

LTspice Model

Tone Decoder

ROHM

BD9E303EFJ-LB

Model Information

Model A macro model
Call Name MDC_BD9E303EFJ-LB_LT
Pin Assign 1:BOOT 2:VIN 3:EN 4:AGND 5:FB 6:COMP 7:PGND 8:SW
File List Model Library MDC_BD9E303EFJ-LB_LT02.lib
 Model Report MDC_BD9E303EFJ-LB_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 Unknown
- Product name BD9E303EFJ-LB
- Company name ROHM

[Characteristics listed]

- Characteristics VFB, FOSC, Maxduty, RONH, RONL, ILIMIT, VUVLO, VUVLOHYS, VENH, VENL, IEN, TSS

Simulation Condition

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

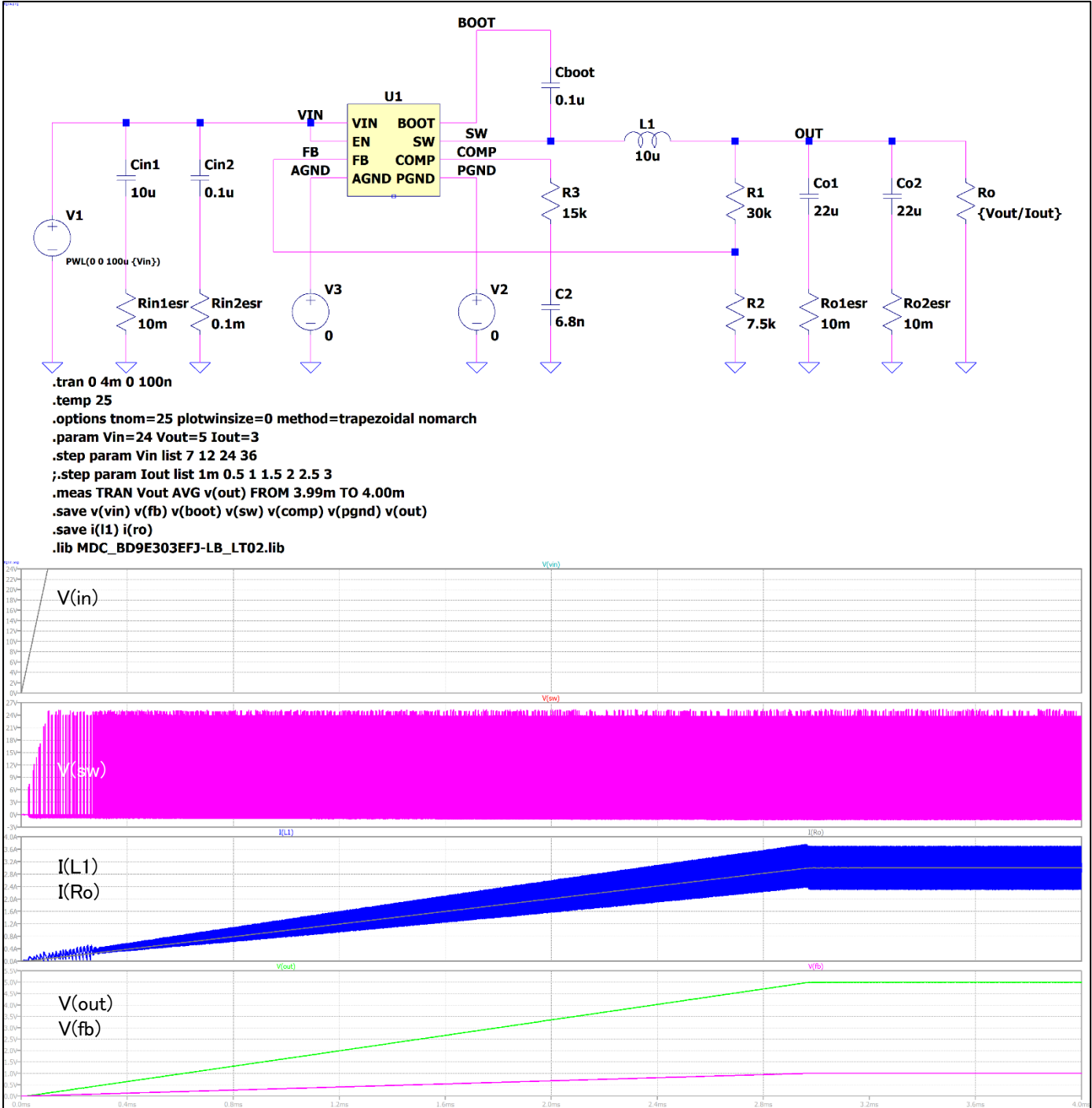
Item	Condition			Unit
	Min	Typ	Max	
Supply Voltage	7.0		36.0	V
Temperature		25		deg C

Model Functions Table

Functions	Implemented
Over-Current Protection	<input type="radio"/>
Undervoltage Lockout Protection	<input type="radio"/>
Soft Start	<input type="radio"/>

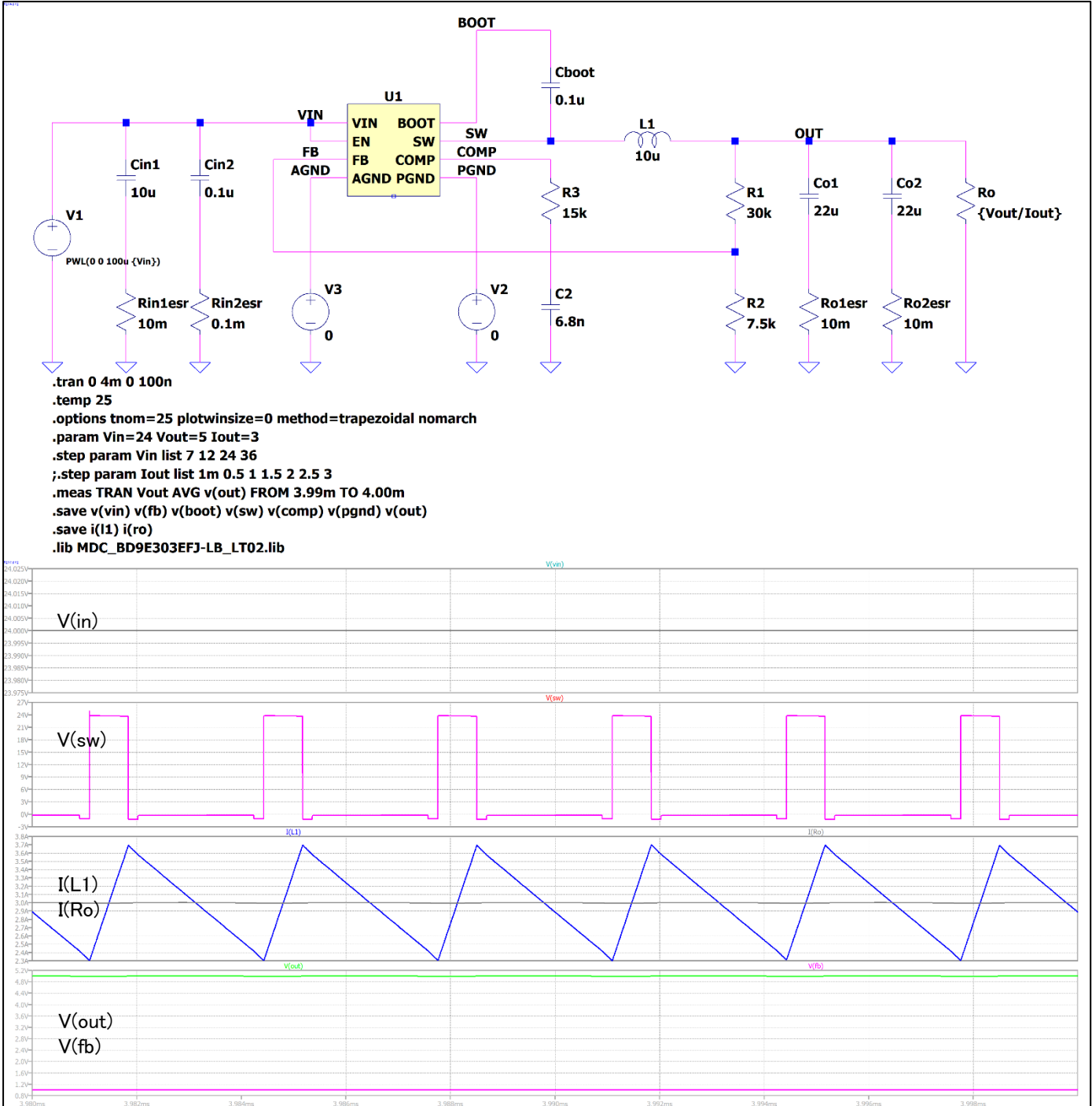
Buck converter Operation ($V_{in} = 24V$, $V_{out}=5.0V$, $I_{out}=3.0A$) Testbench

Referred to Data Sheet

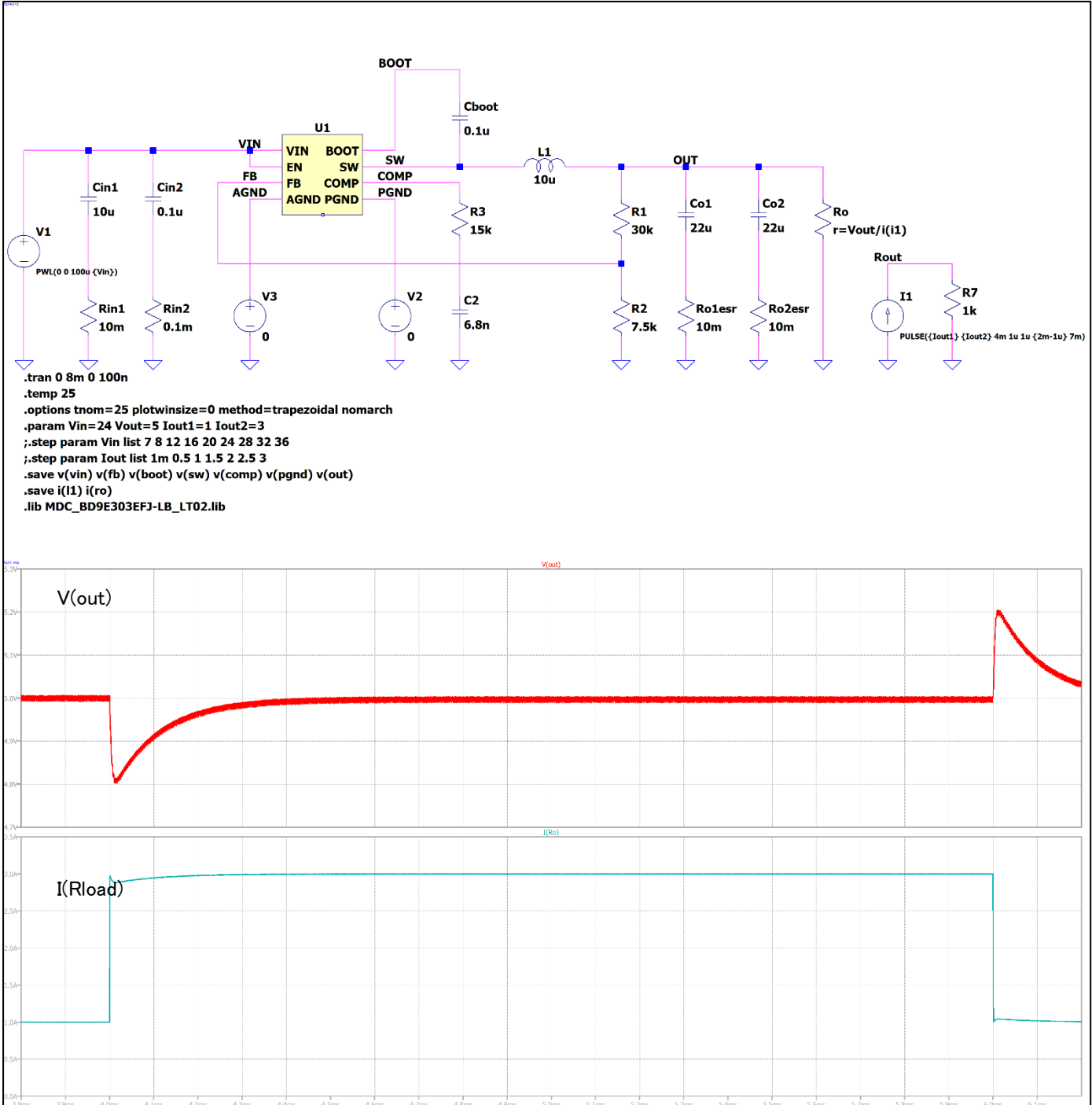


Buck converter Operation ($V_{in} = 24V$, $V_{out}=5.0V$, $I_{out}=3.0A$ [scale down]) Testbench

Referred to Data Sheet



Buck converter Operation ($V_{in} = 24V$, $V_{out}=5.0V$, $I_{out}=1.0A - 3.0A$ [Load transient response]) Testbench Referred to Data Sheet



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