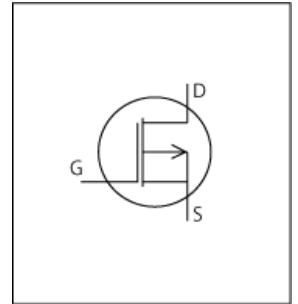


PSpice Model

PMOS

ON

FQB9P25TM



Model Information

Model A macro model based on BSIM3 model
Call Name MDC_FQB9P25TM_PS
Pin Assign 1:D 2:G 3:S
File List Model Library MDC_FQB9P25TM_PS00.lib
 Model Report MDC_FQB9P25TM_PS.pdf (this file)

Verified Simulator Version PSpice version 16.6
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version Rev.C0
- Product name FQB9P25TM
- Company name ON Semiconductor.
- Characteristics IdVds[Vgs],IdVgs[Temp],Rds(on)Id[Vgs],IsVsd[Temp],Crss,Coss,Ciss,VgsQg[Vdd],Rds(on)Temp[Id],tdon,tdoff,tf,tr

Simulation Range

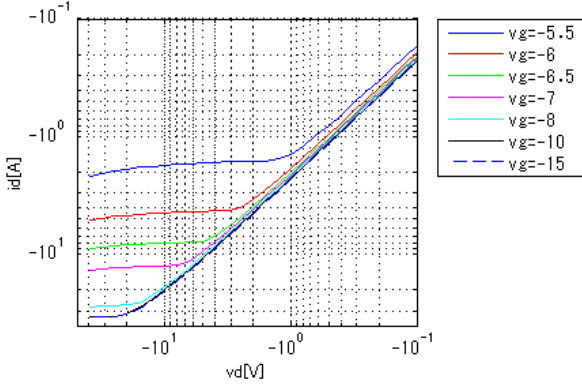
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Drain-source voltage (DC)	0	to	-250	V
Gate-source voltage (DC)	0	to	-30	V
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

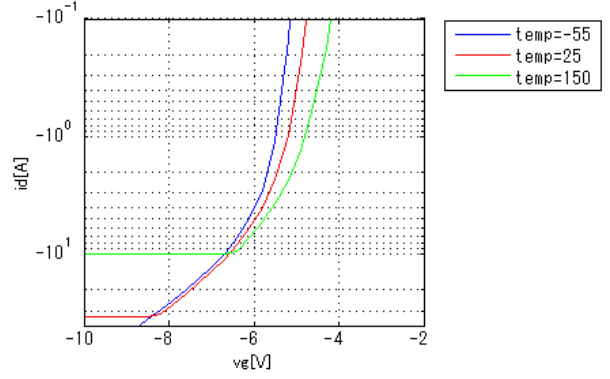
IdVds[Vgs]

Temp. = 25deg C

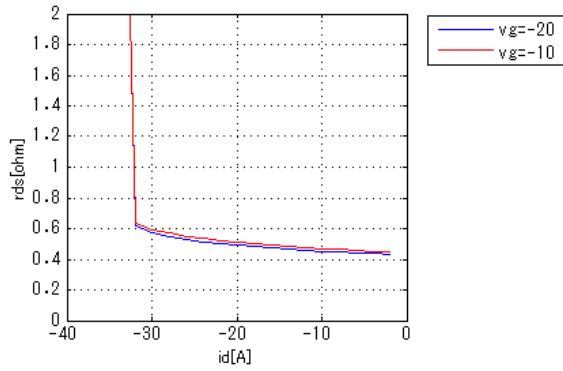


IdVgs[Temp]

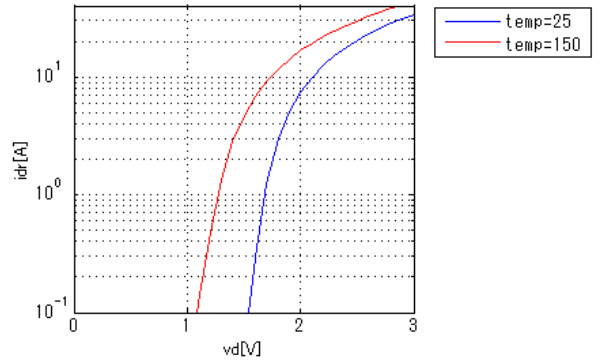
Vds = -50V



Rds(on)Id[Vgs]

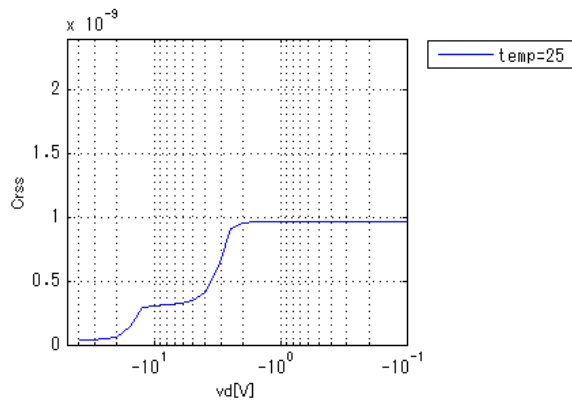


IsVsd[Temp]



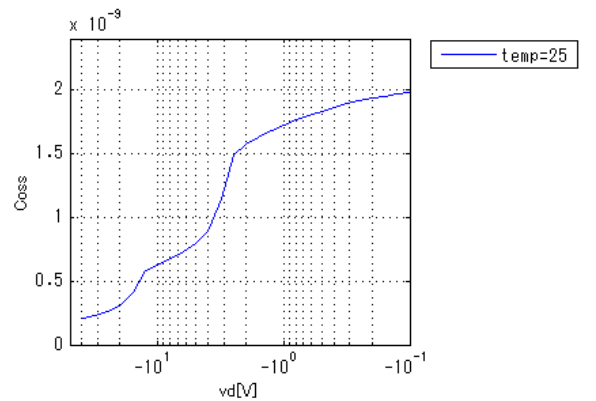
Crss

Freq. = 1MHz



Coss

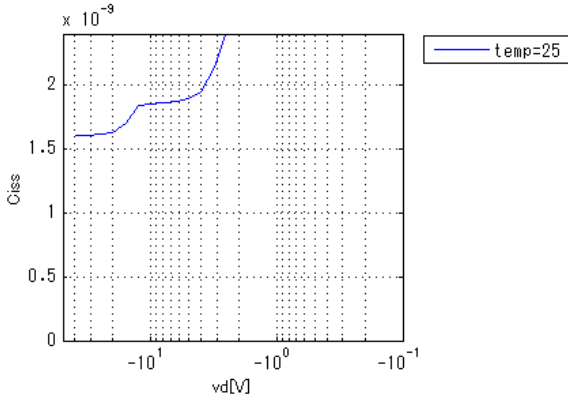
Freq. = 1MHz



Simulation results are following.
 Explanatory notes — : simulated

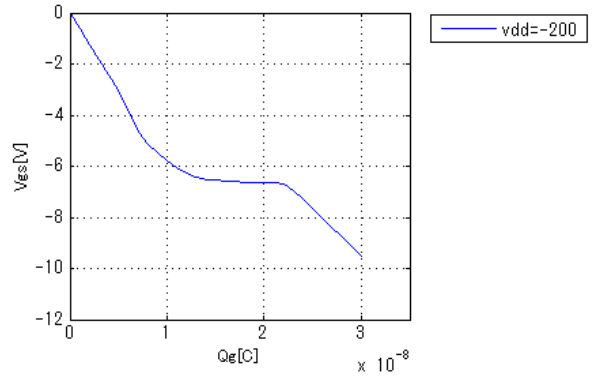
Ciss

Freq. = 1MHz



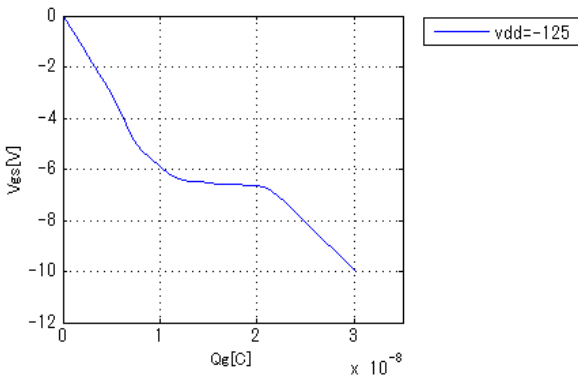
VgsQg[Vdd]

Id = -9.4A



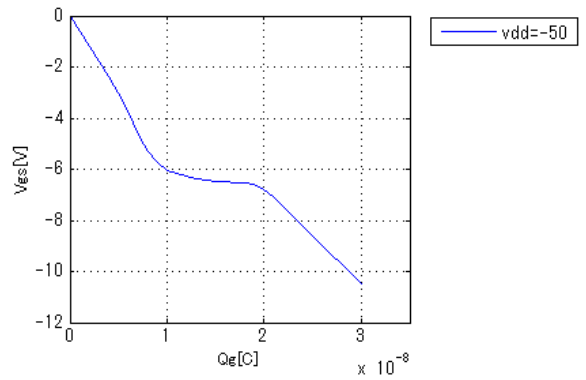
VgsQg[Vdd]

Id = -9.4A



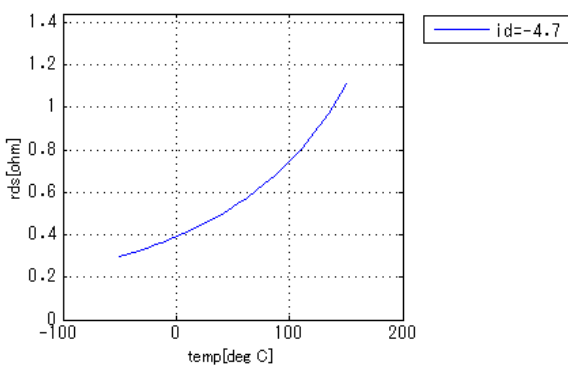
VgsQg[Vdd]

Id = -9.4A



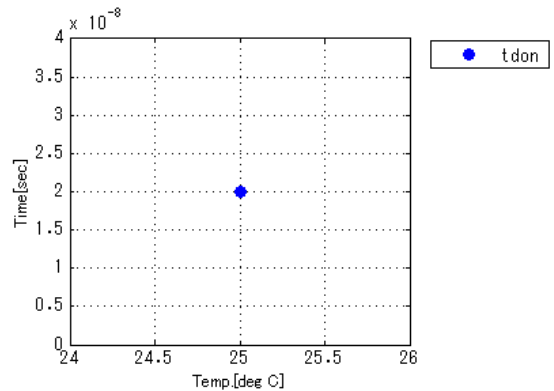
Rds(on)Temp[Id]

Vgs = -10V



tdon

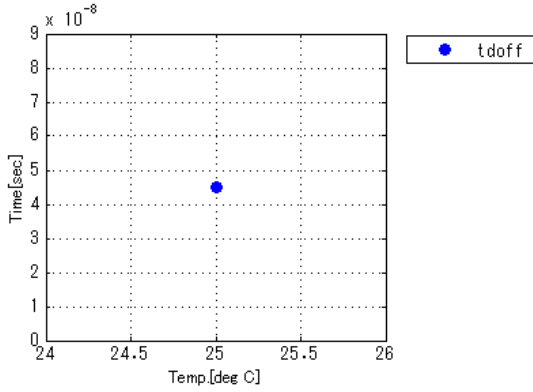
Vdd = -125V, Id = -9.4A, +Vg = 0V, -Vg = -10V, Rg = 25ohm



Simulation results are following.
 Explanatory notes — : simulated

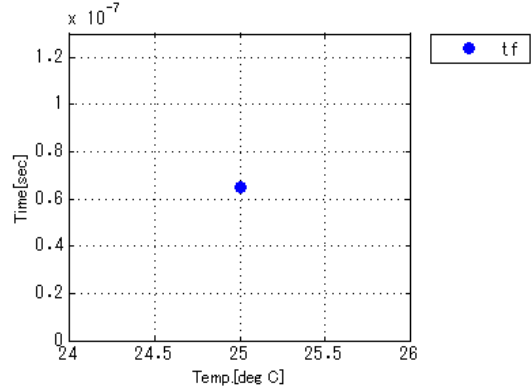
tdoff

Vdd = -125V, Id = -9.4A, +Vg = 0V, -Vg = -10V, Rg = 25ohm



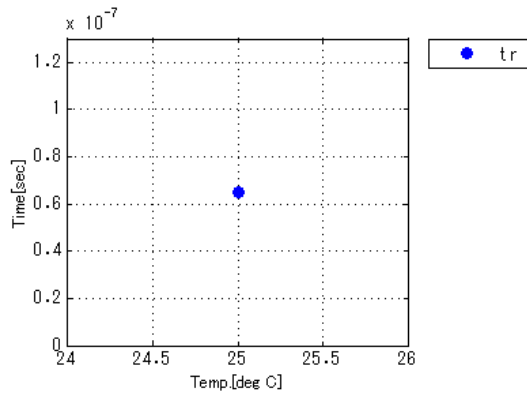
tf

Vdd = -125V, Id = -9.4A, +Vg = 0V, -Vg = -10V, Rg = 25ohm



tr

Vdd = -125V, Id = -9.4A, +Vg = 0V, -Vg = -10V, Rg = 25ohm



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