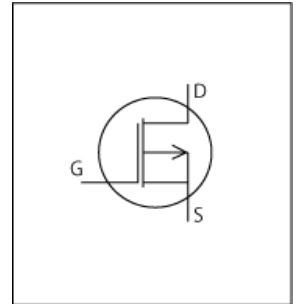


LTspice Model

PMOS

ROHM

RSJ250P10TL



Model Information

Model A macro model based on BSIM3 model
Call Name MDC_RSJ250P10TL_LT
Pin Assign 1:G 2:D 3:S
File List Model Library MDC_RSJ250P10TL_LT01.lib
 Model Report MDC_RSJ250P10TL_LT.pdf (this file)

Verified Simulator Version LTspice version XVII
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 20180823 - Rev.002
- Product name RSJ250P10TL
- Company name ROHM Co., Ltd.
- Characteristics IdVds[Vgs], IdVds[Vgs]02, BvTemp, IdVgs[Temp], VthTemp[Id], Yfsl[Temp], Rds(on)Vgs[Id], Rds(on)Temp[Id], Rds(on)Id[Vgs], Rds(on)Id[Temp], Rds(on)Id[Temp]02, Rds(on)Id[Temp]03, CxssVd, SwitchingIdd, VgsQg[Vdd], IsVsd[Temp]

Simulation Range

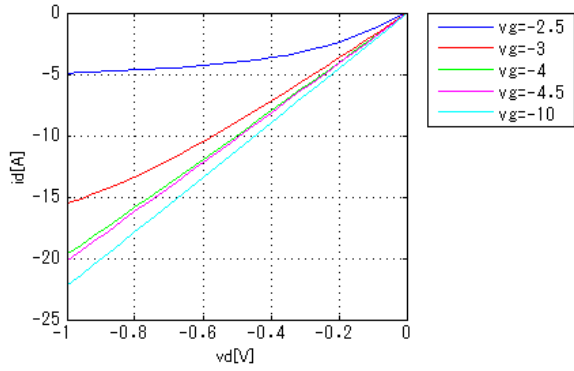
This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Range			Unit
	Min.		Max.	
Drain-source voltage (DC)	0	to	-100	V
Gate-source voltage (DC)	20	to	-20	V
Temperature	-55	to	150	deg C

Simulation results are following.
 Explanatory notes — : simulated

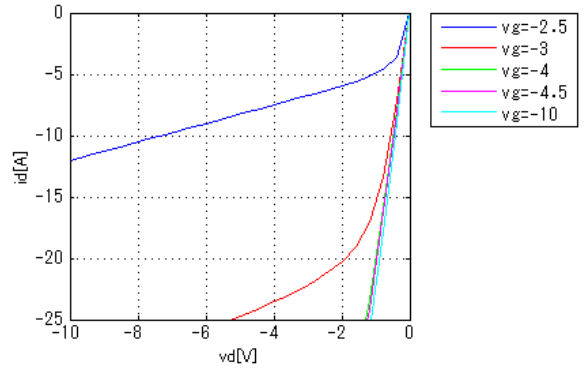
IdVds[Vgs]

Temp. = 25deg C



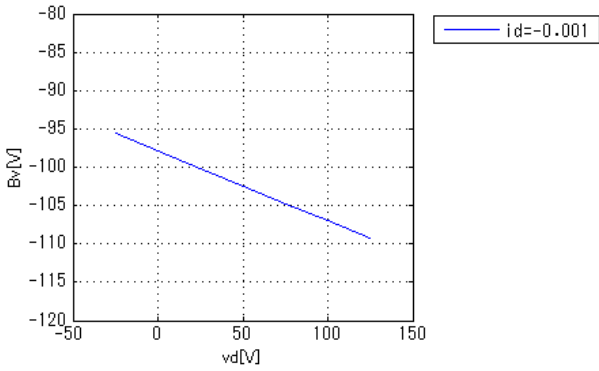
IdVds[Vgs]02

Temp. = 25deg C



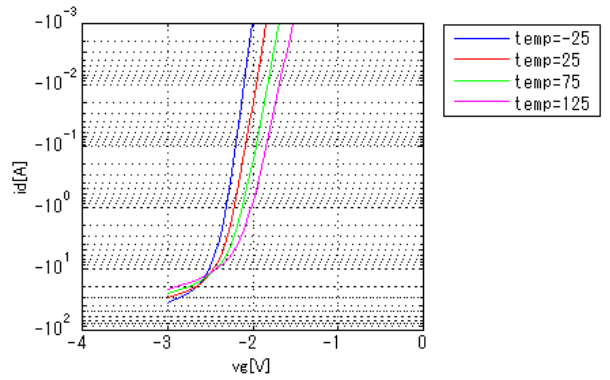
BvTemp

$i_d = -1E-3A$



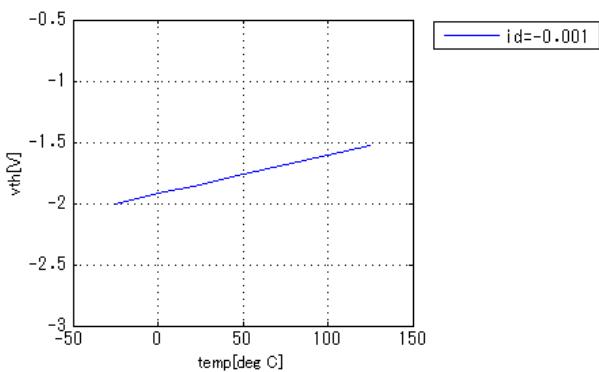
IdVgs[Temp]

$V_{ds} = -10V$

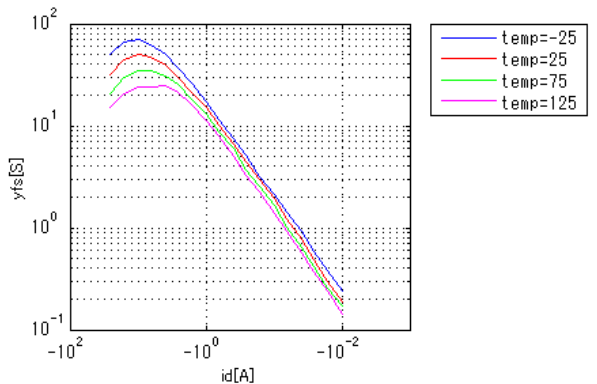


VthTemp[Id]

$V_{ds} = -10V$

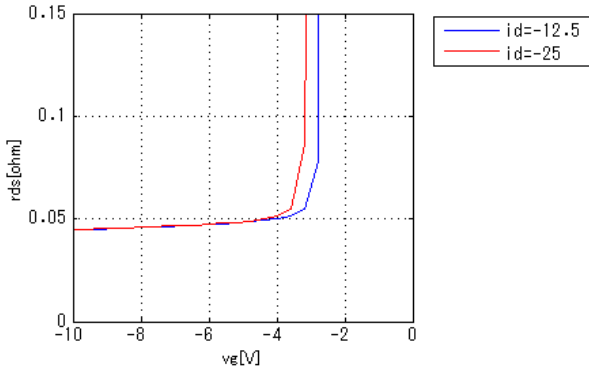


YfsId[Temp]



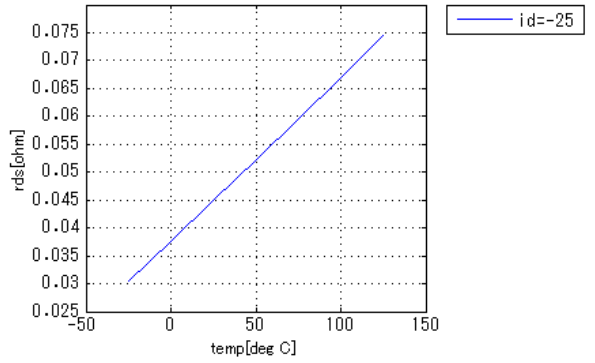
Simulation results are following.
 Explanatory notes — : simulated

Rds(on)Vgs[Id]

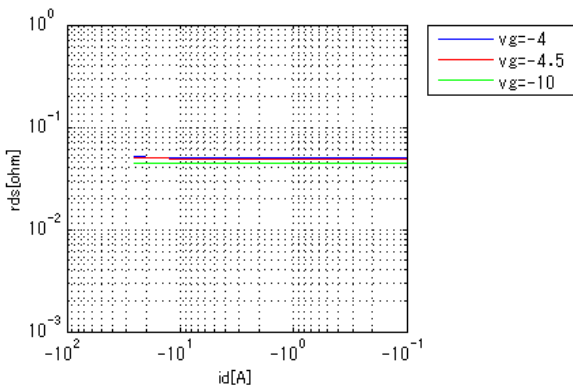


Rds(on)Temp[Id]

Vgs = -10V

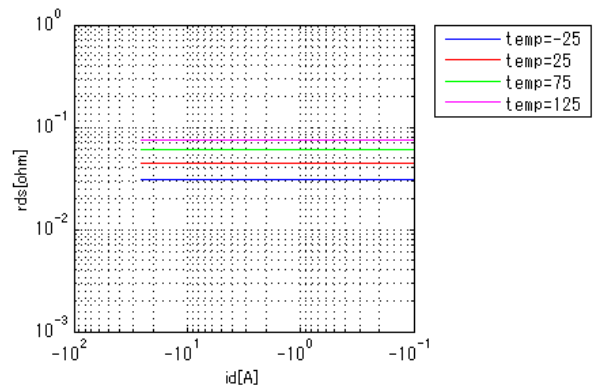


Rds(on)Id[Vgs]



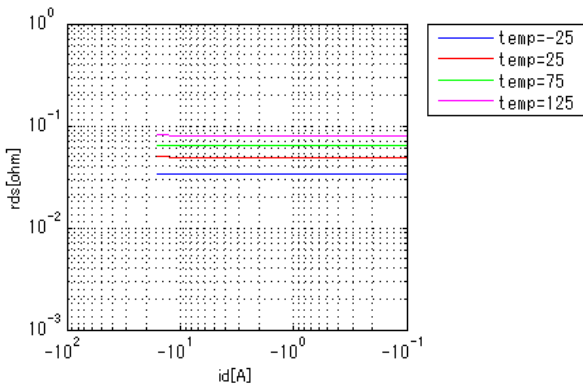
Rds(on)Id[Temp]

Vgs = -10V



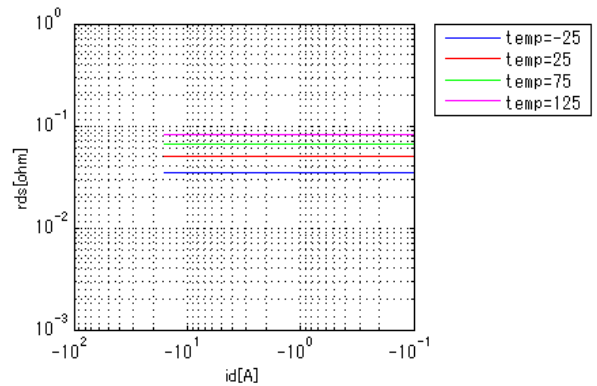
Rds(on)Id[Temp]02

Vgs = -4.5V



Rds(on)Id[Temp]03

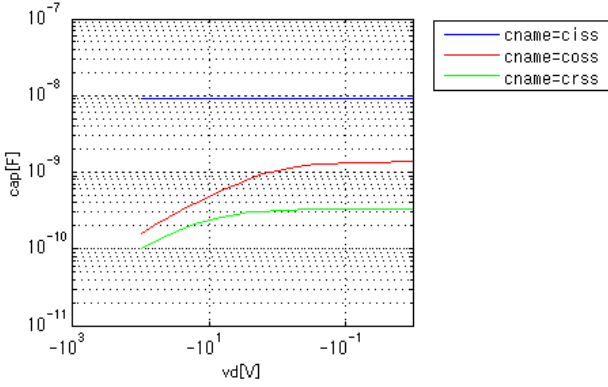
Vgs = -4V



Simulation results are following.
 Explanatory notes — : simulated

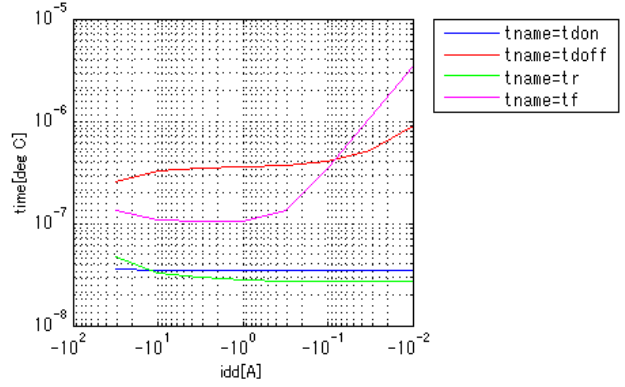
CxssVd

freq = 1000000Hz



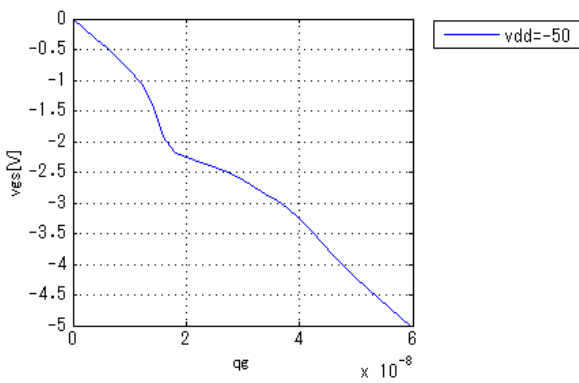
SwitchingIdd

vgg = -10A, +vdd = -50V, RGG = 10V

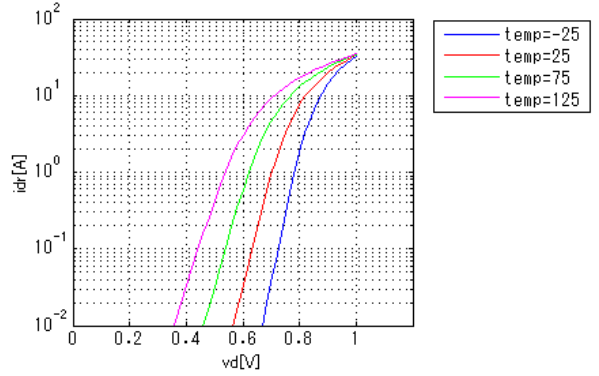


VgsQg[Vdd]

Id = -25A



IsVsd[Temp]



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