

LTspice Model LDO TEXAS INSTRUMENTS TLV1117LV15DCYR

Model Information

Model A macro model

Call Name MDC_TLV1117LV15DCYR_LT Pin Assign 1:GND 2:OUTPUT 3:INPUT

File List Model Library MDC_TLV1117LV15DCYR_LT01.lib

Model Report MDC_TLV1117LV15DCYR_LT_LT.pdf(this file)

Verified Simulator Version LTspiceXVII

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

Date/Version 2011-2015

Product nameCompany nameTLV1117LV15DCYRTEXAS INSTRUMENTS

[Characteristics listed]

• Characteristics VIN-VOUT,Vdrop,Ilimit Line-Tran.Road-Tran

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



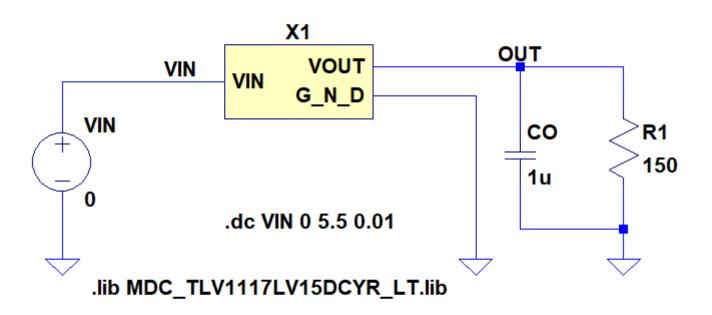
Model Functions Table

Functions	Implemented
VIN-VOUT	0
Vdrop	0
Ilimit	0
Line-Tranjent	0
Load-Tranjent	0
Ripple Rejection	0



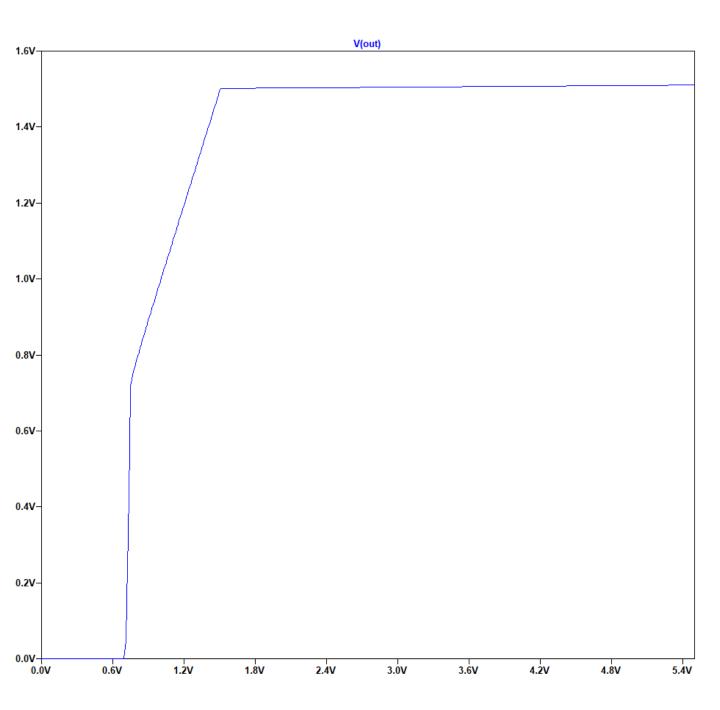
VIN-VOUT Testbench

Referred to Data Sheet





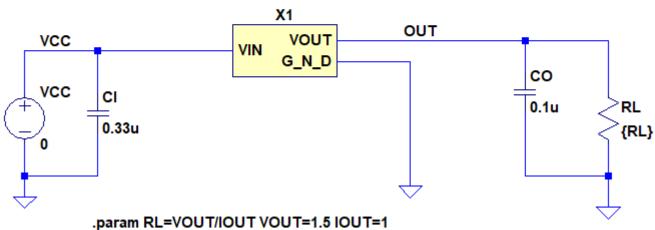
VIN-VOUT





Vdrop Testbench

Referred to Data Sheet



.dc VCC 0 4 0.01

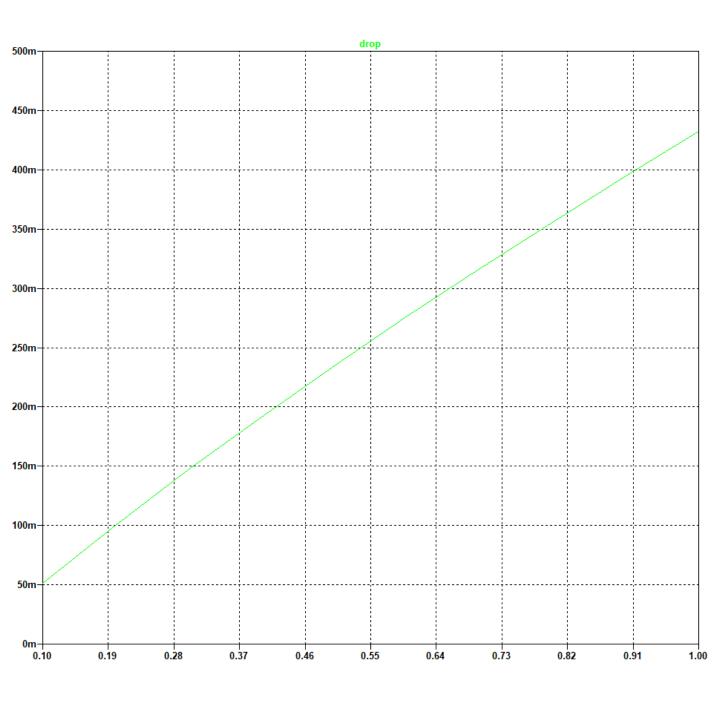
.step param IOUT 0.1 1 0.1

.meas DC drop FIND V(VCC)-V(OUT) WHEN V(OUT)=1.4 RISE=1

.lib MDC_TLV1117LV15DCYR_LT.lib



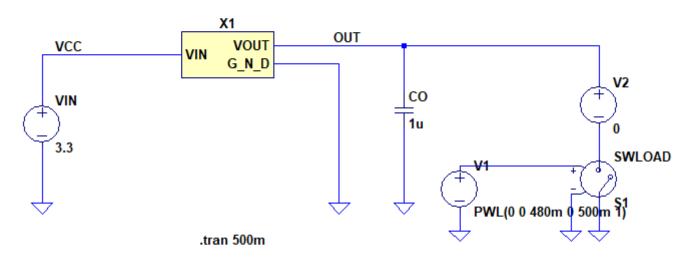
Vdrop





Ilimit Testbench

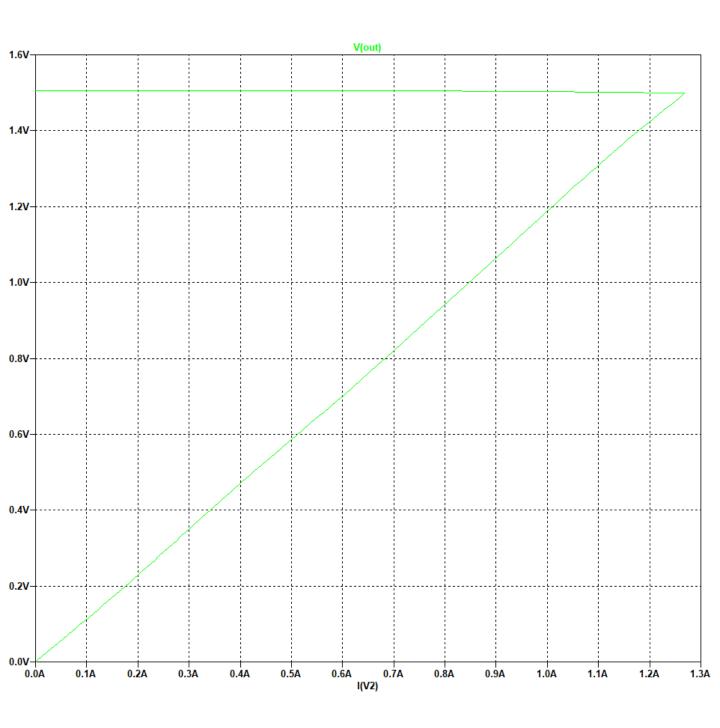
Referred to Data Sheet



.MODEL SWLOAD SW RON=1m ROFF=100k VON=1 VOFF=0
.lib MDC_TLV1117LV15DCYR_LT.lib



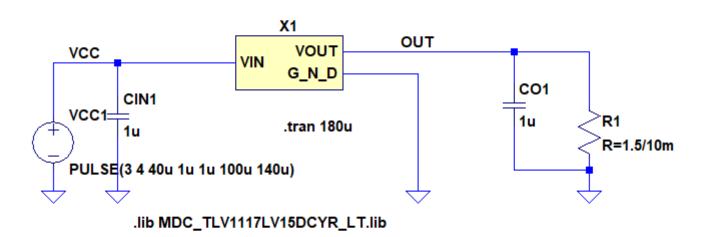
llimit





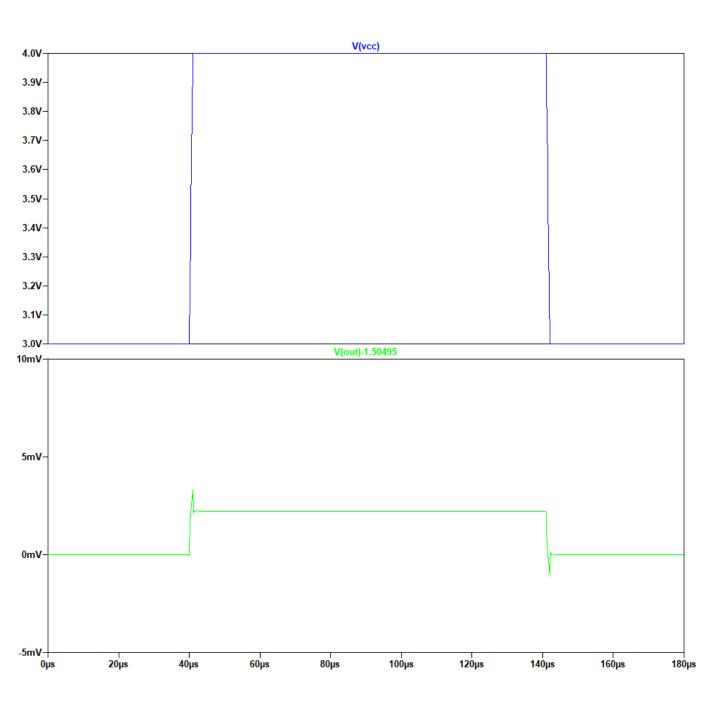
Line-Tran Testbench

Referred to Data Sheet





Line-Tran

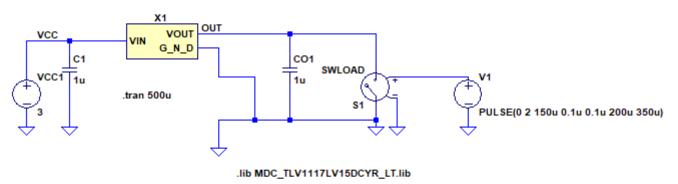




Load-Tran Testbench

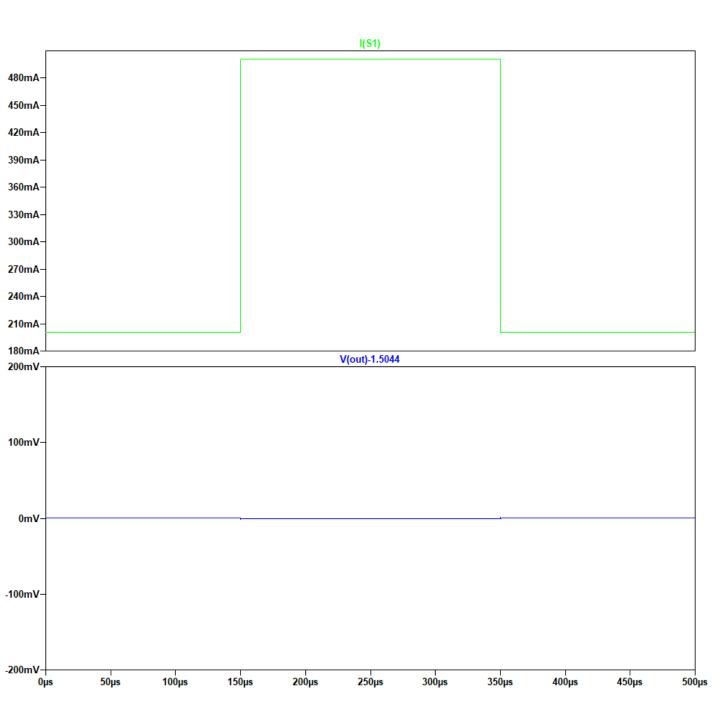
Referred to Data Sheet

.MODEL SWLOAD SW RON=3 ROFF=7.5 VON=1 VOFF=0





Load-Tran





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