

## S-PARAMETERS

S\_Param  
SP1  
Step=10 MHz  
Center=7 GHz  
Span=6 GHz

## MSub

MSUB  
MSub1  
H=dielectric\_height  
Er=Arlon\_Er  
T=conductor\_height  
TanD=Arlon\_TanD

## GOAL

Goal  
OptimGoal1  
Expr="VSWR1"  
SimInstanceName="SP1"  
Weight=1.0  
IndepVar[1]="freq"  
LimitType[1]="LessThan"  
LimitMax[1]=1.1  
Indep1Min[1]=6.95e+9  
Indep1Max[1]=7.05e+9

## GOAL

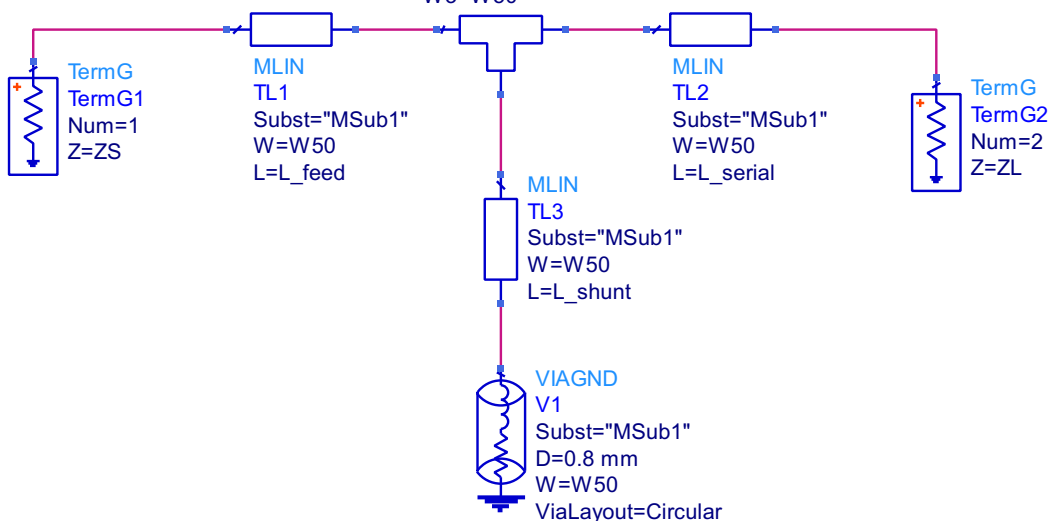
Goal  
OptimGoal2  
Expr="VSWR2"  
SimInstanceName="SP1"  
Weight=1.0  
IndepVar[1]="freq"  
LimitType[1]="LessThan"  
LimitMax[1]=1.1  
Indep1Min[1]=6.95e+9  
Indep1Max[1]=7.05e+9

## GOAL

Goal  
OptimGoal3  
Expr="dB(S(2, 1))"  
SimInstanceName="SP1"  
Weight=1.0  
IndepVar[1]="freq"  
LimitType[1]="GreaterThan"  
LimitMin[1]=-0.2  
Indep1Min[1]=6.95e+9  
Indep1Max[1]=7.05e+9

## OPTIM

Optim  
Optim1  
OptimType=Random  
MaxIters=25  
DesiredError=0.0  
StatusLevel=4  
FinalAnalysis="None"  
NormalizeGoals=yes  
SetBestValues=yes  
Seed=  
SaveSolns=yes  
SaveGoals=yes  
SaveOptimVars=no  
UpdateDataset=yes  
SaveNominal=no  
SaveAllIterations=no  
UseAllGoals=yes  
SaveCurrentEF=no  
EnableCockpit=yes  
SaveAllTrials=no



Var  
Eqn

VAR  
schematic\_parameters  
F\_center=7 GHz  
ZS=50 Ohm  
ZL=35+j\*7 Ohm

Var  
Eqn

VAR  
substrate\_parameters  
Arlon\_Er=2.55  
Arlon\_TanD=0.0013  
dielectric\_height=0.508 mm  
conductor\_height=35 um



VSWR  
VSWR1  
VSWR1=vswr(S11)  
VSWR2=vswr(S22)

Var  
Eqn

VAR  
MLIN\_parameters  
W50=1.382 mm  
L\_feed=2.5 mm  
L\_shunt=5.589 mm {t} {o}  
L\_serial=9.738 mm {t} {o}