

LTspice Model

Photo Relay

TOSHIBA

TLP597G

Model Information

Model A macro model
Call Name MDC_TLP597G_LT
Pin Assign 1:Anode 2:Cathode 3:NC 4:Drain1 5:Source 6:Drain2
File List Model Library MDC_TLP597G_LT.lib
 Model Report MDC_TLP597G_LT.pdf(this file)
Verified Simulator Version LTspice XVII

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2019-06-24
- Product name TLP597G
- Company name Toshiba Electronic Devices & Storage Corporation

[Characteristics listed]

- Characteristics
- IF-VF
- Ion-Von
- Ioff-Voff
- Switching

Simulation Condition

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

Item	Condition	Unit
Temperature	25	deg C

○ : Implemented
 × : Not Implemented
 — : Not applicable

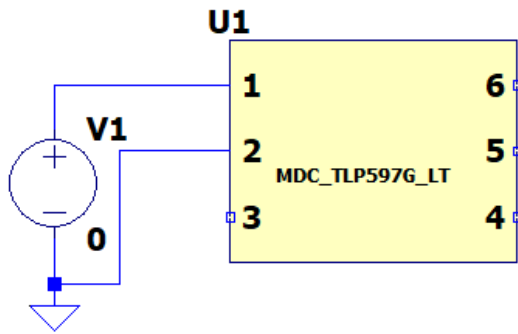
Model Functions Table
RANK=1

Functions	RANK	Implemented
IF-VF-Temp	1	○
Ion-Von	1	○
Ioff-Voff	1	○
CJ-VR	1	—
Propagation delay	1	○
Switching (Typ.)	1	○

IF-VF Testbench

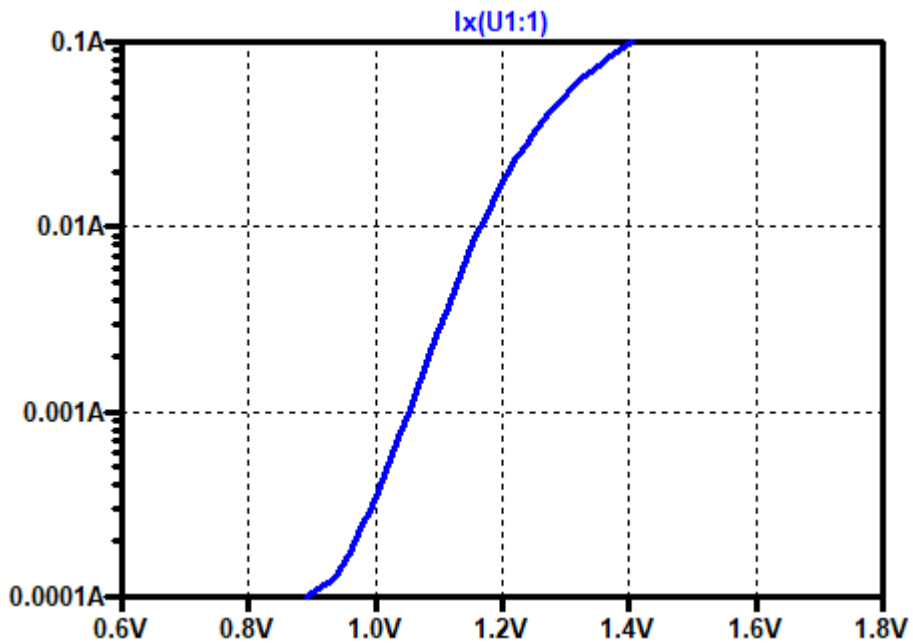
Referred to Data Sheet

```
.dc V1 0.6 1.8 0.01 .OPTION TNOM=25
.TEMP 25
```



Simulation results are following.
 Explanatory notes — : simulated

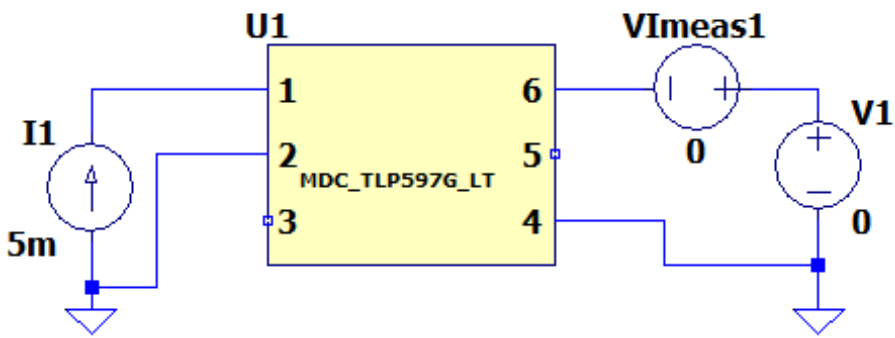
IF-VF



Ion-Von Testbench

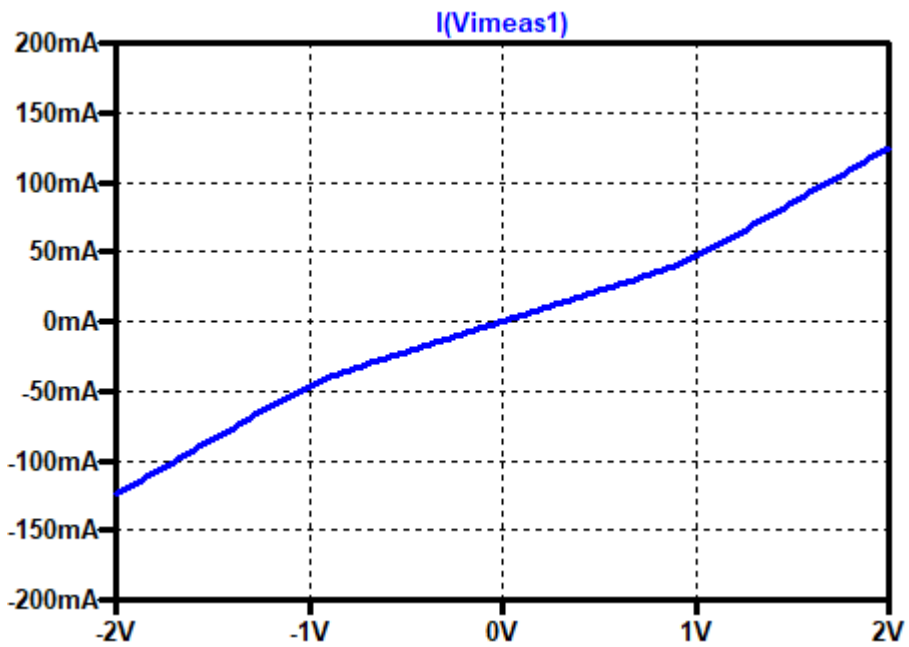
Referred to Data Sheet

```
.dc V1 -2 2 0.01.OPTION TNOM=25
.TEMP 25
```



Simulation results are following.
 Explanatory notes — : simulated

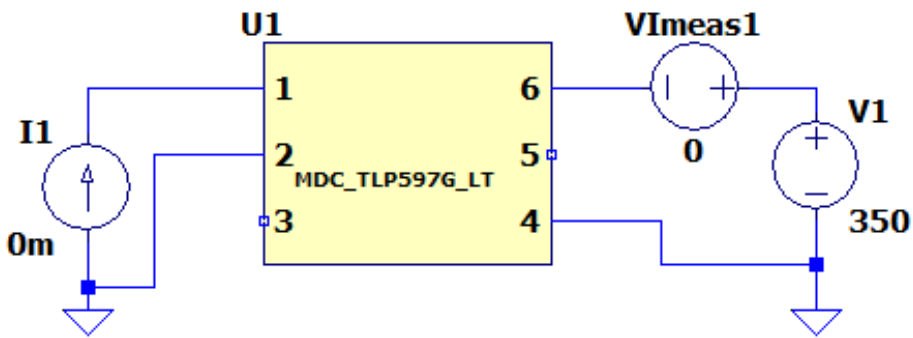
Ion-Von



Ioff-Voff Testbench

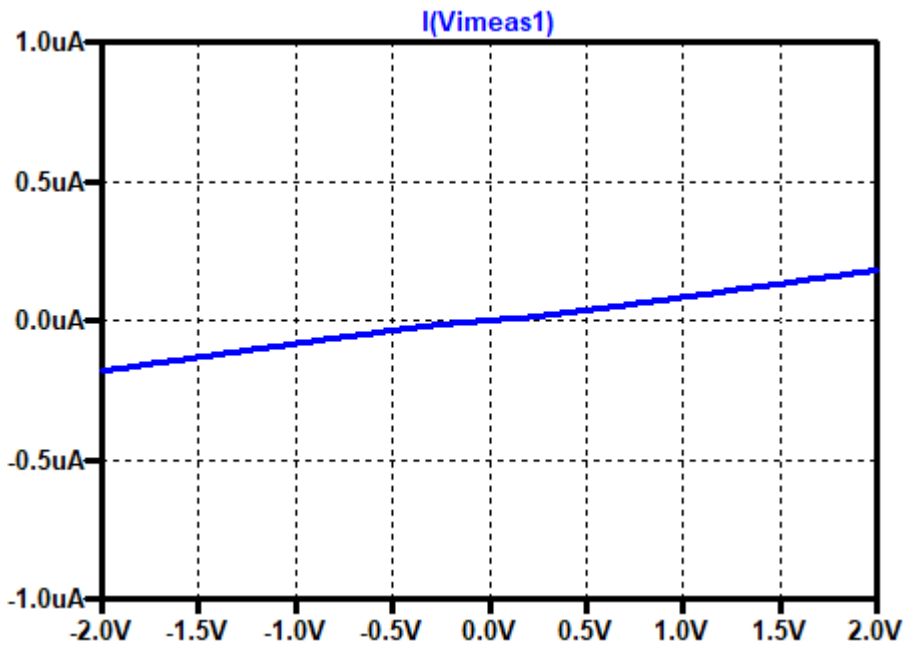
Referred to Data Sheet

```
.dc V1 -2 2 0.01 .OPTION TNOM=25
.TEMP 25
```

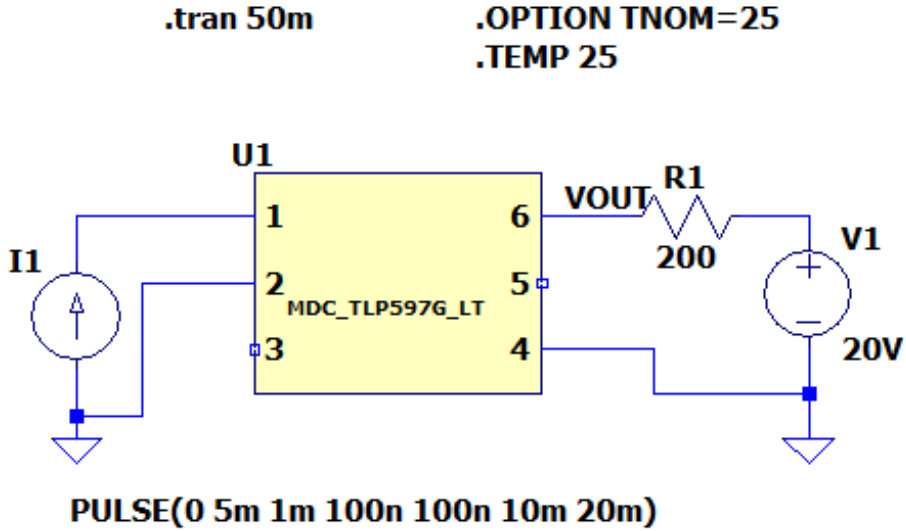


Simulation results are following.
 Explanatory notes — : simulated

Ioff-Voff

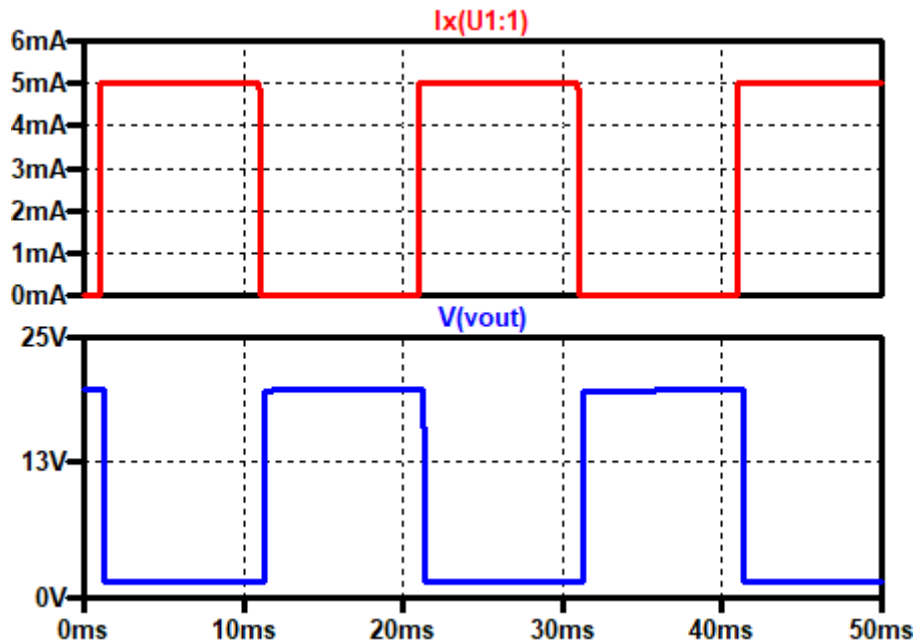


Switching Testbench
 Referred to Data Sheet



Simulation results are following.
 Explanatory notes — : simulated

Switching



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