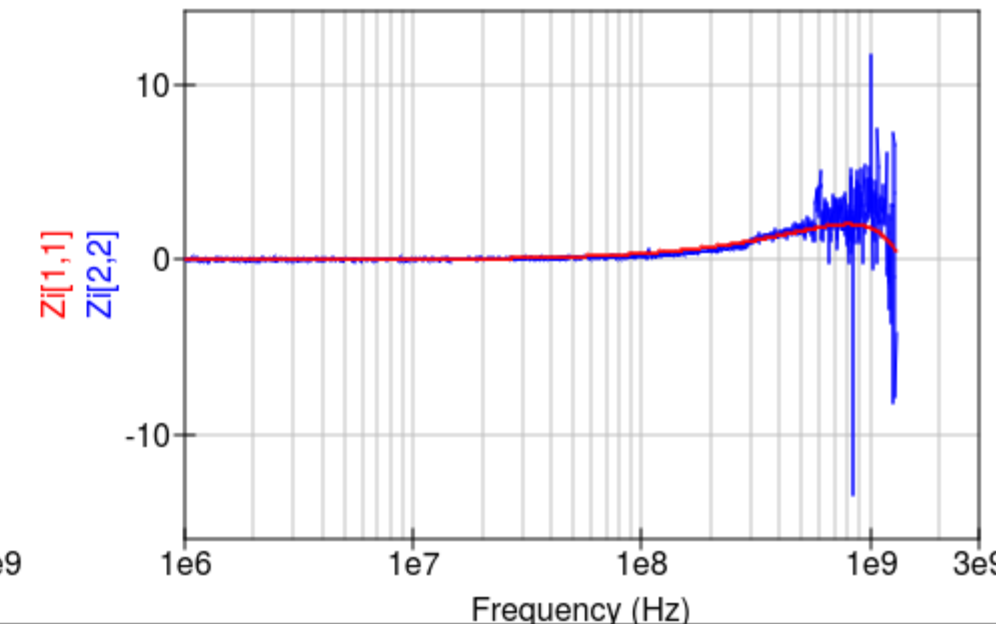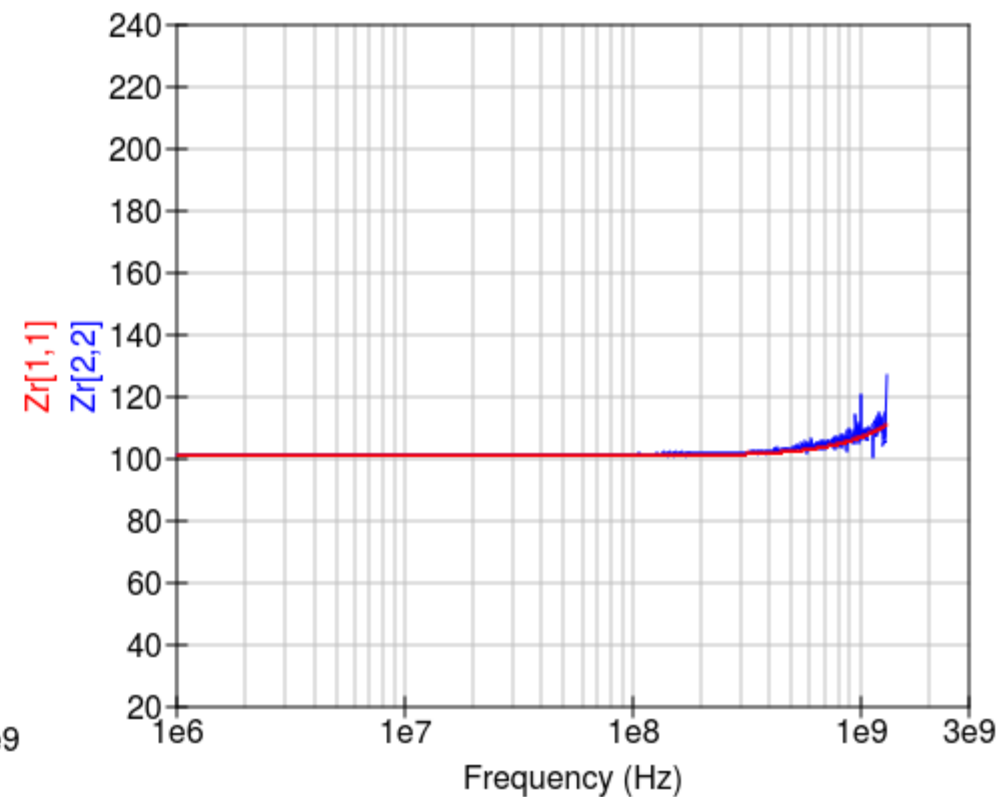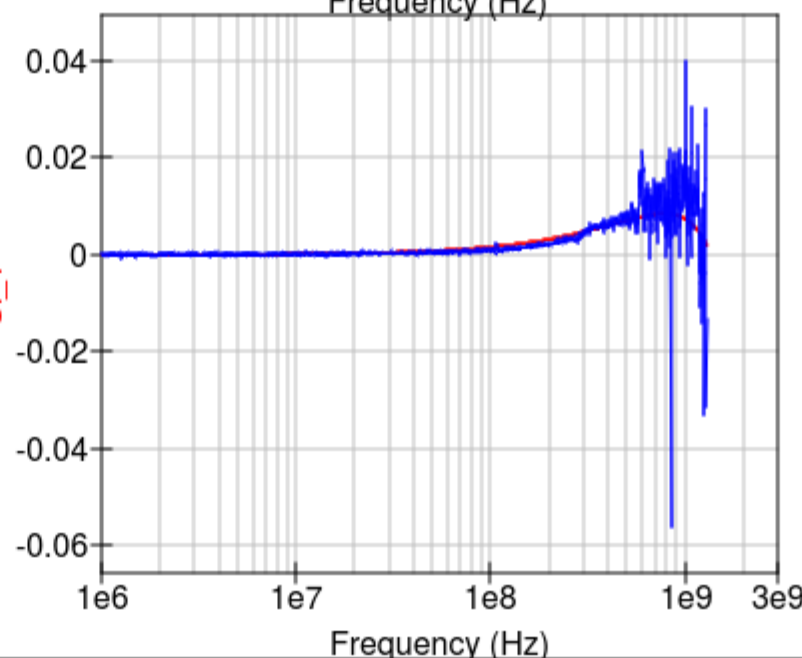Type=log
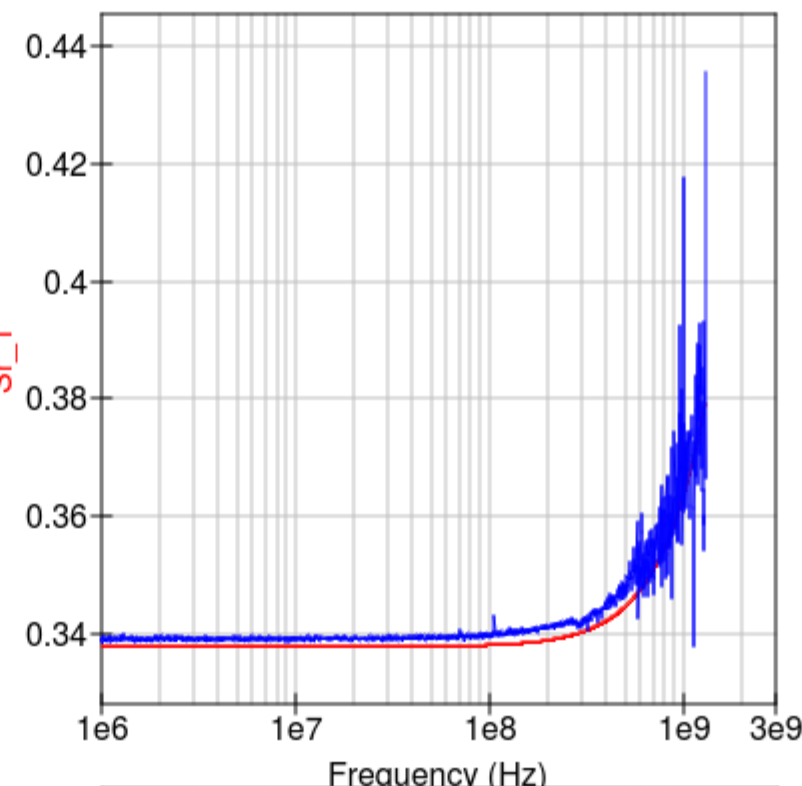Start=1e6
Stop=1.3e9
Points=1501

Simulation Controls

X1
File=mike5.s1p

n1

P1
Num=2
Z=50 Ohm
P=0 dBm
f=1e7

1
file
Ref

P2
Num=1
Z=50 Ohm
P=0 dBm
f=1e7

RFresPCB1
Rs=Rm
Cp=0.43p
Ls=L
Llead=0.5n
Cshunt=1e-15
Tc1=0.0
Tc2=0.0
Tnom=26.85
Temp=26.85
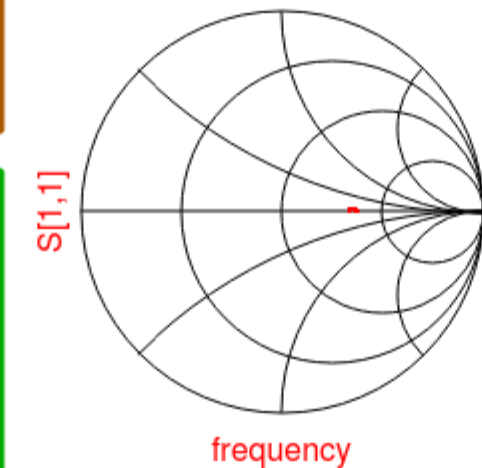
Test circuits

Equation

Eqn1
Zr=real(stoz(S))
Zi=imag(stoz(S))

Equation

Eqn4
A=1000
Rm=101.0
B=1000

Equation

Eqn5
Sr_1=real(S[1,1])
Si_1=imag(S[1,1])
Sr_2=real(S[2,2])
Si_2=imag(S[2,2])

Equations

Measurements

S[2,2]

frequency

Simulation

S[1,1]

frequency



Optimized values of model parameters are listed by displaying Optimization icon menu "Variables"