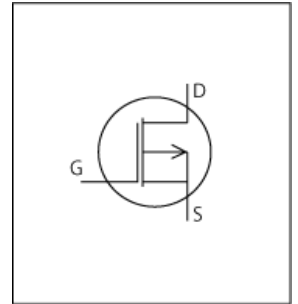


PSpice Model

PMOS

TOSHIBA

SSM3J15FU



Model Information

Model A macro model based on BSIM3
Call Name MDC_SSM3J15FU_PS
Pin Assign 1:D 2:G 3:S
File List Model Library MDC_SSM3J15FU_PS01.lib
 Model Report MDC_SSM3J15FU_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 2014-03-01
- Product name SSM3J15FU
- Company name Toshiba Corporation
- Characteristics IdVgs[Temp], IdVds[Vgs], Coss, Ciss, Crss, Rds(on) Id[Vgs], Rds(on) Vgs[Temp], Rds(on) Temp[Id], VthTemp[Id], IsVsd[Temp]

Simulation Range

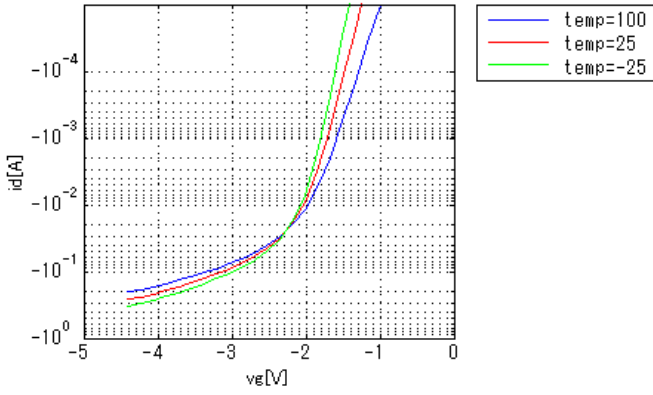
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Drain-source voltage (DC)	0	to	-30	V
Gate-source voltage (DC)	0	to	-20	V
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

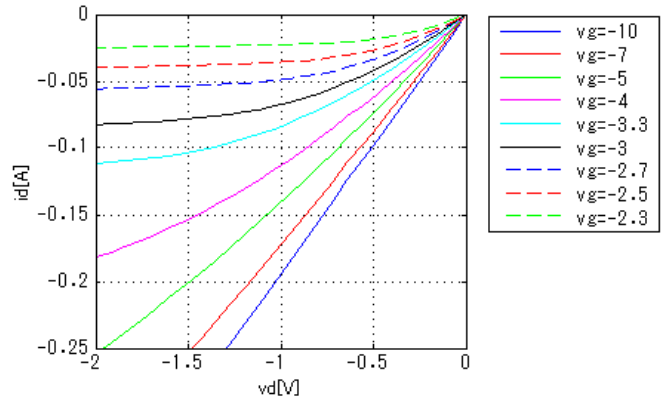
IdVgs[Temp]

Vds = -3V



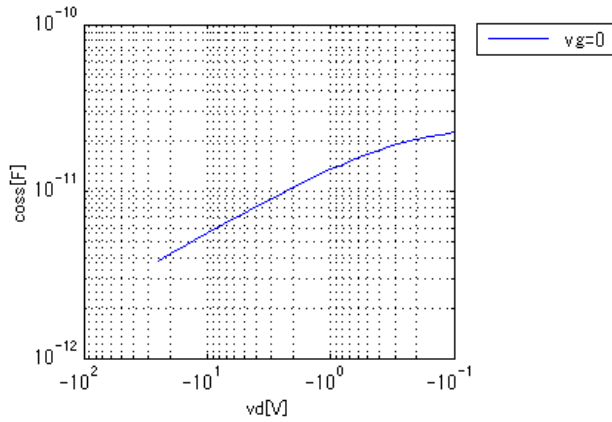
IdVds[Vgs]

Temp. = 25deg C



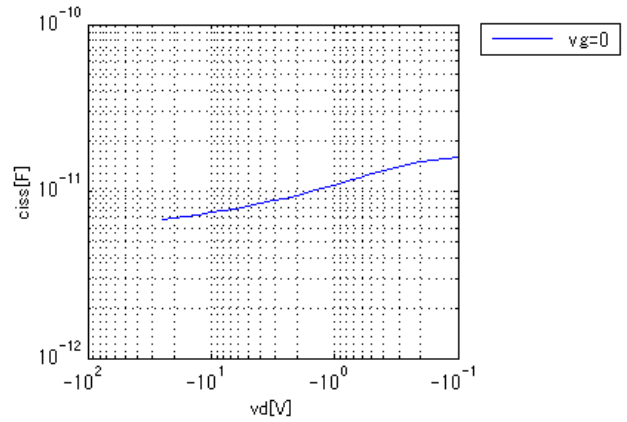
Coss

Freq. = 1MHz



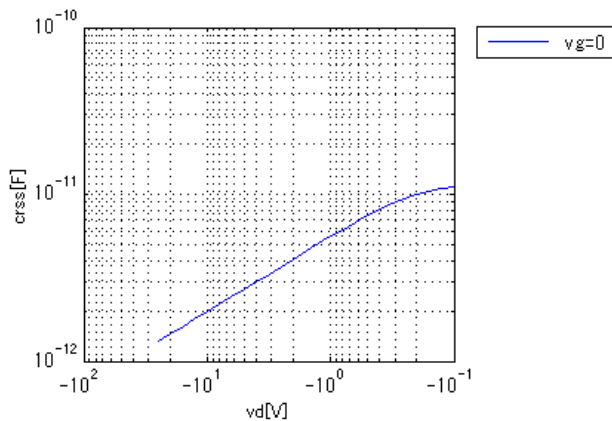
Ciss

Freq. = 1MHz

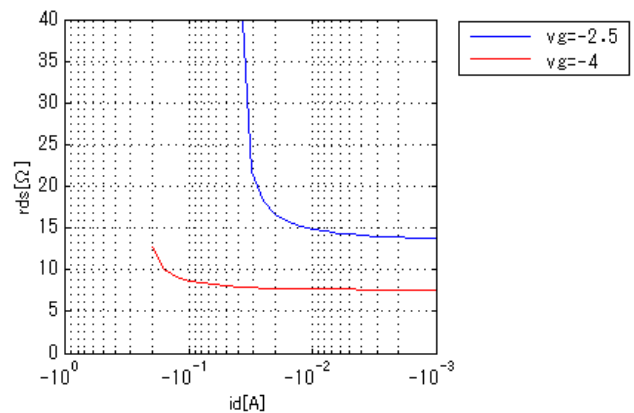


Crss

Freq. = 1MHz



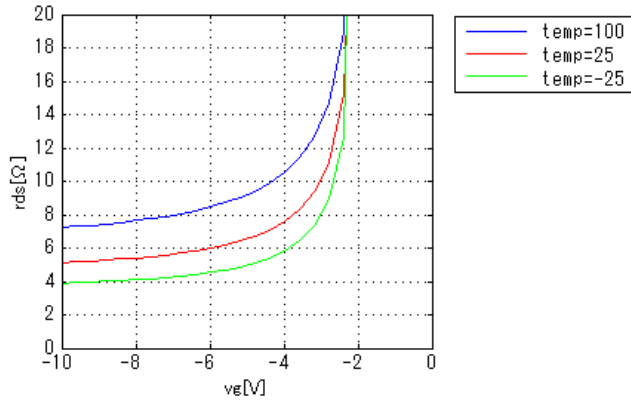
Rds(on)Id[Vgs]



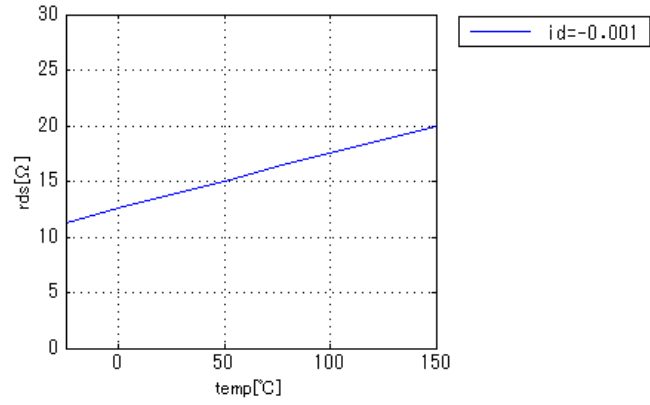
Simulation results are following.
 Explanatory notes — : simulated

Rds(on)Vgs[Temp]

$I_d = -0.001A$

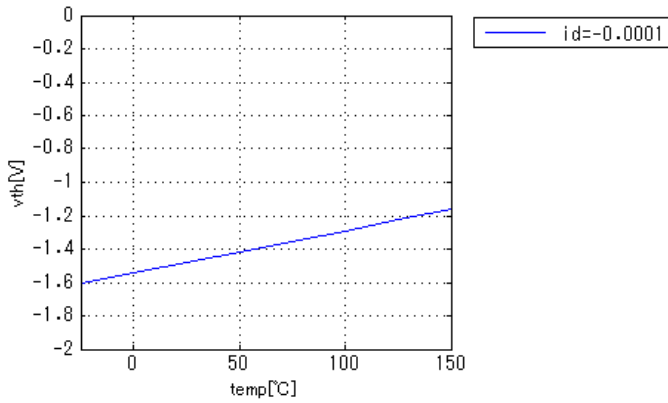


Rds(on)Temp[Id]

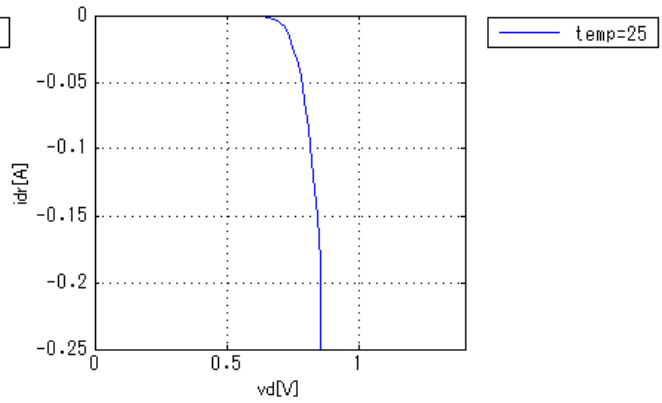


VthTemp[Id]

$V_{ds} = -3V$



IsVsd[Temp]



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