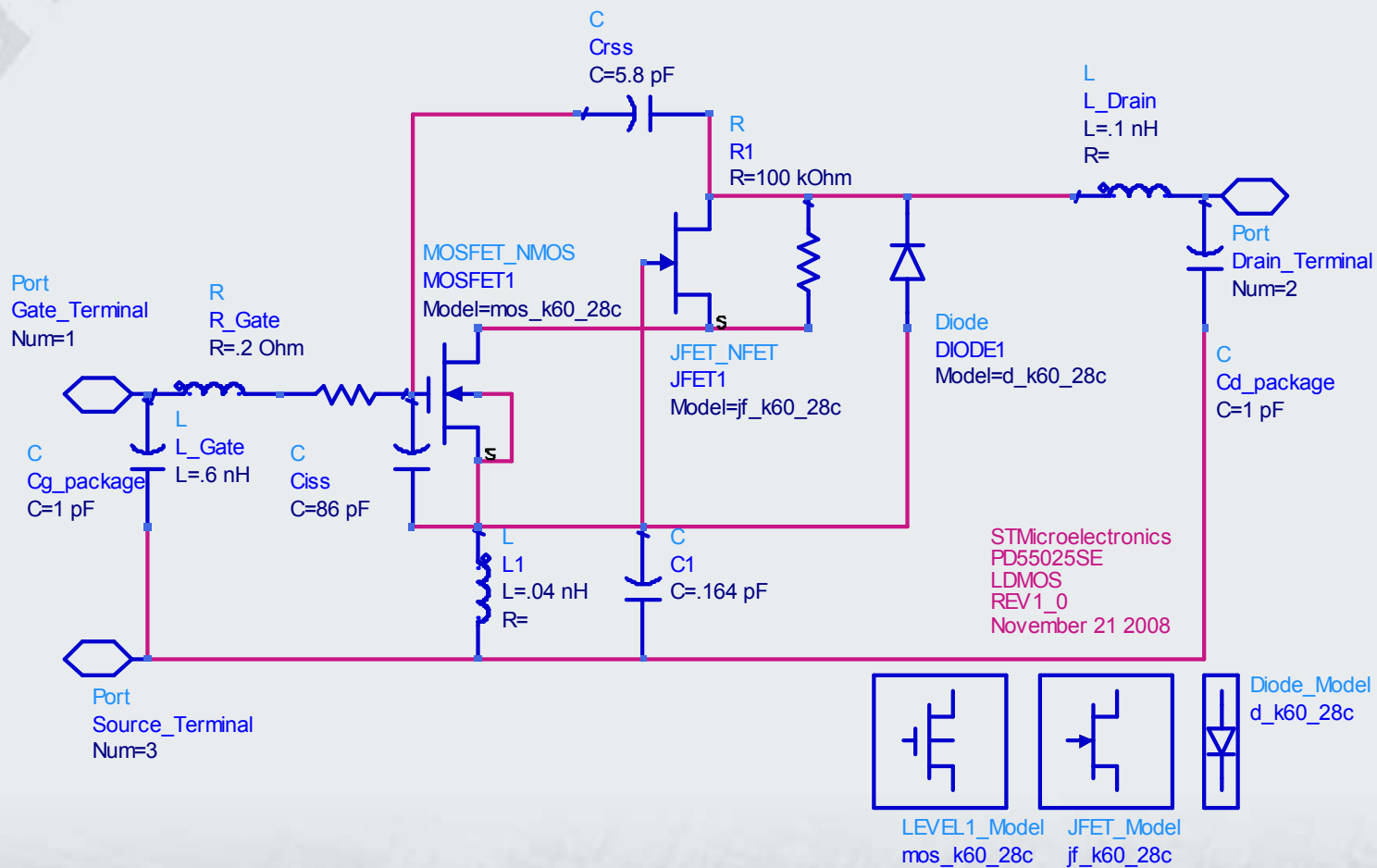


PD55025SE_rev1_0

Model Information



Quakertown , PA
Qtn-jp-215-rev1
November 21 , 2008

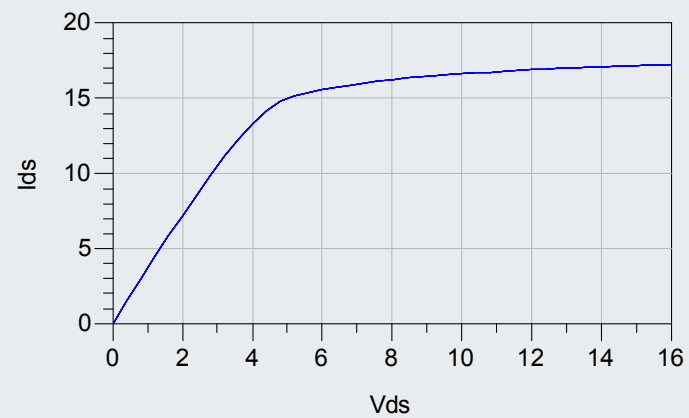
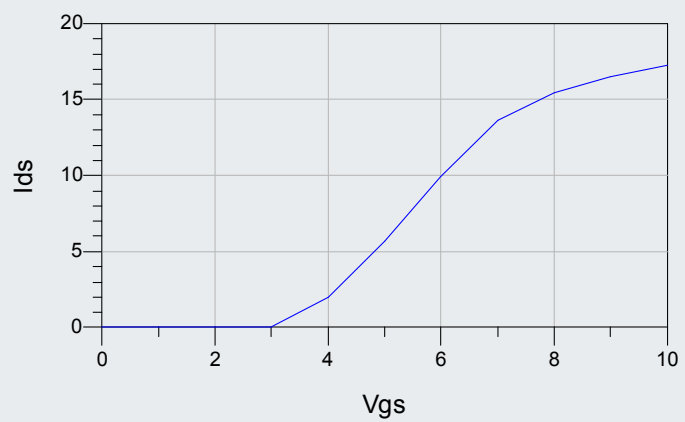


PD55025SE model



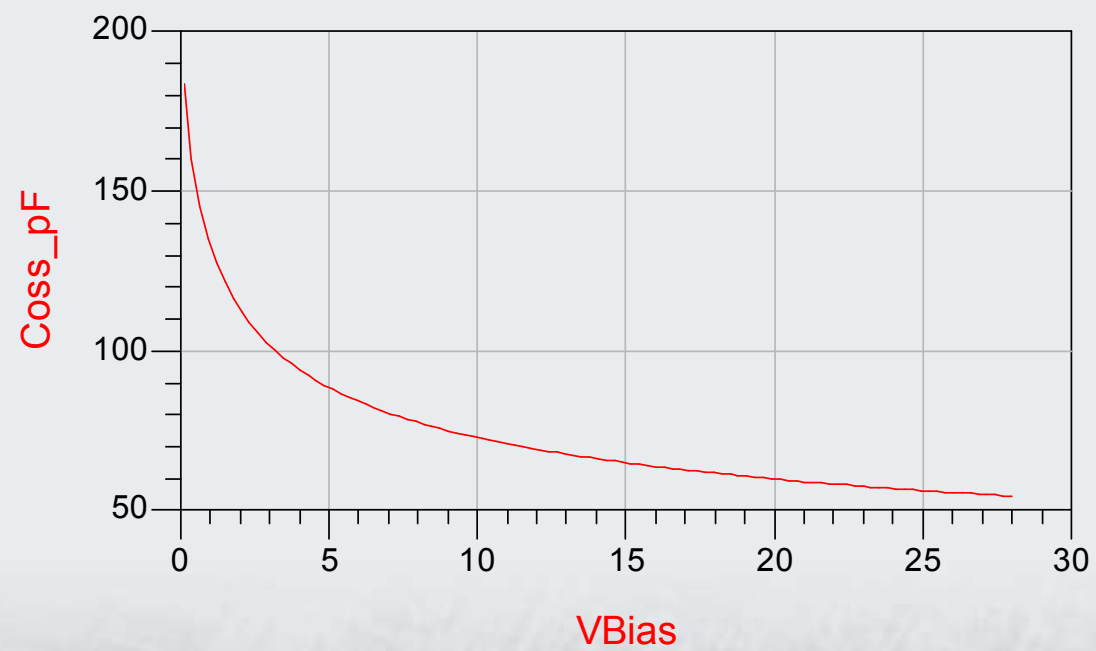
PD55025SE

DC



PD55025SE

Cds



PD55025SE

S-parameter

measured

freq	S(1,1)	S(2,1)	S(1,2)	S(2,2)
50.00 MHz	0.837 / -162.000	13.330 / 89.000	0.018 / -1.000	0.780 / -168.000
100.0 MHz	0.846 / -169.000	6.510 / 76.000	0.017 / -12.000	0.803 / -172.000
150.0 MHz	0.862 / -171.000	4.150 / 66.000	0.016 / -19.000	0.831 / -172.000
200.0 MHz	0.878 / -173.000	2.930 / 58.000	0.015 / -26.000	0.859 / -172.000
250.0 MHz	0.895 / -174.000	2.200 / 51.000	0.013 / -31.000	0.874 / -172.000
300.0 MHz	0.910 / -174.000	1.710 / 45.000	0.012 / -36.000	0.886 / -173.000
350.0 MHz	0.921 / -175.000	1.360 / 40.000	0.010 / -40.000	0.892 / -173.000
400.0 MHz	0.932 / -176.000	1.110 / 35.000	0.009 / -42.000	0.897 / -175.000
450.0 MHz	0.941 / -177.000	0.920 / 31.000	0.008 / -43.000	0.915 / -176.000
500.0 MHz	0.946 / -178.000	0.780 / 27.000	0.007 / -44.000	0.932 / -177.000
550.0 MHz	0.953 / -178.000	0.660 / 24.000	0.006 / -43.000	0.946 / -178.000
600.0 MHz	0.957 / -179.000	0.570 / 21.000	0.005 / -42.000	0.964 / -179.000
650.0 MHz	0.960 / 180.000	0.500 / 18.000	0.004 / -39.000	0.975 / -178.000

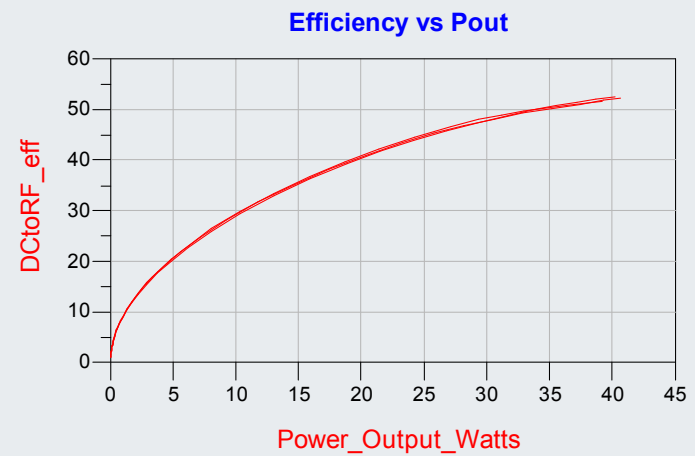
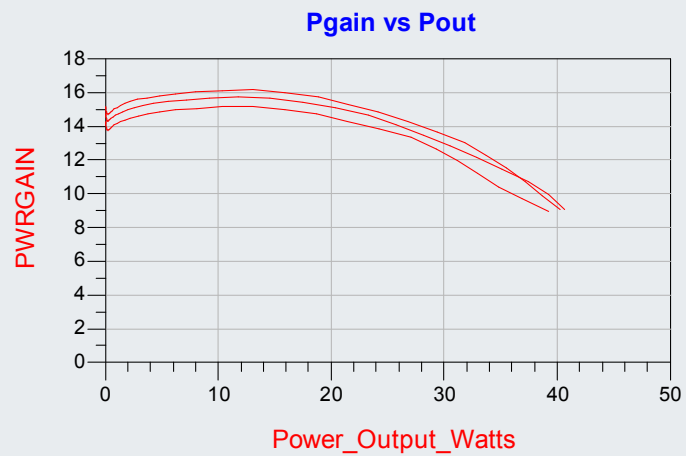
simulated

freq	S(1,1)	S(2,1)	S(1,2)	S(2,2)
50.00 MHz	0.835 / -168.101	17.089 / 87.052	0.015 / -1.430	0.778 / -166.735
100.0 MHz	0.843 / -172.678	8.343 / 76.987	0.015 / -9.935	0.790 / -170.530
150.0 MHz	0.856 / -173.946	5.340 / 69.067	0.014 / -16.211	0.808 / -171.076
200.0 MHz	0.870 / -174.632	3.800 / 62.202	0.013 / -21.297	0.828 / -171.180
250.0 MHz	0.885 / -175.239	2.863 / 56.199	0.012 / -25.325	0.848 / -171.326
300.0 MHz	0.899 / -175.882	2.236 / 50.964	0.010 / -28.307	0.867 / -171.595
350.0 MHz	0.911 / -176.574	1.793 / 46.413	0.009 / -30.221	0.884 / -171.967
400.0 MHz	0.921 / -177.300	1.468 / 42.458	0.008 / -31.004	0.898 / -172.404
450.0 MHz	0.930 / -178.044	1.221 / 39.020	0.007 / -30.524	0.911 / -172.874
500.0 MHz	0.938 / -178.792	1.031 / 36.025	0.006 / -28.548	0.921 / -173.352
550.0 MHz	0.945 / -179.535	0.881 / 33.408	0.005 / -24.701	0.930 / -173.824
600.0 MHz	0.950 / 179.731	0.761 / 31.115	0.004 / -18.455	0.937 / -174.282
650.0 MHz	0.955 / 179.011	0.663 / 29.101	0.004 / -9.234	0.943 / -174.720



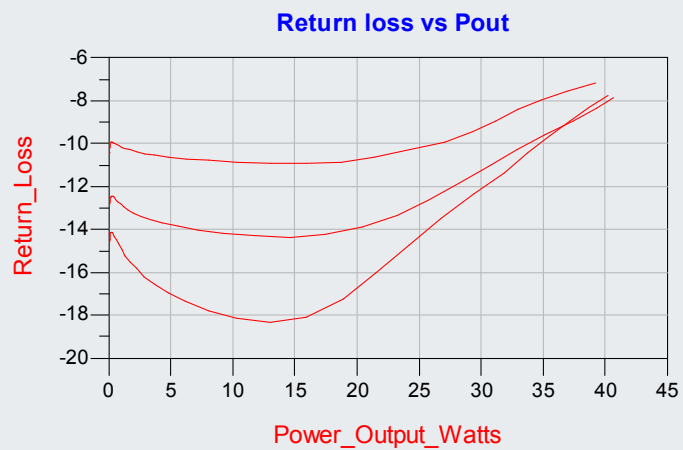
PD55025E

480 MHz – 520 MHz Large Signal RF



PD55025E

480 MHz – 520 MHz Large Signal RF



Netlist

- *PD55025SE_rev1_0
- *11/21/2008
- *STMicroelectronics
- *port 1 = GATE , 2 = Drain , 3 = Source
- *
- .SUBCKT PD55025SE 10 20 30
- LGATE 10 11 .6N
- RGATE 11 12 .2
- CG 10 30 1P
- CRSS 12 17 5.8P
- CISS 12 14 86P
- LS 14 30 0.04N
- CS 14 30 .164P
- R 17 13 100K
- LD 17 20 .1N
- CD 20 30 1P
- MOS 13 12 14 14 mos_55025SE L=.6UM W= 116mM
- JFET 17 14 13 jf_55025SE
- DBODY 14 17 d_55025SE
- .MODEL mos_55025SE nmos (vto=3 KP=2E-5 LAMBDA=0.15 RD=0.107 RS=0.107)
- .MODEL jf_55025SE njf (VTO=-5 BETA=6 LAMBDA=1)
- .MODEL d_55025SE d (CJO=190p RS=0.25 VJ=.4 M=0.325 BV=80)
- .ENDS





LEVEL1_Model
mos_55025se
NMOS=yes
PMOS=no
Vto=3
Kp=2e-5
Gamma=
Phi=
Lambda=0.15
Rd=0.107
Rs=0.107
Cbd=
Cbs=
Is=
Pb=
Cgso=
Cgdo=

Cgbo=
Rsh=
Cj=
Mj=
Cjsw=
Mjsw=
Js=
Tox=
Nsub=
Tt=
Ffe=
Imax=
Ld=
Uo=
Nlev=
Gdsnoi=

Kf=
Af=
Fc=
Rg=
Rds=
Tnom=27
Trise=
N=
Tt=
Ffe=
Imax=
Imelt=
AllParams=

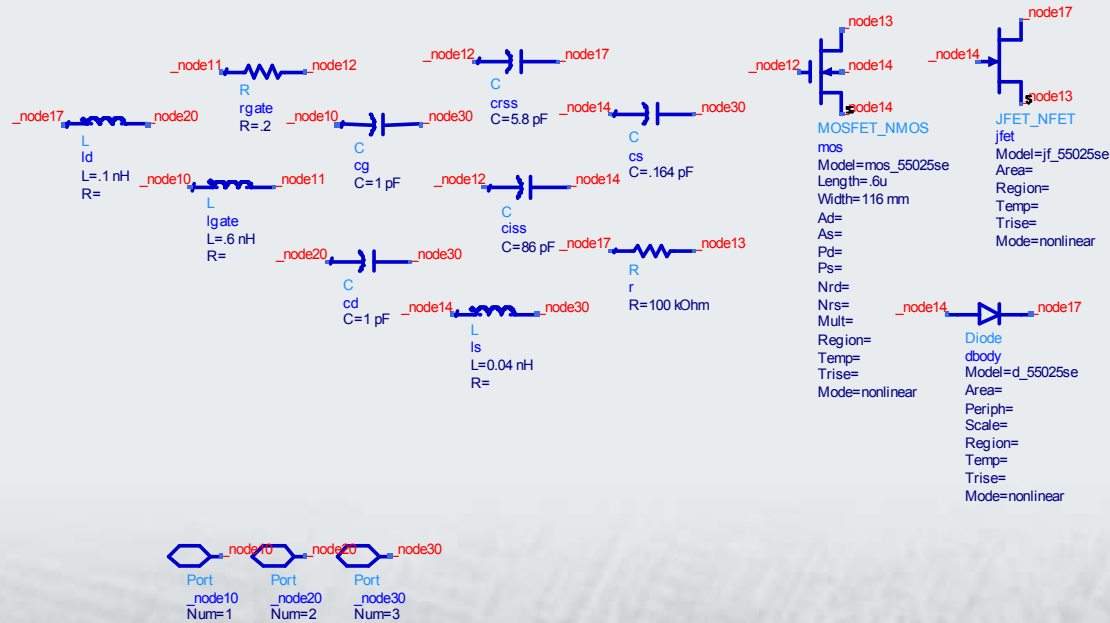


JFET_Model
jf_55025se
NFET=yes
PFET=no
Beta=6
Lambda=1
Rd=
Rs=
Is=
Cgs=
Cgd=
Pb=
Fc=
Tnom=27
Trise=
Kf=

Af=
Imax=
Imelt=
N=
Isr=
Nr=
Alpha=
Vt0c=
Beta0ce=
Xti=
Ffe=
Gdsnoise=no
AllParams=

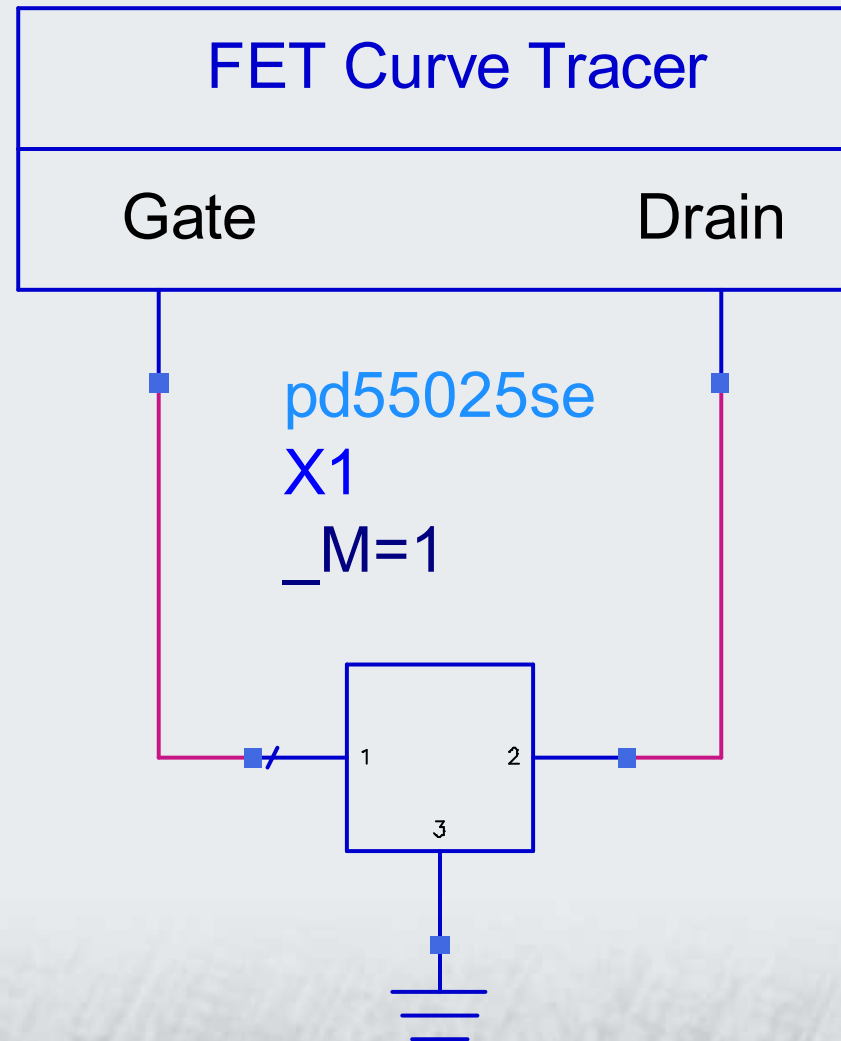


Diode_Model
d_55025se
Is=
Rs=0.25
Gleak=
N=
Tt=
Cd=
Cjo=190 pF
Vj=.4
M=0.325
Fc=
Imax=
Imelt=
Isr=
Nr=
Ikf=
Bv=80
Ibv=1e-10
Nbv=
Ibv=
Nbv=
Kf=
Af=
Ffe=
Rsw=
Gleaksw=
Ns=
Ikp=
Cjsw=
Msw=
Vjsw=
Fcsw=
AllowScaling=no
Tnom=27
Trise=
Xti=
Eg=
AllParams=



Imported netlist

DC_FET
DC_FET1
VGS_start=0
VGS_stop=10
VGS_points=101
VDS_start=0
VDS_stop=16.0
VDS_points=41



Example of imported netlist attached to “X”

