

LTspice Model shunt regulator Texas Instruments TL432AIDBVR

Model Information

Model A macro model
Call Name MDC_TL432AIDBVR_LT
Pin Assign 1:NC 2:ANODE 3:NC 4:CATHODE 5:REF
File List Model Library MDC_TL432AIDBVR_LT.lib
 Model Report MDC_TL432AIDBVR_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 JAJ5443Q – AUGUST 2004 – REVISED JULY 2022
- Product name TL432
- Company name Texas Instruments Incorporated

[Characteristics listed]

- Characteristics Icathode-VKA
VA-Freq
ZKA-Freq
Icathde(off)
Transient

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

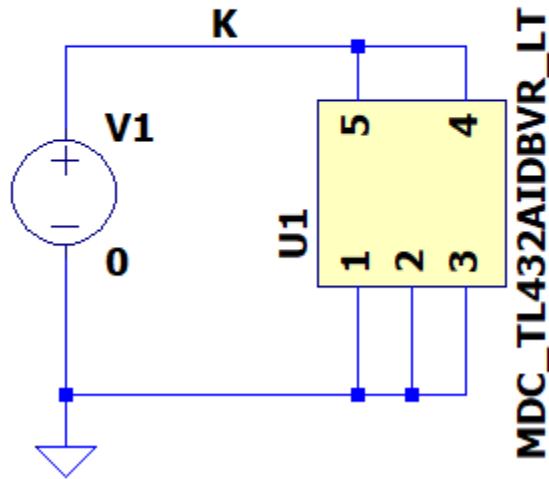
Model Functions Table

Functions	RANK	Implemented
Icathode-VKA	1	○
VA-Freq	1	○
ZKA-Freq	1	○
Icathde(off)	1	○

Icathode-VKA

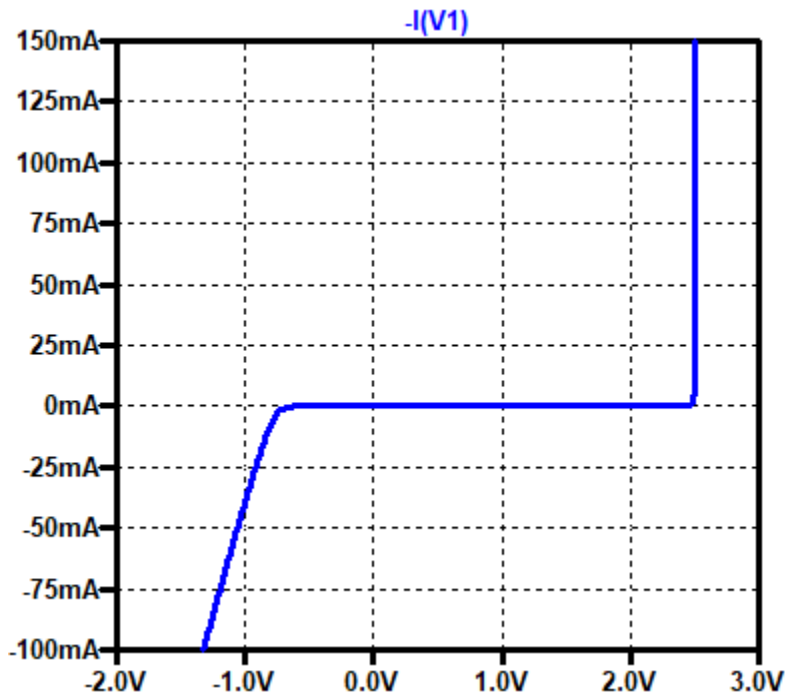
Referred to Data Sheet

```
.dc V1 -2 3 0.001
.option TNOM=25
.temp 25
```



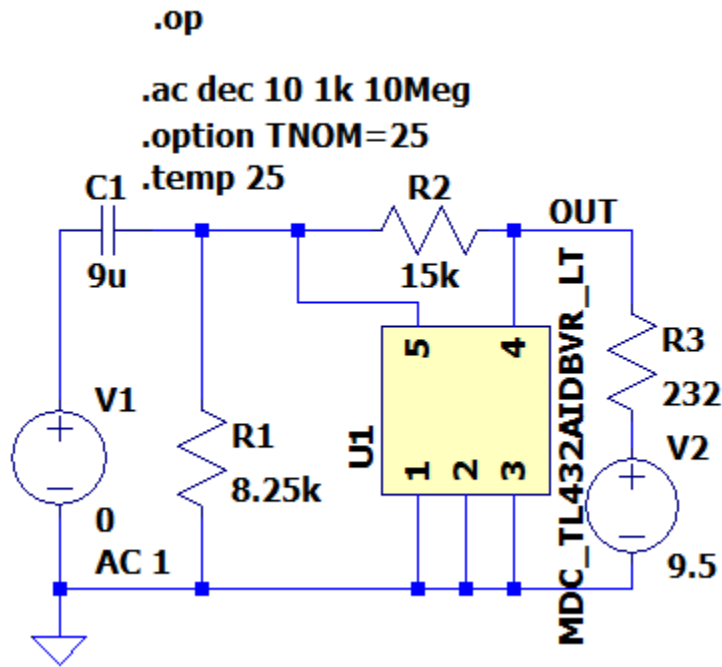
Simulation results are following.
 Explanatory notes — : simulated

Icathode-VKA



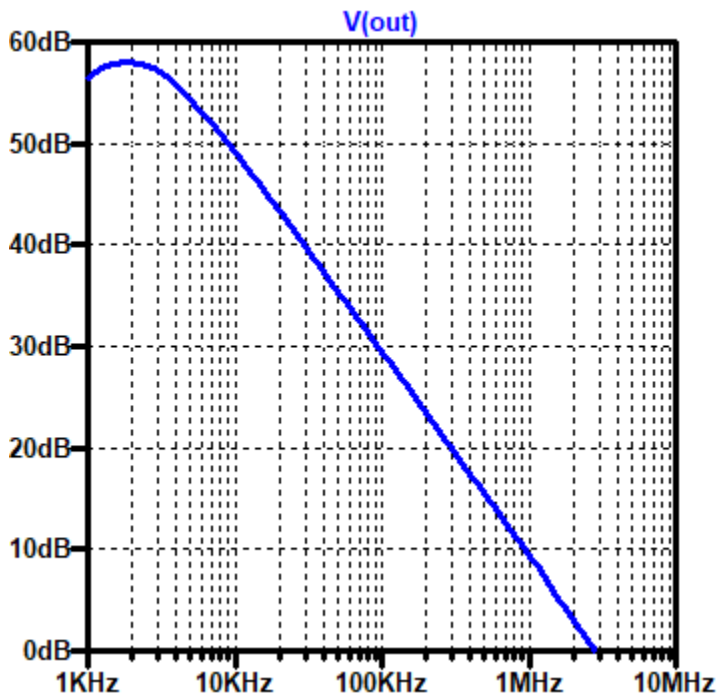
VA-Freq

Referred to Data Sheet



Simulation results are following.
 Explanatory notes — : simulated

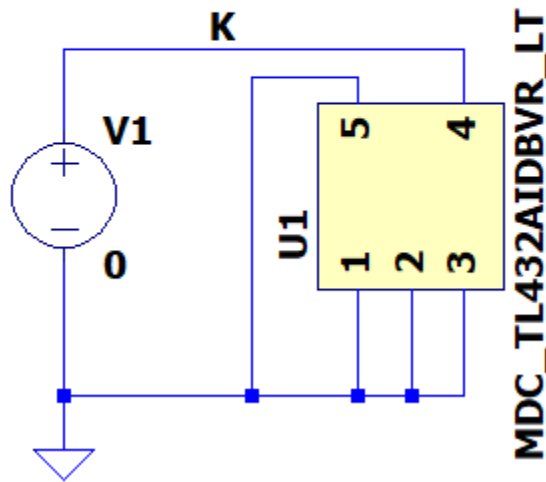
VA-Freq



Icathde(off)

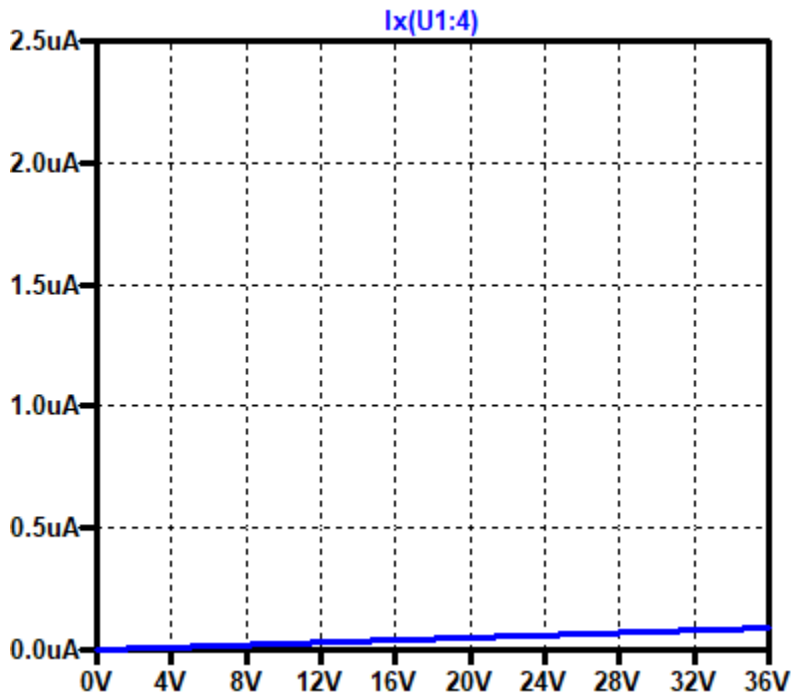
Referred to Data Sheet

```
.dc V1 0 36 0.1
.option TNOM=25
.temp 25
```



Simulation results are following.
 Explanatory notes — : simulated

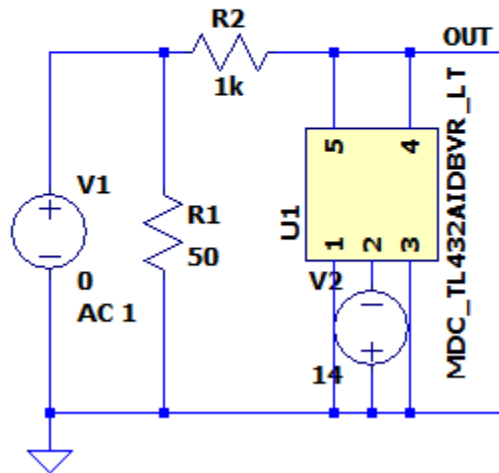
Icathde(off)



ZKA-Freq

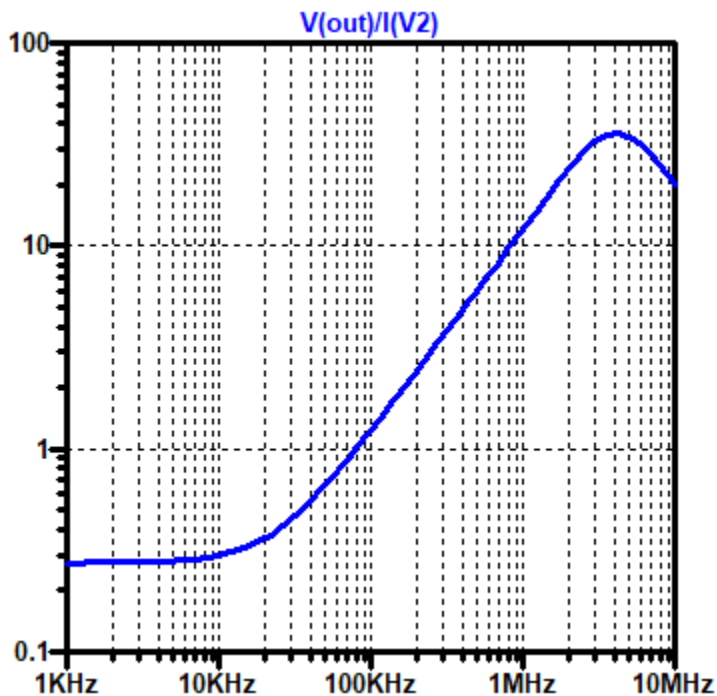
Referred to Data Sheet

```
.OP
.ac dec 10 1k 10Meg
.option TNOM=25
.temp 25
```



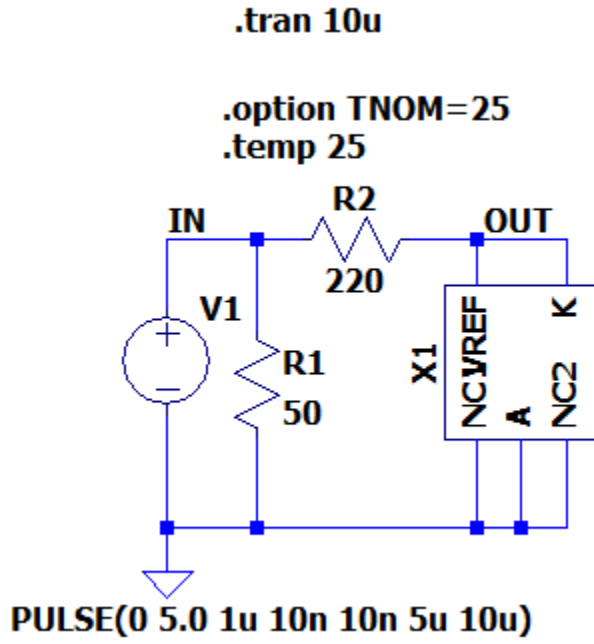
Simulation results are following.
 Explanatory notes — : simulated

ZKA-Freq



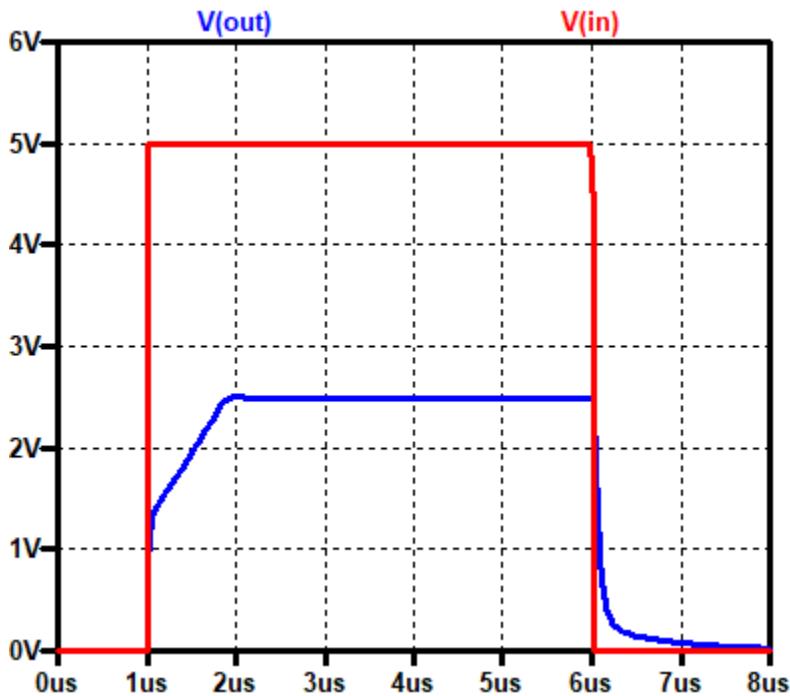
Transient

Referred to Data Sheet

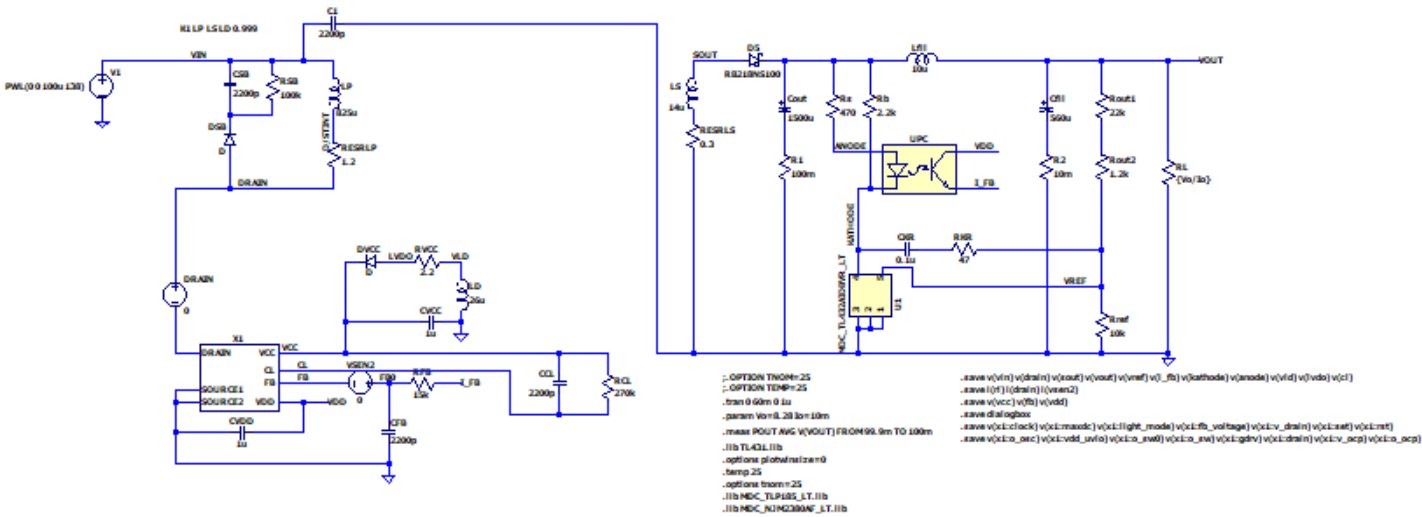


Simulation results are following.
 Explanatory notes — : simulated

Transient

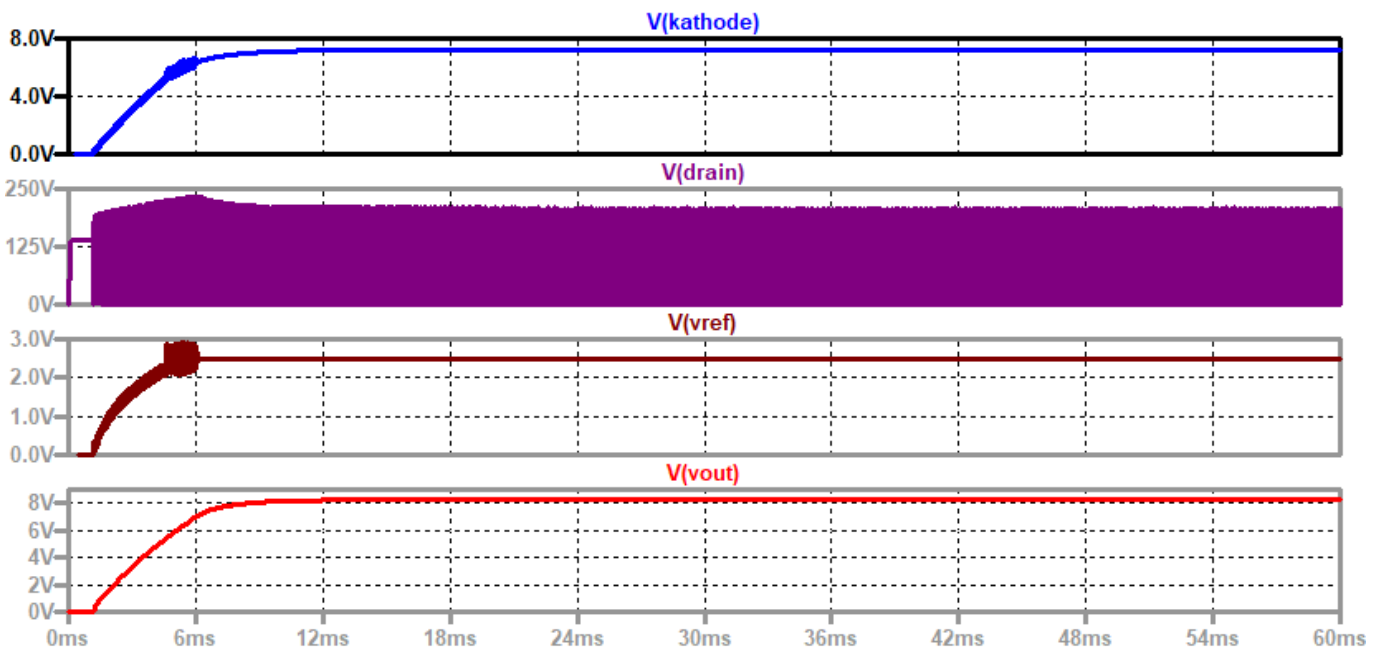


Application:Flyback Converter
 Referred to Data Sheet



Simulation results are following.
 Explanatory notes — : simulated

Application:Flyback Converter



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