

Hello this is Bordodynov's Electronics web page.
I made my collection of models and examples for LTspice publicly available.
I regularly update my collection:
correcting shortcomings and adding new models.

[Additional library for LTspice, file is lib.zip ~20M](#)

[Additional examples for LTspice, file is example.zip ~28M](#)

[Transistors and diodes, file is cmp.zip ~260K](#)

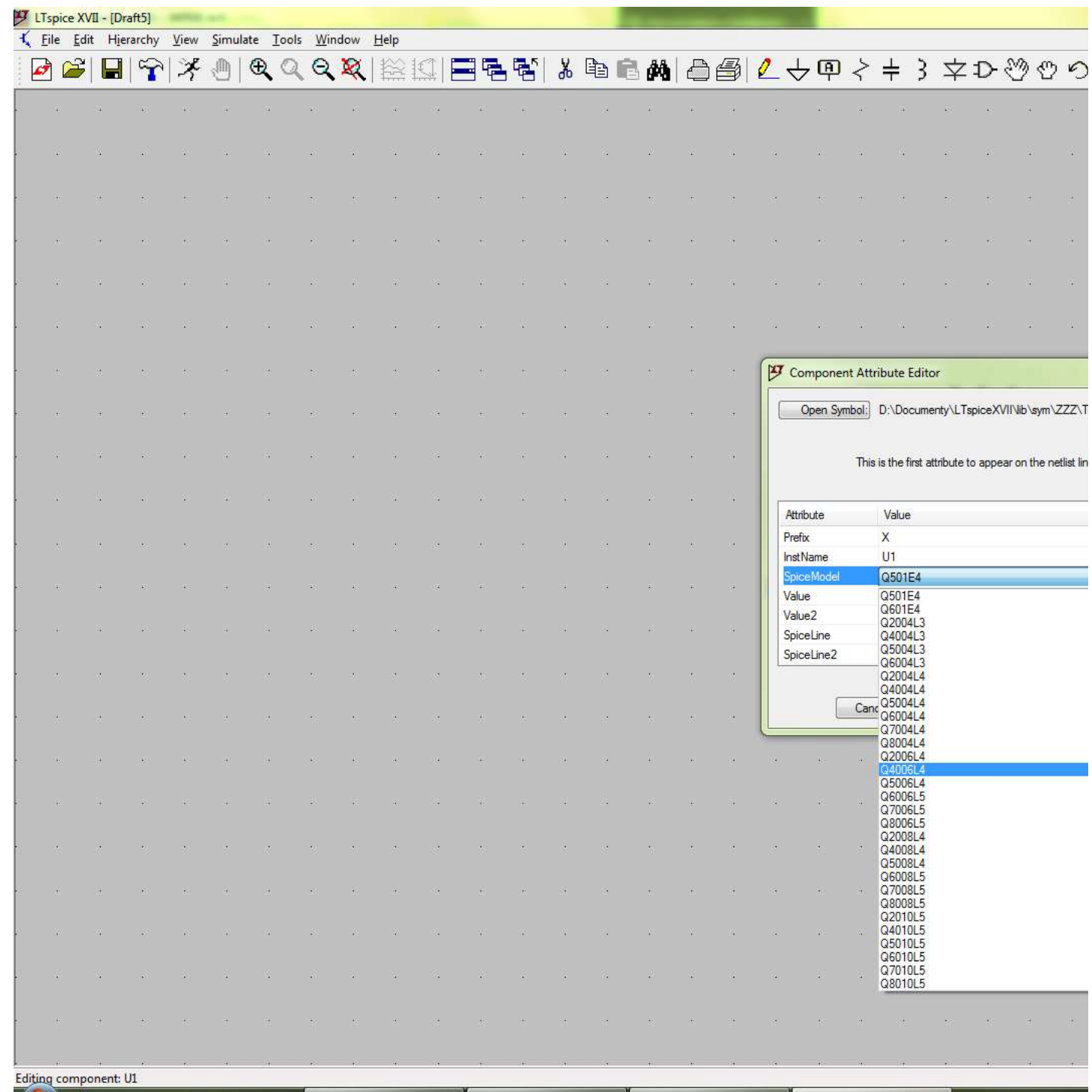
[VDMOS for LTspiceIV, file is standard.mos.IV.txt ~322K](#)

[VDMOS for LTspiceXVII, file is standard.mos.XVII.txt ~322K](#)

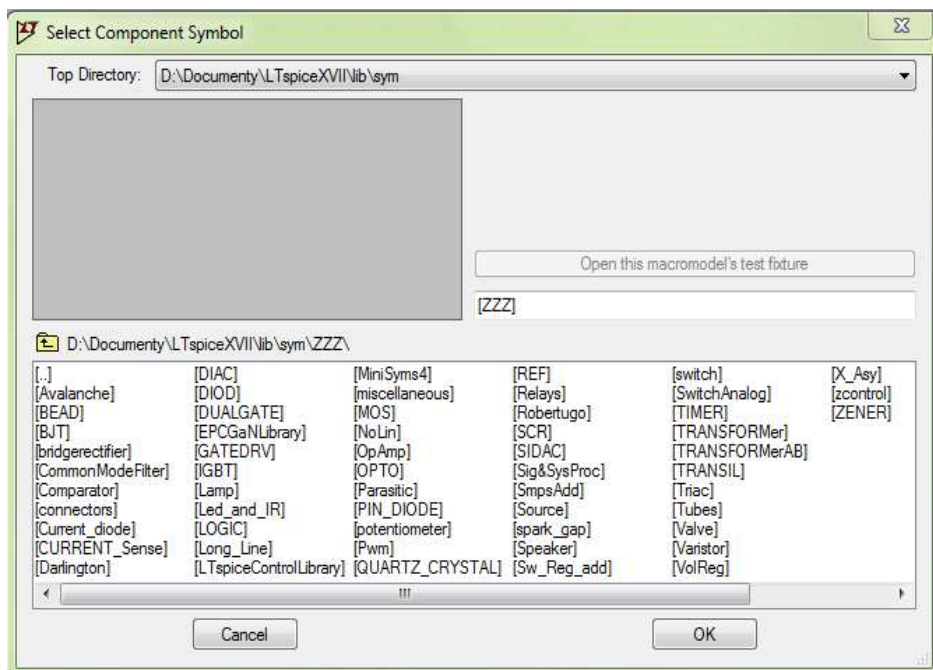
For LTspiceIV users, you must copy the contents of the lib and example folder to the LTspiceIV lib and example folder.
For LTspiceXVII users, you need to copy the contents of my collection LTspiceXVII folder to the LTspiceXVII similar name folder.
To find the desired folder (There are two such folders), start typing any item (click on the symbol of the logical element in the menu). In the top line
You will see "(the required address)\LTspiceXVII\lib\sym".
Are you aware that the user directory of LTspiceXVII is in "Documents" of the user.
C:\Users\uswrname\Documents\LTspiceXVII\lib
For example:
C:\Users\Joe\Documents\LTspiceXVII\lib\sym
and C:\Users\Joe\Documents\LTspiceXVII\lib\sym\ZZZ is where keep my symbols
C:\Users\Joe\Documents\LTspiceXVII\lib\sub is where i keep my .subckts and lib

Special symbols.

There are a lot of special symbols in my folder. These symbols allow you to call many elements.
They have a built-in pop-up menu (drop down list).
By activating this menu with the mouse, select the desired transistor, Operational amplifier, thyristor, etc.



Contents of the ZZZ folder:



Construction of transformers.

I have a transformer of winding Winding_RC or WINDING_LCR

(Just Winding not use.)

The library is Volodin with the same symbol name (valvol.lib). (There is a swap on the diagram) and the Core.

The cores can be nonlinear or linear.

Non-linear core is the Core, Coreja.

Coreja-Model Jiles-Atherton. Parameters can be taken from files magmod.txt (example/Bordodynov/TRANSFRMS/magmod.txt).

Linear Core Two: Corelin_al, the parameter is AL, i.e., induction for one spiral (turn) and

The CORELIN_A_Lm parameter is the

Section area, length of the average magnetic line and effective magnetic permeability.

Use linear lines before using non-linear Core.

And the most important thing. All elements must have a shared point (Connected via wires).

But you can also post the coils and the core. The main thing to do is to pin one name to the PIN.

For this, there is a third pin in the winding. One pin on the core.

The simplest transformer consisting of a primary, a secondary, and a core can just move together to pines fit (connected).

I prefer to use TR1, TR2, etc.

The coress allow for the loss of the eddy. For this, there is a boundary frequency of Fe (Feddy).

WINDING_RC has the parameters of Rser and Cpars and the number of coils.

WINDING_LCR is the additional inductiveness of the scattering.

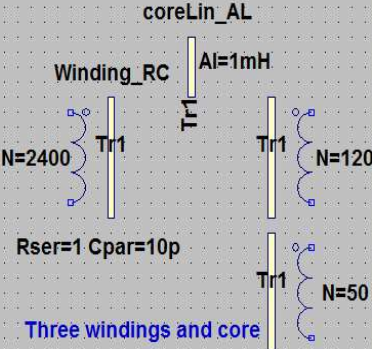
I prefer not to clutter the diagram.

Parameters other than the number of coils are not visible, but when they get into the symbol and then the Tick will be Visible.

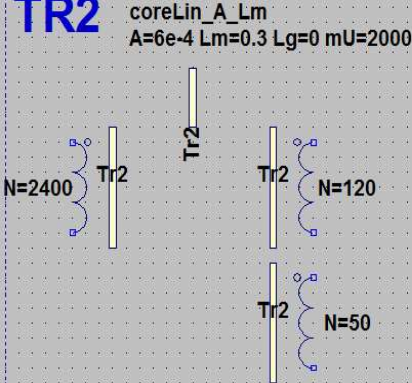
You can get the dissipation power of the core (non-linear) in the normal way using ALT.

Construction of transformers.

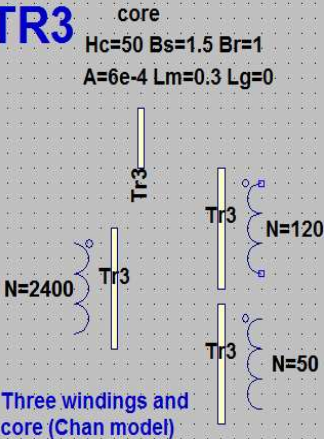
TR1



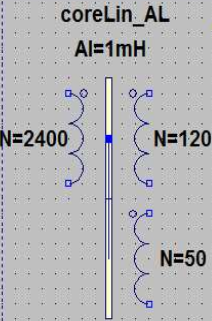
TR2



TR3



TR5



TR4

