

*D1003

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

*May 2004

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*          _____ GATE
*          I   _____ DRAIN
*          I   I   _____ SOURCE
*          I   I   I
.SUBCKT D1003  10  20  30
Cin1,Cin2 & Lin model the input side of the package
Cin1  10   30   0.45p
Lin   10   11   0.68n
Cin2  11   30   0.45p
LG    11   12   1n    ;Gate bond wire inductance
CGS   12   13   138p  ;Gate-source capacitance
MOS   14   12   13    13  D1003 L=0.9U W=0.168    ;D G S B LEVEL1
JFET  16   13   14    D1003                      ;D G S
DBODY 13   16   D1003                              ;P N
LS    13   30   0.5n  ;Source bond wire inductance
CGD   12   16   3p    ;Gate-drain feedback capacitance

Cout1,Cout2 & Lout model the output side of the package
Cout1  16   30   1.2p
Lout   16   20   1.68n
Cout2  20   30   1.2p

.MODEL D1003 NMOS (VTO=4.76 KP=2.811E-5 LAMBDA=0.032 RD=0.025 RS=0.102)
.MODEL D1003 NJF  (VTO=-4.3 BETA=0.75 LAMBDA=0.54)
.MODEL D1003 D    (CJO=246.6P RS=0.25 VJ=0.7 M=0.35 BV=75)
.MODEL D1003 D    (CJO=246.6P RS=0.25 VJ=0.7 M=0.35 BV=75)

.ENDS
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