obj1=sparameters('common1.s2p')

rfplot(obj1)

rfplot(s11)

rfplot(obj1)

Zin=((1+obj1)/(1-obj1))\*50,

%-- 8/8/2021 8:39 AM --%

obj1=sparameter('common1.s2p')

obj1=sparameters('common1.s2p')

rfplot(obj1)

size(obj1)

obj1

i

j

size (Parameters)

help sparameters

S4=obj1(2,1)

S4=obj1(1,1)

x=rfplot(obj1,2,1)

size(x)

plot(x)

plot(x,Frequencies)

Frequencies

rfplot(x)

x

Zin=((1+s11)/(1-s11))\*50

s11 = rfparam(S1,1,1);

% Extract S11 from the original data

s11 = rfparam(S1,1,1);

s11 = rfparam(S1,1,1);

S1 = sparameters('default.s2p');

s11 = rfparam(S1,1,1);

Zin=((1+s11)/(1-s11))\*50

Z=Zin-50

rfplot(Z)

plot(Z,Frequencies)

rfplot(Z)

clc

size(s11)

s11

Zin=(1+s11)/(1-s11);

Zin=((1+s11)/(1-s11))\*50;

Z=Zin-50;

size(Z)

size(Zin)

size(s11)

Zin=((1+s11)./(1-s11))\*50;

Z=Zin-50;

size(Z)

F=(1e5:0.01e5:1e9);

size(F)

F=(1e5:0.1e5:1e9);

size(F)

S1 = sparameters('default.s2p');

s11 = rfparam(S1,1,1);

size(s11)

s11 = rfparam(S1,2,1);

size(s11)

S1 = sparameters('default.s2p');

S1 = sparameters('common1.s2p');

s11 = rfparam(S1,1,1);

size(s11)

Zin=((1+s11)./(1-s11))\*50;

Z=Zin-50;

size(Z)

obj1=sparameters('common1.s2p')

size(Frequencies)

help (sparameters)

help(sparameters)

help sparameters

size(freq)

s11 = rfparam(freq;

s11 = rfparam(freq);

s11 = rfparam(Frequencies);

F=(1e9-1e5)/801;

f=[1e5:F:1e9];

size(f)

F=(1e9-1e5)/800;

f=[1e5:F:1e9];

f=[1e5:F:1e9]';

size(f)

plot(Z,f)

plot(f,Z)

plot(real(f),Z)

plot(f,real(Z))

Z

plot(f,Z)

rfplot(obj1)

plot(f,Z)

plot(f,real(Z))

size(s11)

s11

f

s11

size(s11)

load common1.s2p

load (common1.s2p)

load Freq.txt

load s11.txt

size(Freq)

Zin=((1+s11)./(1-s11))\*50;

Z=Zin-50;

plot(Freq,real(Z))

Zin=((1+s11)/(1-s11))\*50;

Z=Zin-50;

plot(Freq,real(Z))

s11

Freq

Z

Zin=((1+s11)./(1-s11))\*50;

Zin

Z=Zin-50;

Z

plot(Freq,real(Z))

s11

clear

clc

load s11.txt

load Freq.txt

Zin=((1+s11)./(1-s11))\*50;

Z=Zin-50;

s11

p11= (-2.359875609462173e-1)-(7.255304390036355e-1)

p11= -2.359875609462173e-1 -7.255304390036355E-1

p11= (-2.359875609462173e-1)\*angle(-7.255304390036355e-1)

angle(p11)

-2.359875609462173e-1\*exp(deg2rad(-7.255304390036355e-1)\*i)

s11

-2.359875609462173e-1\*exp(deg2rad(-7.255304390036355e-1)\*i)

size (s11)

S11=s11(:,1)\*exp(deg2rad(s11(:,2))\*i);

S11=s11(:,1)\*exp(deg2rad(s11(:,2)).\*i);

S11=s11(:,1).\*exp(deg2rad(s11(:,2)).\*i);

S11

S11(1,:)

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(Freq,Z)

plot(Freq,abs(Z))

Z(1,:)

abs(Z(1,:))

0.48562208+0.046750199\*i

abs(0.4856 + 0.0468i)

abs(S11(1,:))

0.51196957+0.097312212\*i

abs(0.5120 + 0.0973i)

S11

abs(S11(201,:))

abs(S11(202,:))

abs(S11(200,:))

-2.934082191154375e-1\*exp(deg2rad(8.375660228416285e-1)\*i)

abs(-0.2934 - 0.0043i)

0.88106734+0.18520959\*i

abs(0.8811 + 0.1852i)

-2.293830966795953e-1\*exp(deg2rad(-2.693388025115511)\*i)

abs(-0.2291 + 0.0108i)

0.96079093-0.15607613\*i

abs(0.9608 - 0.1561i)

-1.225130266952377e-1\*exp(deg2rad(-2.686745588316176e1)\*i)

abs(-0.1093 + 0.0554i)

[10.^(-4.980548239529080e-1/20) .\* exp(1j\*deg2rad(5.725096655468346))]

[10.^(-4.980548239529080e-1/10) .\* exp(1j\*deg2rad(5.725096655468346))]

[10.^(-4.980548239529080e-1) .\* exp(1j\*deg2rad(5.725096655468346))]

S11=10^(s11/10);

S11=10.^(s11/10);

S11

s11

S11=10.^(s11(:,1)/10);

S11

S11=10.^(s11(:,1)/20);

S11

S11=10.^(s11(:,1));

S11

S11=20.^(s11(:,1));

S11

[10.^(-4.980548239529080e-1/20) .\* exp(1j\*deg2rad(5.725096655468346))]

S11=[10.^(s11(:,1)/20) .\* exp(1j\*deg2rad(s11(:,2)))]

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(Freq,real(Z))

S11=10.^(s11(:,1)/20) .\* exp(1j\*deg2rad(s11(:,2)))

S11=10.^(s11(:,1)/10) .\* exp(1j\*deg2rad(s11(:,2)))

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(Freq,real(Z))

S11=10.^(s11(:,1)/10) .\* exp(1j\*deg2rad(s11(:,2)))

S11=[10.^(s11(:,1)/10) .\* exp(1j\*deg2rad(s11(:,2)))]

S11=[10.^(s11(:,1)/10) .\* exp((180j\*deg2rad(s11(:,2))/pi))]

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(Freq,real(Z))

S11=[10.^(s11(:,1)/10) .\* exp(1j\*deg2rad(s11(:,2)\*180/pi))]

S11=[10.^(s11(:,1)/20) .\* exp(1j\*deg2rad(s11(:,2)\*180/pi))]

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(Freq,real(Z))

S11=[10.^(s11(:,1)/20) .\* exp(1j\*deg2rad(s11(:,2)\*180/pi))]

S11=[10.^(s11(:,1)/20) .\* exp(1j\*deg2rad(s11(:,2)))]

Zin=[(1+S11)./(1-S11))]\*50;

Zin=((1+S11)./(1-S11))\*50;

Zin

Z=Zin-50;

Z

plot(Freq,Z)

load 744272102.txt

load (744272102.txt)

load ('744272102.txt')

obj1('744272102.txt')

obj1=sparameters('744272102.txt')

rfplot(obj1)

help sparameters

obj1=zparameters('744272102.txt')

rfplot(obj1)

obj1=zparameters('diff1.s2p')

rfplot(obj1)

obj1=sparameters('diff1.s2p')

rfplot(obj1)

obj1=sparameters('common1.s2p')

rfplot(obj1)

obj1=sparameters('diff1.s2p')

rfplot(obj1)

obj1=sparameters('744272102.txt')

rfplot(obj1)

load diff1\_s11.txt

load diff1s11.txt

load diff1\_Freq.txt

S11=diff1s11(:,1).\*exp(deg2rad(diff1s11(:,2)).\*i);

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

Z

S11

plot(diff1\_Freq,Z)

Z=Zin-50;

Zin

plot(diff1\_Freq,Zin)

Zin=((1+S11)./(1-S11));

Z=Zin-50;

plot(diff1\_Freq,Z)

plot(diff1\_Freq,Zin)

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)\*180/pi))]

Zin=((1+S11)./(1-S11));

Z=Zin-50;

plot(diff1\_Freq,Z)

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

Z=Zin;

Z=0-Zin;

plot(diff1\_Freq,Z)

Z=Zin;

plot(diff1\_Freq,Z)

S11

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180))]

Zin=((1+S11)./(1-S11))\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

Z=Zin;

plot(diff1\_Freq,Z)

S11=[10.^(diff1s11(:,1)/10) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

Z=Zin;

plot(diff1\_Freq,Z)

S11=[(diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180))]

S11=[diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180)))]

S11=diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180)))

S11=[diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

plot(diff1\_Freq,Zin)

S11=[diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

plot(diff1\_Freq,Zin)

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

S11=[10.^(s11(:,1)/20) .\* exp(1j\*deg2rad(s11(:,2)))]

S11=[10.^(-4.980548239529080e-1/20)

S11

S11=10.^(-4.980548239529080e-1/20)

S11=10^(-4.980548239529080e-1/20)

S11=10^(-4.980548239529080e-1/10)

db2pow(-4.980548239529080e-1)

clc

load s11.txt

load common1\_s11.txt

load common1\_Freq.txt

S11=[db2pow(common1\_s11(:,1)).\* exp(1j\*deg2rad(common\_s11(:,2)))];

S11=[db2pow(common1\_s11(:,1)).\* exp(1j\*deg2rad(common1\_s11(:,2)))];

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(common1\_Freq,Z)

plot(common1\_Freq,abs(Z))

S11(1,:)

x=r\*cos(deg2rad(common\_s11(:,2)));

S11=10.^(common1\_s11(:,1)/20).\*cos(deg2rad(common\_s11(:,2)))+j\*(10.^(common1\_s11(:,1)/20).\*sin(deg2rad(common\_s11(:,2))));

S11=10.^(common1\_s11(:,1)/20).\*cos(deg2rad(common1\_s11(:,2)))+j\*(10.^(common1\_s11(:,1)/20).\*sin(deg2rad(common1\_s11(:,2))));

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(common1\_Freq,Z)

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(common1\_Freq,Z)

S11=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(diff1\_Freq,Z)

S11=[10.^(common1\_s11(:,1)/20) .\* exp(1j\*deg2rad(common1\_s11(:,2)))]

Zin=[(1+S11)./(1-S11)]\*50;

Z=Zin-50;

plot(common1\_Freq,Z)

S11\_Common=[10.^(common1\_s11(:,1)/20) .\* exp(1j\*deg2rad(common1\_s11(:,2)))]

S11\_diff=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin\_common=[(1+S11\_common)./(1-S11\_common)]\*50;

Zin\_common=[(1+S11\_Common)./(1-S11\_Common)]\*50;

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_C=Zin\_common-50;

Z\_D=Zin\_diff-50;

plot(common1\_Freq,Z\_C);

hold on

plot(common1\_Freq,Z\_D);

%-- 8/10/2021 10:00 AM --%

S11\_Common=[10.^(common1\_s11(:,1)/20) .\* exp(1j\*deg2rad(common1\_s11(:,2)))]

load common1\_s11

load common1\_s11.txt

Z\_C=Zin\_common-50;

Zin\_common=[(1+S11\_Common)./(1-S11\_Common)]\*50;

S11\_Common=[10.^(common1\_s11(:,1)/20) .\* exp(1j\*deg2rad(common1\_s11(:,2)))]

Zin\_common=[(1+S11\_Common)./(1-S11\_Common)]\*50;

Z\_C=Zin\_common-50;

plot(common1\_Freq,loglog(Z\_C));

load common1\_Freq.txt

plot(common1\_Freq,loglog(Z\_C));

loglog(Z\_C)

loglog(common1\_Freq,Z\_C)

S11\_diff=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

load diffs11.txt

load diff1s11.txt

load diff1\_Freq.txt

S11\_diff=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D=Zin\_diff-50;

loglog(common1\_Freq,Z\_D)

loglog(diff1\_Freq,Z\_D)

Z\_D

loglog(common1\_Freq,Z\_C)

hold on

loglog(diff1\_Freq,Z\_D)

S11\_diff=[10.^(diff1s11(:,1)/10) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D=Zin\_diff-50;

loglog(diff1\_Freq,Z\_D)

S11\_diff=diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

S11\_diff=diff1s11(:,1) .\* exp(1j\*deg2rad(diff1s11(:,2)))

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D=Zin\_diff-50;

loglog(diff1\_Freq,Z\_D)

S11\_diff=[10.^(diff1s11(:,1)/10) .\* exp(1j\*deg2rad(diff1s11(:,2)\*pi/180))]

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D=Zin\_diff-50;

loglog(diff1\_Freq,Z\_D)

S11\_diff=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))]

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D=Zin\_diff;

loglog(diff1\_Freq,Z\_D)

load common\_filter\_s11.txt

load common\_filter\_Freq.txt

S11\_Common\_filter=[10.^(common\_filter\_s11(:,1)/20) .\* exp(1j\*deg2rad(common\_filter\_s11(:,2)))]

Zin\_common\_filter=[(1+S11\_Common\_filter)./(1-S11\_Common\_filter)]\*50;

Z\_C=Zin\_common\_filter-50;

loglog(common\_filter\_Freq,Z\_C)

load diff\_filter\_s11.txt

load diff\_filter\_Freq.txt

S11\_diff\_filter=[10.^(diff\_filter\_s11(:,1)/20) .\* exp(1j\*deg2rad(diff\_filter\_s11(:,2)))]

Zin\_diff\_filter=[(1+S11\_diff\_filter)./(1-S11\_diff\_filter)]\*50;

Z\_D\_F=Zin\_diff\_filter-50;

loglog(diff\_filter\_Freq,Z\_D\_F)

hold on

Z\_C=Zin\_common\_filter-50;

loglog(common\_filter\_Freq,Z\_C)

hold on

Z\_D\_F=Zin\_diff\_filter-50;

Z\_C\_F=Zin\_common\_filter-50;

loglog(common\_filter\_Freq,Z\_C\_F)

hold on

loglog(diff\_filter\_Freq,Z\_D\_F)

clc

S11\_Common\_filter=[10.^(common\_filter\_s11(:,1)/20).\*exp(1j\*deg2rad(common\_filter\_s11(:,2)))]

S11\_diff\_filter=[10.^(diff\_filter\_s11(:,1)/20).\*exp(1j\*deg2rad(diff\_filter\_s11(:,2)))]

Zin\_common\_filter=[(1+S11\_Common\_filter)./(1-S11\_Common\_filter)]\*50;

Zin\_diff\_filter=[(1+S11\_diff\_filter)./(1-S11\_diff\_filter)]\*50;

Z\_C\_F=Zin\_common\_filter-50;

Z\_D\_F=Zin\_diff\_filter-50;

loglog(common\_filter\_Freq,Z\_C\_F)

hold on

loglog(diff\_filter\_Freq,Z\_D\_F)

Z\_C\_F=Zin\_common\_filter-50;

loglog(common\_filter\_Freq,Z\_C\_F)

Z\_D\_F=Zin\_diff\_filter-50;

loglog(diff\_filter\_Freq,Z\_D\_F)

loglog(common\_filter\_Freq,Z\_C\_F);

hold on

loglog(diff\_filter\_Freq,Z\_D\_F)

loglog(common\_filter\_Freq,Z\_C\_F, diff\_filter\_Freq, Z\_D\_F);

plot(common\_filter\_Freq,Z\_C\_F, diff\_filter\_Freq, Z\_D\_F);

%-- 8/12/2021 12:36 PM --%

load common1.xlsx

load common1\_s11.txt

load common1\_Freq.txt

load common\_filter\_s11.txt

load common\_filter\_Freq.txt

S11\_Common1=[10.^(common1\_s11(:,1)/20).\*exp(1j\*deg2rad(common1\_s11(:,2)))];

S11\_Common\_filter=[10.^(common\_filter\_s11(:,1)/20).\*exp(1j\*deg2rad(common\_filter\_s11(:,2)))];

Zin\_common1=[(1+S11\_Common1)./(1-S11\_Common1)]\*50;

Zin\_common\_filter=[(1+S11\_Common\_filter)./(1-S11\_Common\_filter)]\*50;

Z\_C=Zin\_common1-50;

Z\_C\_F=Zin\_common\_filter-50;

semilogx(common1\_Freq,Z\_C);

semilogy(common1\_Freq,Z\_C);

semilogx(common1\_Freq,Z\_C);

hold on

semilogy(common1\_Freq,Z\_C);

loglog(common1\_Freq,Z\_C);

subplot (2,2,1)

plot(common1\_Freq,Z\_C),

title(linear to linear)

title('linear to linear')

subplot (2,2,2)

semilogx(common1\_Freq,Z\_C);

title('log to linear')

subplot (2,2,3)

semilogy(common1\_Freq,Z\_C);

title('linear to log')

subplot (2,2,4)

loglog(common1\_Freq,Z\_C);

title('log to log')

load diff1s11.txt

load diff1\_Freq.txt

load diff\_filter\_s11.txt

load diff\_filter\_Freq.txt

S11\_diff\_filter=[10.^(diff\_filter\_s11(:,1)/20) .\* exp(1j\*deg2rad(diff\_filter\_s11(:,2)))];

S11\_diff=[10.^(diff1s11(:,1)/20) .\* exp(1j\*deg2rad(diff1s11(:,2)))];

Zin\_diff\_filter=[(1+S11\_diff\_filter)./(1-S11\_diff\_filter)]\*50;

Zin\_diff\_filter=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D\_F=Zin\_diff\_filter-50;

Zin\_diff\_filter=[(1+S11\_diff\_filter)./(1-S11\_diff\_filter)]\*50;

Zin\_diff=[(1+S11\_diff)./(1-S11\_diff)]\*50;

Z\_D\_F=Zin\_diff\_filter-50;

Z\_D=Zin\_diff-50;

subplot(2,2,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,2,2);

loglog(common1\_Freq,Z\_C);

subplot(2,2,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,2,2);

loglog(common1\_filter\_Freq,Z\_C\_F);

loglog(common\_filter\_Freq,Z\_C\_F);

title('Common Mode Filter')

subplot(2,2,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(2,2,4);

loglog(diff\_filter\_Freq,Z\_D\_F);

title('Diff Mode Filter')

load T&T\_s11.txt

load T & T\_Freq.txt

load T&T\_Freq.txt

S11\_T&T=[10.^(T&T\_s11(:,1)/20) .\* exp(1j\*deg2rad(T&T\_s11(:,2)))];

S11\_T&T =[10.^(T&T\_s11(:,1)/20) .\* exp(1j\*deg2rad(T&T\_s11(:,2)))];

S11\_T=[10.^(T&T\_s11(:,1)/20) .\* exp(1j\*deg2rad(T&T\_s11(:,2)))];

S11\_Trans=[10.^(T&T\_s11(:,1)/20) .\* exp(1j\*deg2rad(T&T\_s11(:,2)))];

S11\_trans=[10.^(T&T\_s11(:,1)/20) .\* exp(1j\*deg2rad(T&T\_s11(:,2)))];

S11\_trans=[10.^(T\_T\_s11(:,1)/20) .\* exp(1j\*deg2rad(T\_T\_s11(:,2)))];

loglog(T\_T\_Freq,T\_T\_s11)

Zin\_trans=[(1+S11\_trans)./(1-S11\_trans)]\*50;

Z\_T=Zin\_trans-50;

loglog(T\_T\_Freq,Z\_T)

S11\_Cap=S11\_Common\_filter-S11\_Common1;

S11\_Cap=S11\_Common\_filter-S11\_Common1

plot(common1\_Freq,S11\_Cap)

title('S11\_Cap vs Freq')

S11\_Diff\_Filter=S11\_diff\_filter + S11\_Cap

Zin\_Diff\_Filter=[(1+S11\_Diff\_Filter)./(1-S11\_Diff\_Filter)]\*50;

Z\_Diff\_Filter=Zin\_Diff\_Filter-50;

loglog(diff1\_Freq,Z\_Diff\_Filter);

title('Diff impdence vs Freq (with capacitor)')

title('Diff impedence vs Freq (with capacitor)')

loglog(T\_T\_Freq,Z\_T)

title('Transformers internal impedence')

subplot(2,2,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,2,2);

loglog(common1\_Freq,Z\_C);

subplot(2,2,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,2,2);

loglog(common1\_filter\_Freq,Z\_C\_F);

loglog(common\_filter\_Freq,Z\_C\_F);

title('Common Mode Filter')

subplot(2,2,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(2,2,4);

loglog(diff\_filter\_Freq,Z\_D\_F);

title('Diff Mode Filter')

subplot(3,2,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(3,2,2);

loglog(common1\_filter\_Freq,Z\_C\_F);

loglog(common\_filter\_Freq,Z\_C\_F);

title('Common Mode Filter')

subplot(3,2,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(3,2,4);

loglog(diff\_filter\_Freq,Z\_D\_F);

title('Diff Mode Filter');

subplot (2,2,1)

plot(common1\_Freq,Z\_C),

title(linear to linear)

title('linear to linear')

subplot (2,2,2)

semilogx(common1\_Freq,Z\_C);

title('log to linear')

subplot (2,2,3)

semilogy(common1\_Freq,Z\_C);

title('linear to log')

subplot (2,2,4)

loglog(common1\_Freq,Z\_C);

title('log to log')

subplot(2,3,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,3,2);

loglog(common\_filter\_Freq,Z\_C\_F);

title('Common Mode Filter')

subplot(2,3,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(2,3,4);

loglog(diff\_filter\_Freq,Z\_D\_F);

title('Diff Mode Filter');

subplot(2,3,5);

loglog(T\_T\_Freq,T\_T\_s11);

title('Tr with Tr vs Freq (dB vs Hz)');

subplot(2,3,6);

loglog(diff1\_Freq,Z\_D, common1\_Freq, Z\_C);

title('Common and Diff vs Freq(Ohm vs Hz)');

title('C & D vs Freq(Ohm vs Hz)');

title('Diff Mode Filter');

title('C & D vs Freq(Ohm vs Hz)');

subplot(2,3,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(2,3,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,3,2);

loglog(common\_filter\_Freq,Z\_C\_F);

title('Common Mode Filter')

subplot(2,3,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(2,3,4);

loglog(diff\_filter\_Freq,Z\_D\_F);

title('Diff Mode Filter');

subplot(2,3,5);

loglog(T\_T\_Freq,T\_T\_s11);

title('Tr with Tr vs Freq (dB vs Hz)');

subplot(2,3,6);

loglog(diff1\_Freq,Z\_D, common1\_Freq, Z\_C);

title('Common and Diff vs Freq(Ohm vs Hz)');

title('C & D vs Freq(Ohm vs Hz)');

title('Diff Mode Filter');

title('C & D vs Freq(Ohm vs Hz)');

subplot(2,3,3);

loglog(diff1\_Freq,Z\_D);

title('Diff Mode')

subplot(2,3,1);

loglog(common1\_Freq,Z\_C);

title('Common Mode')

subplot(2,3,2);

loglog(common\_filter\_Freq,Z\_C\_F);