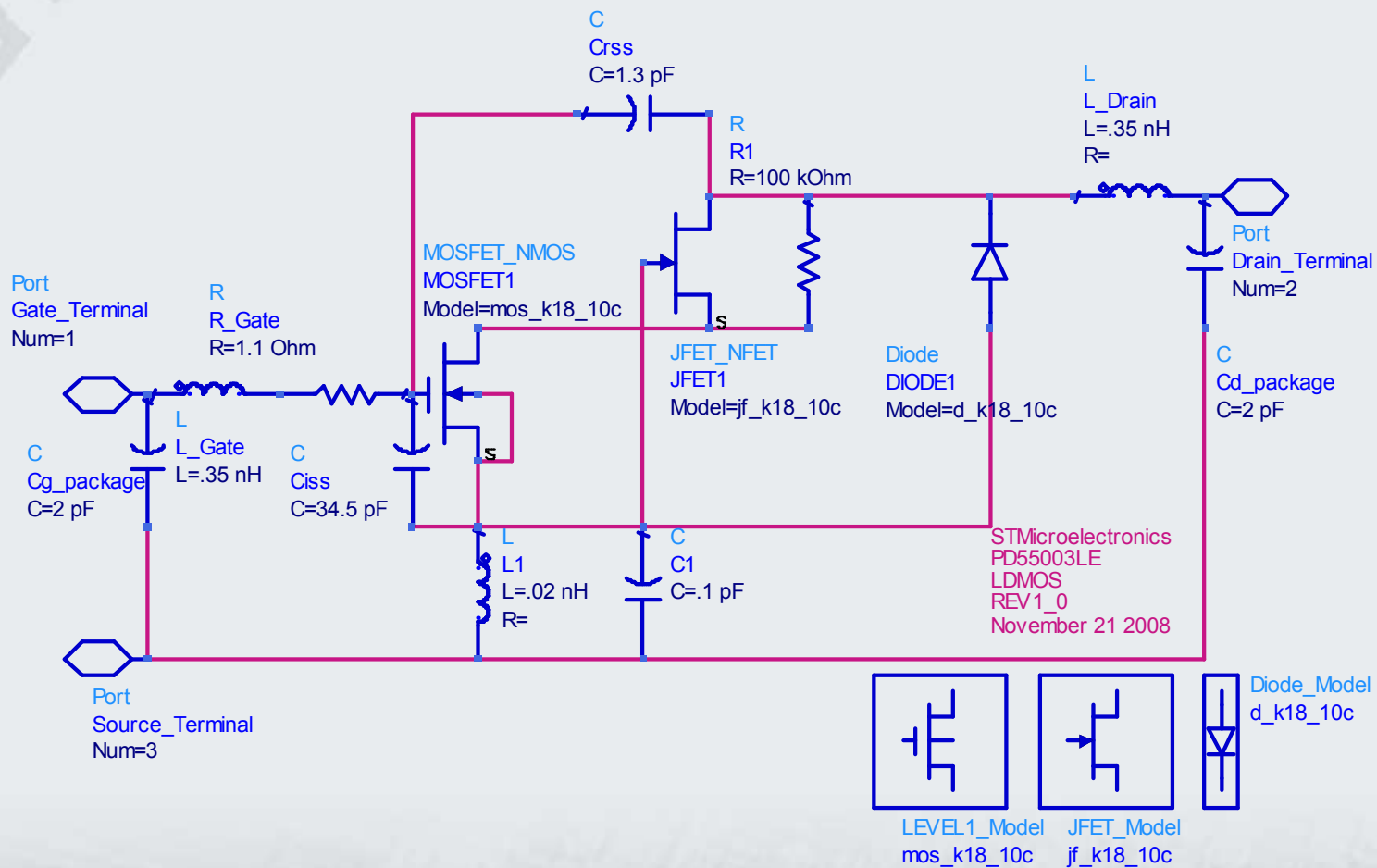


PD55003LE_rev1_0

Model Information



Quakertown , PA
Qtn-jp-281-rev1
November 21 , 2008

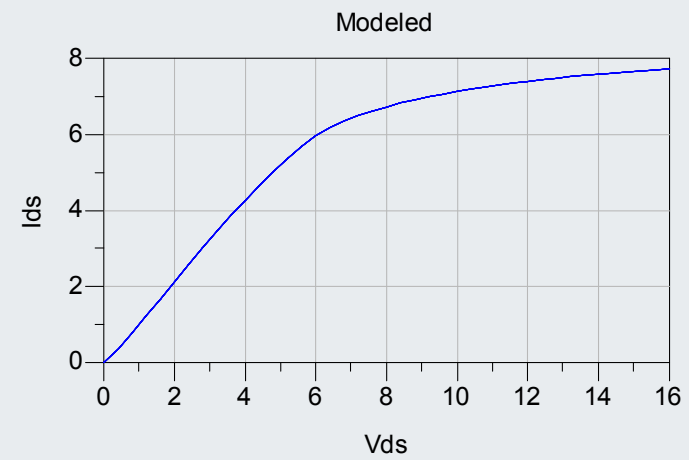
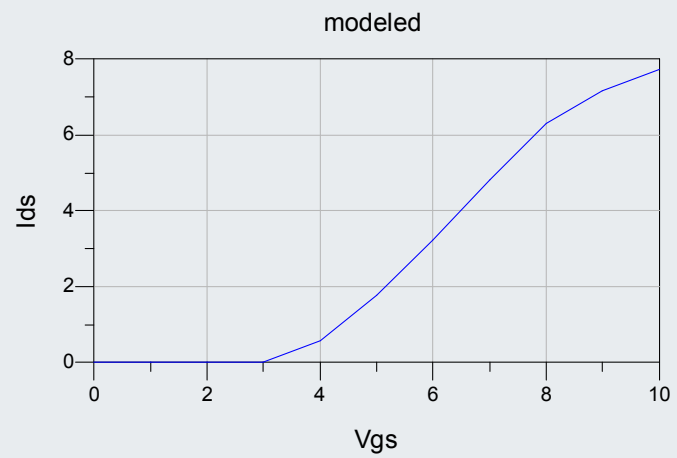


PD55003LE model



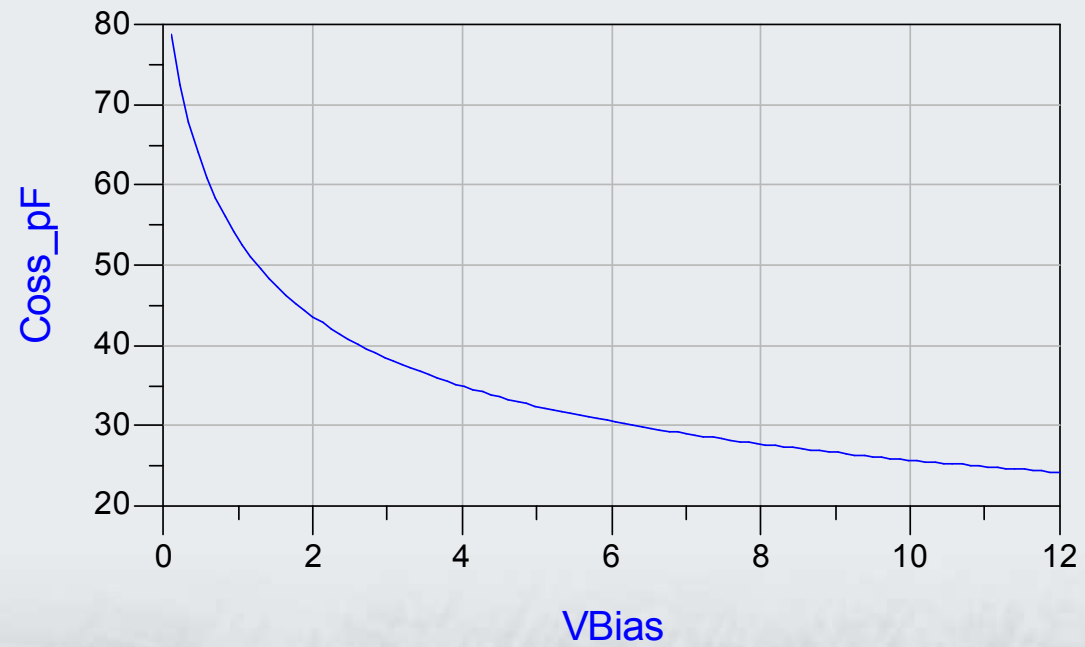
PD55003LE

DC



PD55003LE

Cds



PD55003LE

S-parameter

measured 12 V 150 mA

freq	S(1,1)	S(2,1)	S(1,2)	S(2,2)
50.00 MHz	0.808 / -110.000	20.140 / 112.000	0.039 / 22.000	0.672 / -109.000
100.0 MHz	0.772 / -141.000	11.770 / 93.000	0.042 / 5.000	0.633 / -138.000
150.0 MHz	0.771 / -152.000	7.860 / 82.000	0.041 / -5.000	0.642 / -147.000
200.0 MHz	0.779 / -157.000	5.800 / 73.000	0.040 / -11.000	0.665 / -151.000
250.0 MHz	0.794 / -161.000	4.500 / 66.000	0.038 / -17.000	0.694 / -154.000
300.0 MHz	0.809 / -163.000	3.620 / 60.000	0.035 / -22.000	0.721 / -155.000
350.0 MHz	0.824 / -165.000	2.980 / 54.000	0.033 / -26.000	0.750 / -157.000
400.0 MHz	0.839 / -166.000	2.500 / 49.000	0.031 / -30.000	0.774 / -159.000
450.0 MHz	0.853 / -168.000	2.130 / 44.000	0.028 / -32.000	0.796 / -160.000
500.0 MHz	0.865 / -169.000	1.830 / 40.000	0.025 / -34.000	0.818 / -161.000
550.0 MHz	0.874 / -171.000	1.590 / 36.000	0.023 / -36.000	0.837 / -163.000
600.0 MHz	0.885 / -172.000	1.390 / 33.000	0.021 / -36.000	0.852 / -164.000
650.0 MHz	0.894 / -173.000	1.230 / 29.000	0.018 / -37.000	0.867 / -165.000
700.0 MHz	0.901 / -174.000	1.100 / 26.000	0.016 / -37.000	0.880 / -166.000
750.0 MHz	0.906 / -175.000	0.970 / 23.000	0.015 / -36.000	0.890 / -167.000
800.0 MHz	0.911 / -176.000	0.880 / 20.000	0.012 / -32.000	0.902 / -169.000
850.0 MHz	0.916 / -177.000	0.790 / 18.000	0.011 / -28.000	0.909 / -169.000
900.0 MHz	0.918 / -178.000	0.720 / 15.000	0.010 / -22.000	0.918 / -171.000
950.0 MHz	0.922 / -179.000	0.650 / 13.000	0.008 / -13.000	0.922 / -171.000

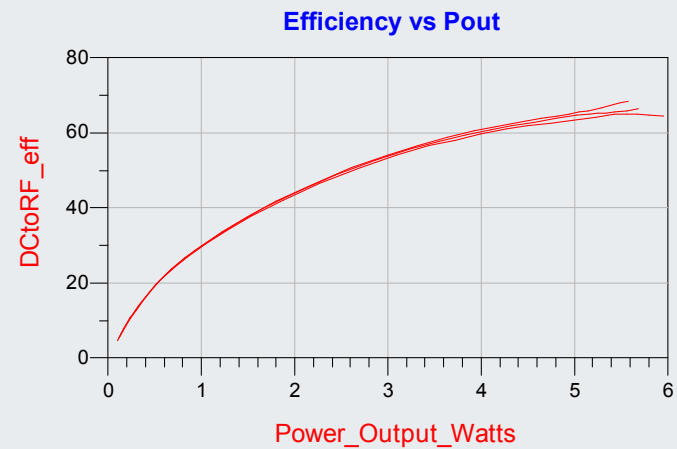
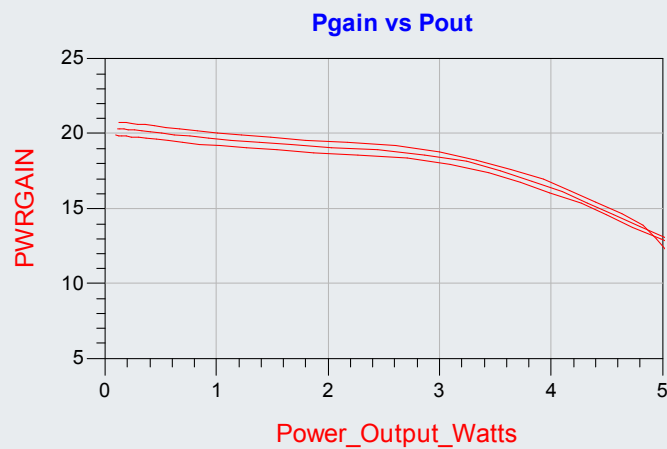
modeled 12 V 150 mA

freq	S(1,1)	S(2,1)	S(1,2)	S(2,2)
50.00 MHz	0.832 / -97.502	33.469 / 115.987	0.023 / 26.675	0.714 / -81.552
100.0 MHz	0.786 / -129.198	18.679 / 91.425	0.025 / 2.917	0.632 / -111.015
150.0 MHz	0.794 / -141.867	12.218 / 77.132	0.024 / -10.742	0.650 / -124.416
200.0 MHz	0.816 / -148.683	8.705 / 66.657	0.023 / -20.433	0.691 / -132.735
250.0 MHz	0.840 / -153.192	6.527 / 58.324	0.021 / -27.910	0.735 / -138.973
300.0 MHz	0.862 / -156.582	5.068 / 51.467	0.018 / -33.810	0.774 / -144.079
350.0 MHz	0.881 / -159.321	4.041 / 45.721	0.016 / -38.458	0.806 / -148.423
400.0 MHz	0.897 / -161.624	3.291 / 40.844	0.014 / -42.042	0.834 / -152.194
450.0 MHz	0.910 / -163.609	2.729 / 36.659	0.012 / -44.657	0.856 / -155.510
500.0 MHz	0.921 / -165.347	2.298 / 33.033	0.010 / -46.312	0.874 / -158.458
550.0 MHz	0.930 / -166.888	1.960 / 29.862	0.009 / -46.907	0.889 / -161.105
600.0 MHz	0.938 / -168.268	1.692 / 27.065	0.007 / -46.175	0.901 / -163.502
650.0 MHz	0.944 / -169.516	1.476 / 24.578	0.006 / -43.539	0.911 / -165.694
700.0 MHz	0.950 / -170.653	1.299 / 22.351	0.004 / -37.779	0.919 / -167.714
750.0 MHz	0.954 / -171.697	1.153 / 20.343	0.003 / -26.368	0.927 / -169.591
800.0 MHz	0.958 / -172.662	1.032 / 18.522	0.003 / -5.301	0.932 / -171.348
850.0 MHz	0.961 / -173.560	0.929 / 16.862	0.002 / 24.019	0.937 / -173.006
900.0 MHz	0.964 / -174.401	0.842 / 15.341	0.003 / 48.135	0.942 / -174.579
950.0 MHz	0.966 / -175.192	0.767 / 13.940	0.004 / 62.124	0.945 / -176.082



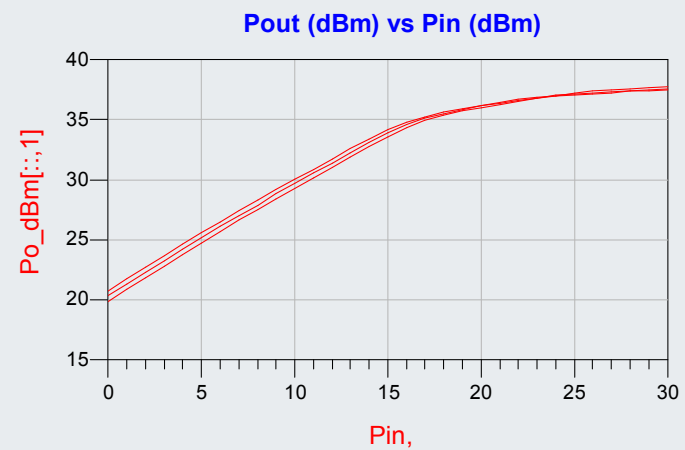
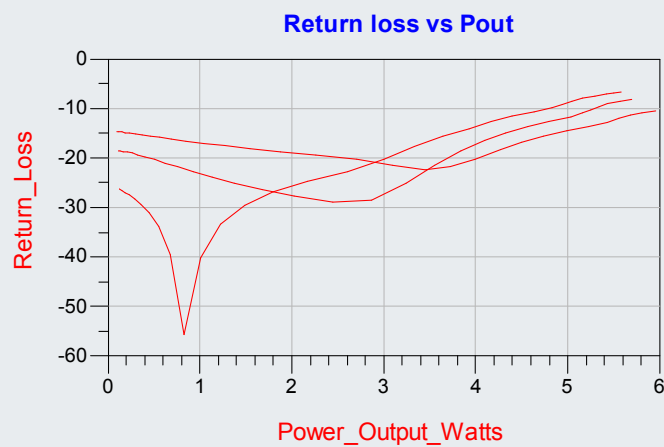
PD55003LE

480 MHz – 520 MHz Large Signal RF



PD55003LE

480 MHz – 520 MHz Large Signal RF

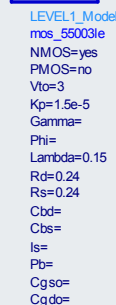


- *SD55003LE_rev1_0
- *11/21/2008
- *STMicroelectronics
- *port 1 = GATE , 2 = Drain , 3 = Source
- *
- .SUBCKT pd55003LE 10 20 30
- LGATE 10 11 .35N
- RGATE 11 12 1.1
- CG 10 30 2P
- CRSS 12 17 1.3P
- CISS 12 14 34.5P
- LS 14 30 0.06N
- CS 14 30 .1P
- R 17 13 100K
- LD 17 20 0.35N
- CD 20 30 2P
- MOS 13 12 14 14 mos_55003LE L=.8UM W= 42mM
- JFET 17 14 13 jf_55003LE
- DBODY 14 17 d_55003LE

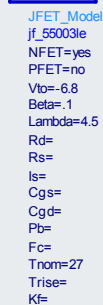
- .MODEL mos_55003LE nmos (vto=3 KP=1.5E-5 LAMBDA=0.15 RD=0.24 RS=0.24)
- .MODEL jf_55003LE njf (VTO=-6.8 BETA=.1 LAMBDA=4.5)
- .MODEL d_55003LE d (CJO=82.5p RS=0.25 VJ=.4 M=0.4 BV=80)

- .ENDS

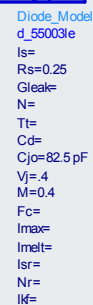




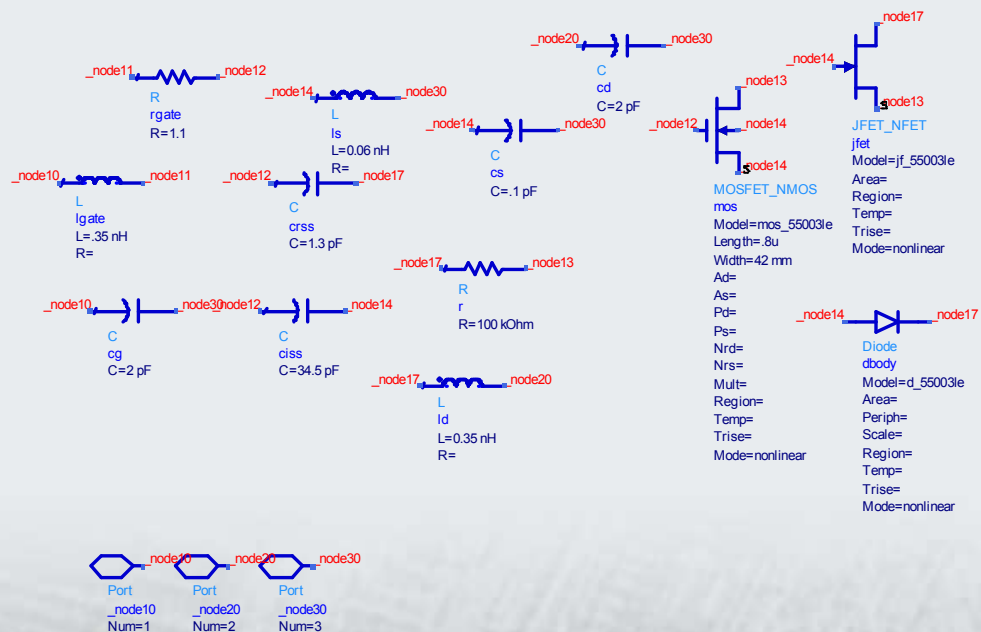
Cgbo=	Kf=
Rsh=	Af=
Cj=	Fc=
Mj=	Rg=
Cjsw=	Rds=
Mjsw=	Tnom=27
Js=	Trise=
Tox=	N=
Nsub=	Ti=
Nss=	Ffe=
Tpg=	Imax=
Ld=	Imelt=
Uo=	AllParams=
Nlev=	
Gdsnoi=	



Af=
 lmax=
 lmelt=
 N=
 lsr=
 Nr=
 Alpha=
 V_k=
 M=
 Vtotc=
 Betatce=
 Xti=
 Ffe=
 Gdsnoise=no
 AllParams=



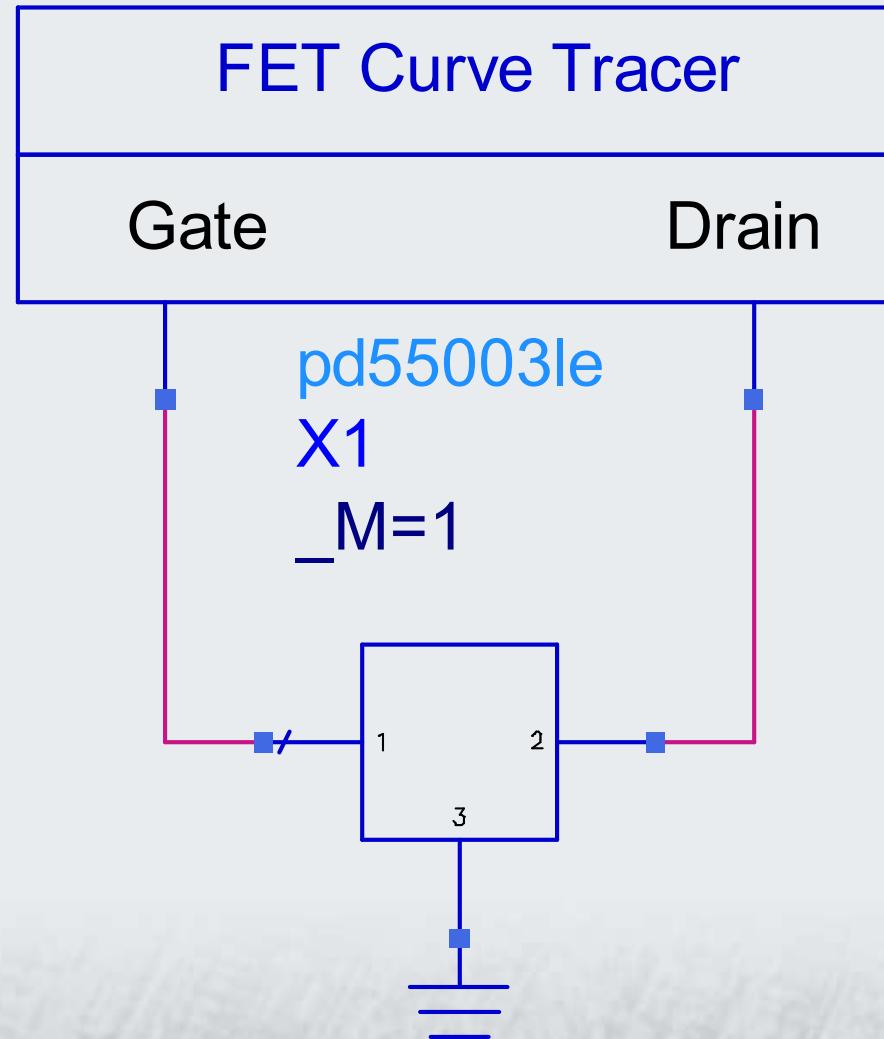
Bv=80	Vjsw=
lbv=1e-10	Fcsw=
Nbv=	AllowScaling=no
lbvl=	Tnom=27
NbvI=	Trise=
Kf=	Xti=
Af=	Eg=
Ffe=	AllParams=
Jsw=	
Rsw=	
Gleaksw=	
Ns=	
lkp=	
Cjsw=	
Msw=	



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”

