

*D1004

*PSPICE MODEL FOR POINT NINE RF N-CHANNEL VERTICAL DMOS POWER FET

*May 2004

```
*          _____GATE
*          I   _____DRAIN
*          I   I   _____SOURCE
*          I   I   I
.SUBCKT D1004  10  20  30
*Cin1,Cin2 & Lin model the input side of the package
Cin1  10    30    0.32p
Lin   10    11    0.59n
Cin2  11    30    0.32p
LG    11    12    2n      ;Gate bond wire inductance
CGS   12    13    184p    ;Gate-source capacitance
MOS   14    12    13      13  D1004 L=0.9U W=0.224      ;D G S B LEVEL1
JFET  16    13    14      D1004                        ;D G S
DBODY 13    16    D1004                                ;P N
LS    13    30    0.3n   ;Source bond wire inductance
CGD   12    16    4p     ;Gate-drain feedback capacitance

*Cout1,Cout2 & Lout model the output side of the package
Cout1  16    30    1.05p
Lout   16    20    1.77n
Cout2  20    30    1.05p

.MODEL D1004 NMOS (VTO=4.76 KP=2.811E-5 LAMBDA=0.032 RD=0.019 RS=0.077)
.MODEL D1004 NJF (VTO=-4.3 BETA=1 LAMBDA=0.54)
.MODEL D1004 D (CJO=328.8P RS=0.25 VJ=0.7 M=0.35 BV=75)

.ENDS
```