Import SPICE Model into TINA

TI Precision Labs – ADCs

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Download Slides From Web

- This presentation is a step by step method for importing SPICE netlists from other simulators
- Recommended to download the slides and step through the example

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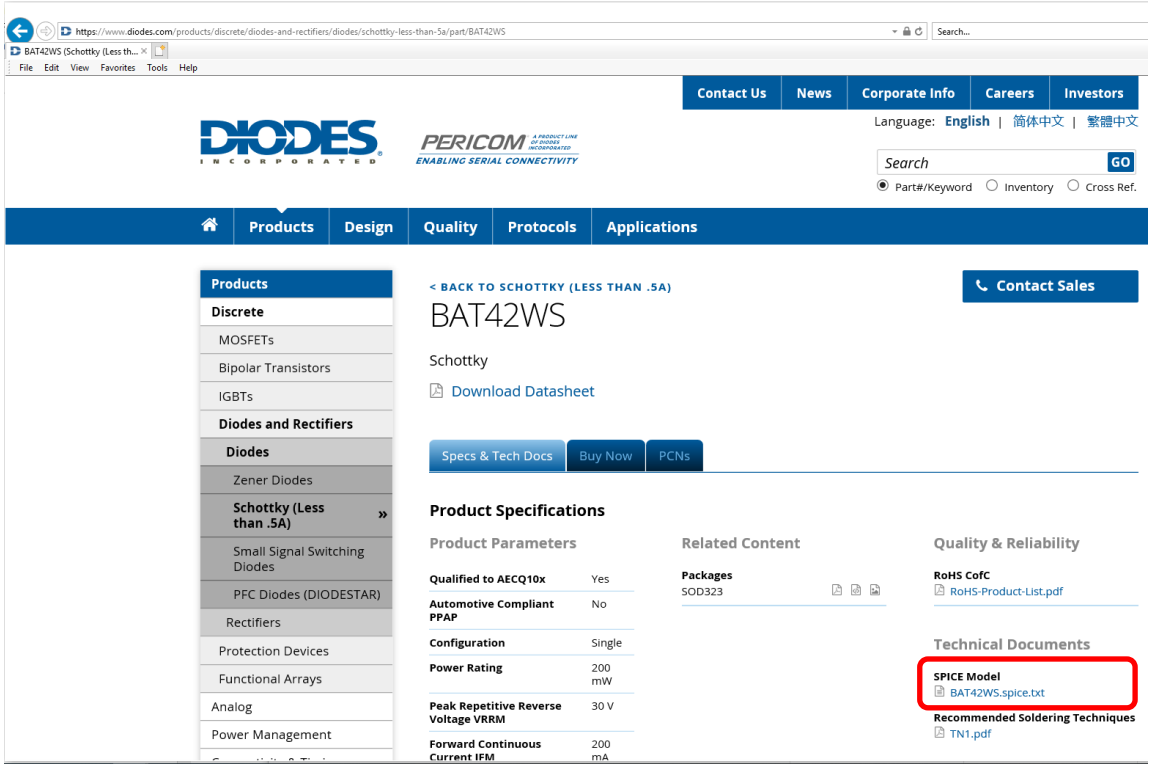
https://training.ti.com/ti-precision-labs-adcs

Procedure to import SPICE model into TINA

1. **Download Schottky diode SPICE models (.LIB, .CIR or .MOD netlist file) from Manufacturer's website.**
2. **Open the netlist file and revise the format.**
3. **Import and Compile the Netlist file in TINA-TI.**
4. **Create the TINA-TI macromodel (.TSM) by using New Micro Wizard.**

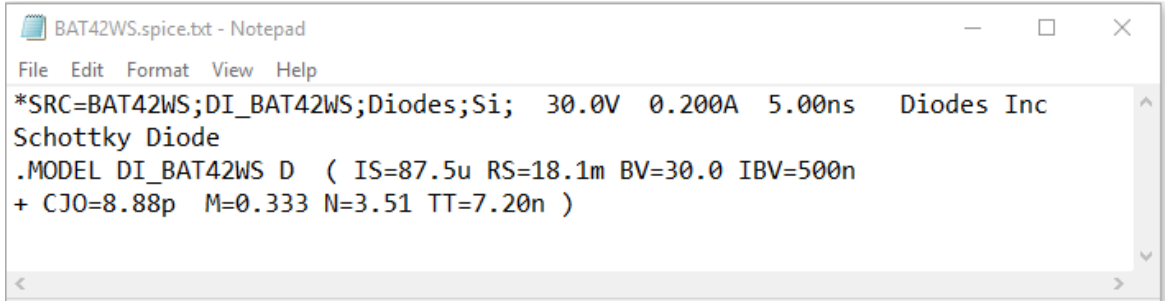
Download SPICE model: Product Page on Diodes Inc.



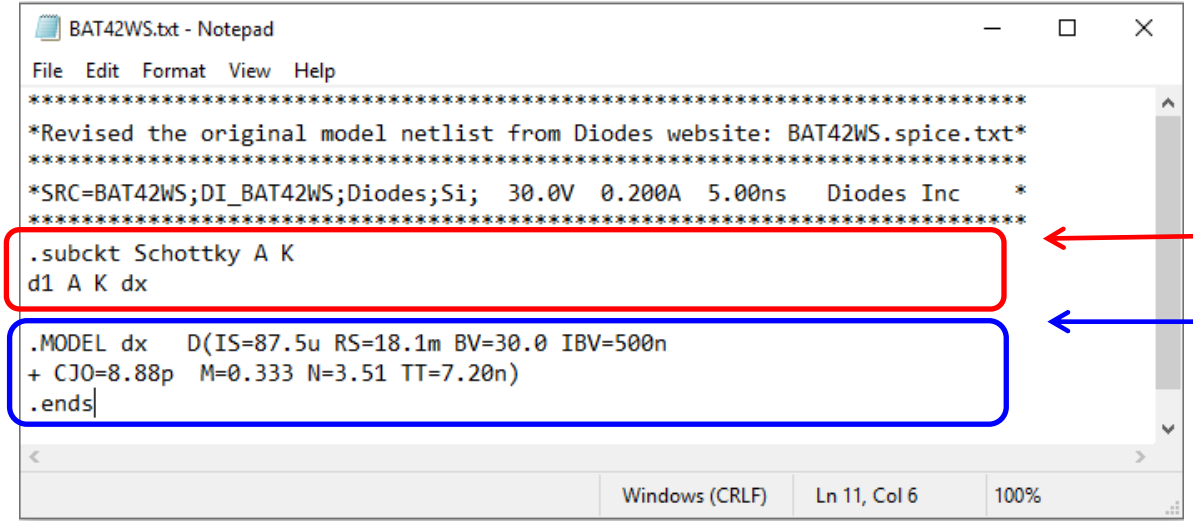
Step 1:
Download PSpice model.

Note: If the Spice netlist file has a different extension(.lib,.cir or .mod), open it with Notepad directly.

Revise the Netlist of Schottky diode



Revised!

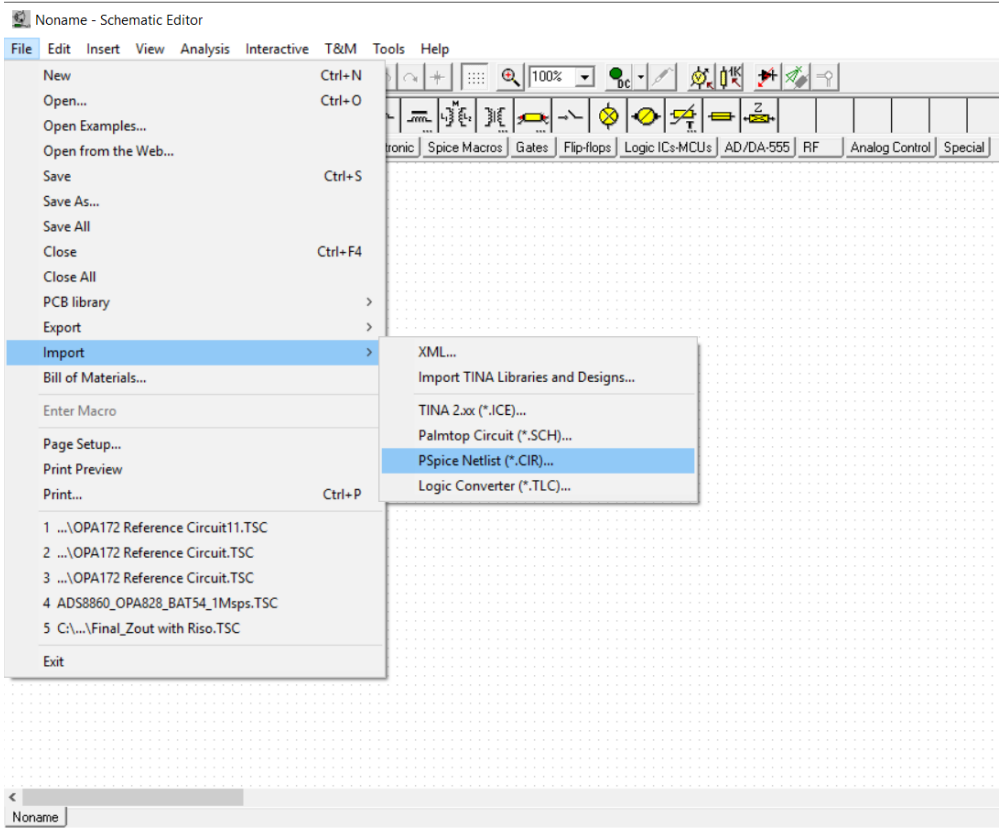


Step 2:

- Add pin declaration.
- Modify netlist to this format.

Step 3: Change the file extension to .cir or .lib. (BAT42WS.cir)

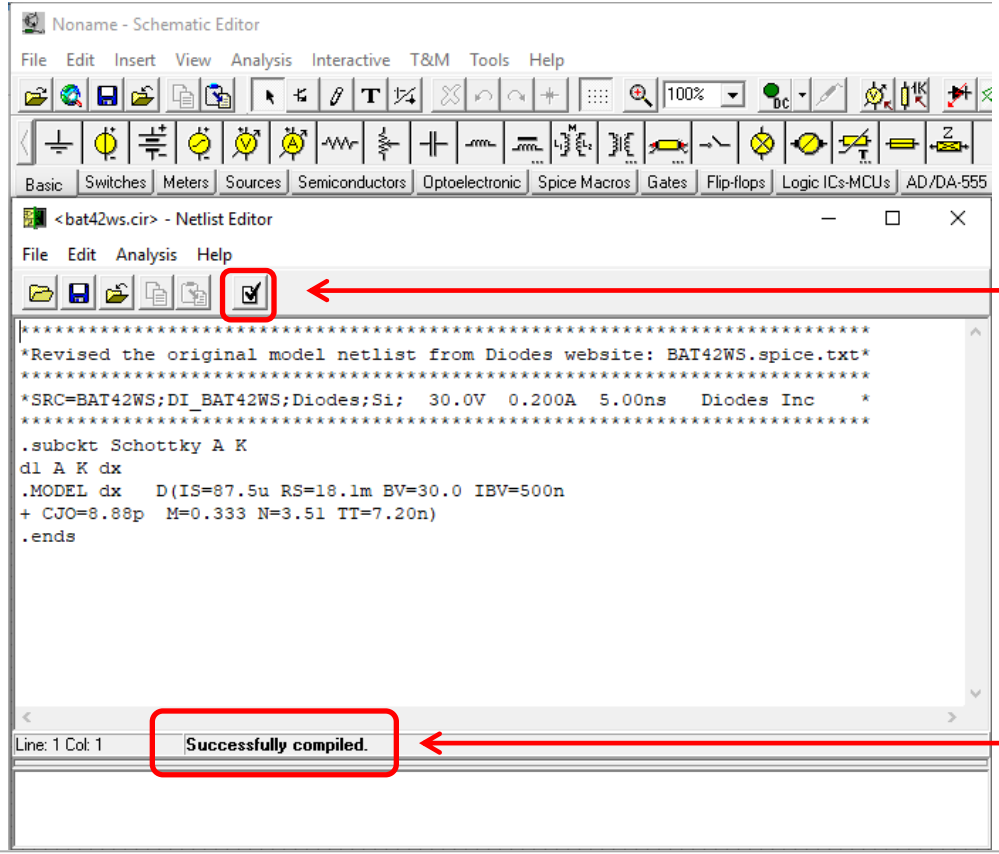
Import and Verify Compatibility with TINA



Step 4:

- Open TINA, and select “File-> Import ->Pspice Netlist(*.CIR)”.
- Select “BAT42WS.cir”.

Import and Verify Compatibility with TINA – Cont'd



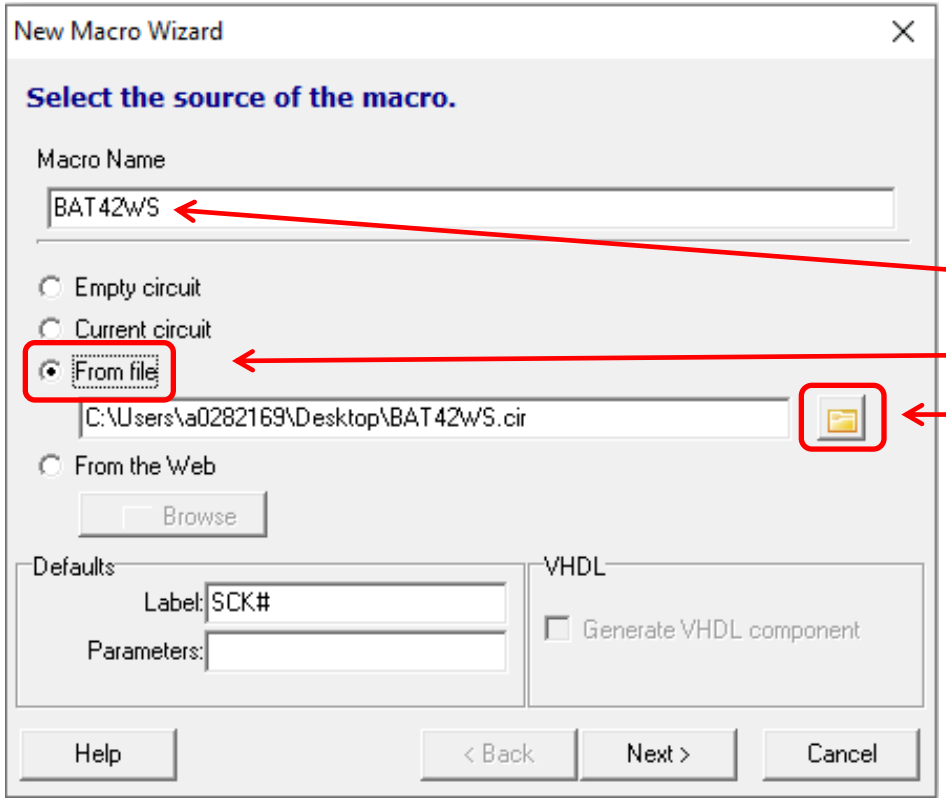
Step 5:

Select check-box icon indicated by black arrow.

Step 6:

The netlist format and syntax are compatible with TINA!

Create TINA-TI macromodel for Schottky diode



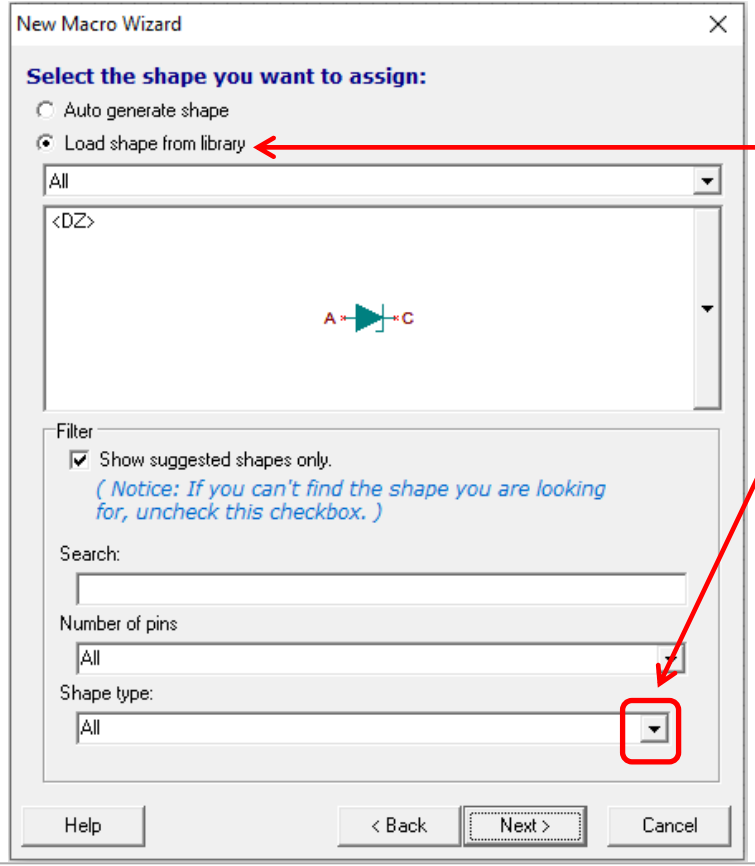
Step 7:

Open TINA9-TI and select “Tools”-> “New Macro Wizard” menu tab. (shown on left side)

Step 8:

- Enter macromodel name.
- Select “From file”.
- Click the folder icon and navigate to the directory with the netlist.
- Click the “Next” button.

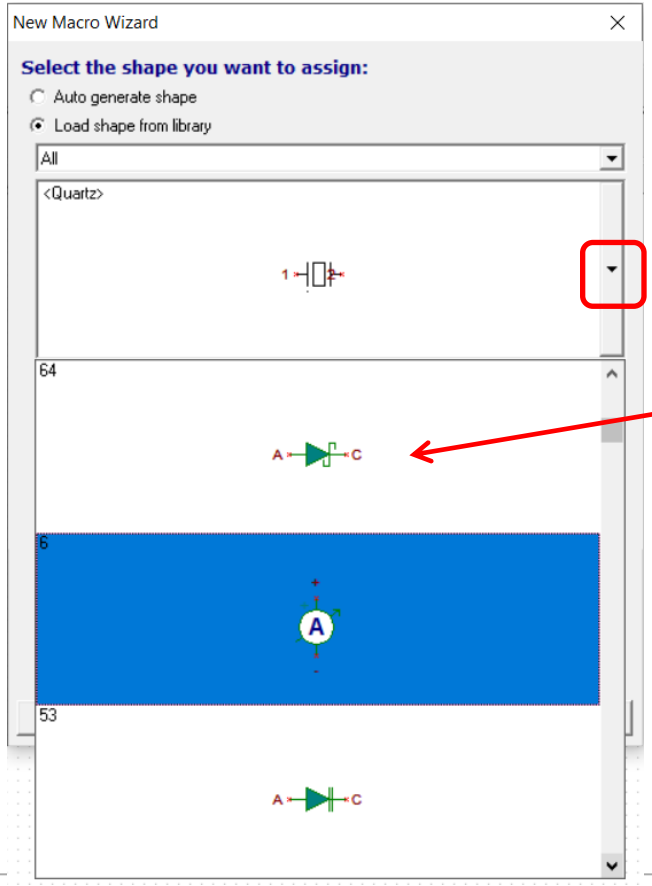
Assign a Symbol for the micromodel



Step 9:

- Select “Load shape from library”.
- May select “Diodes” from Shape type.

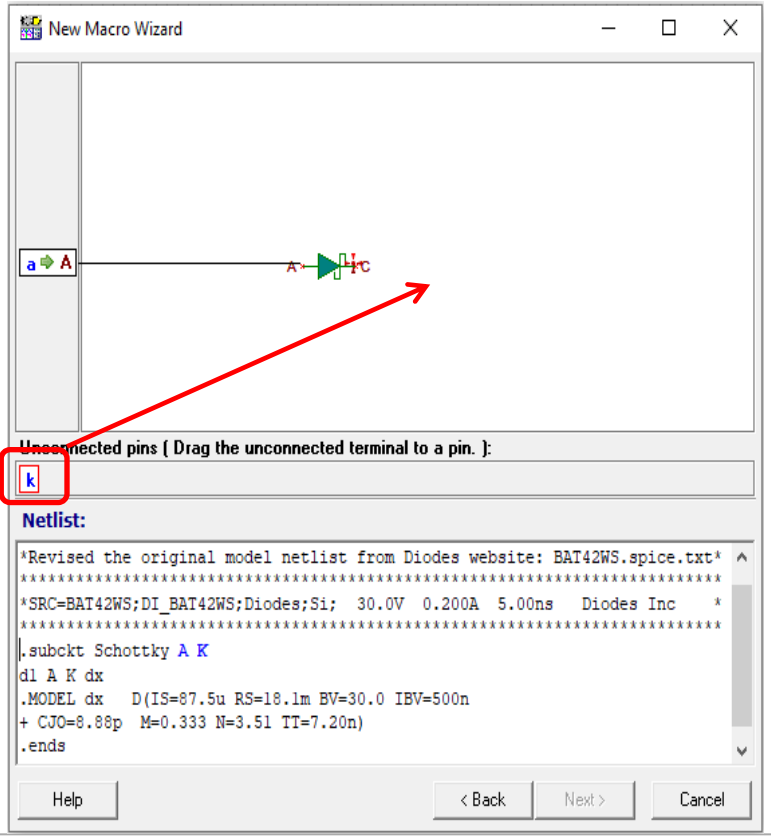
Assign a Symbol for the micromodel – Cont'd



Step 10:

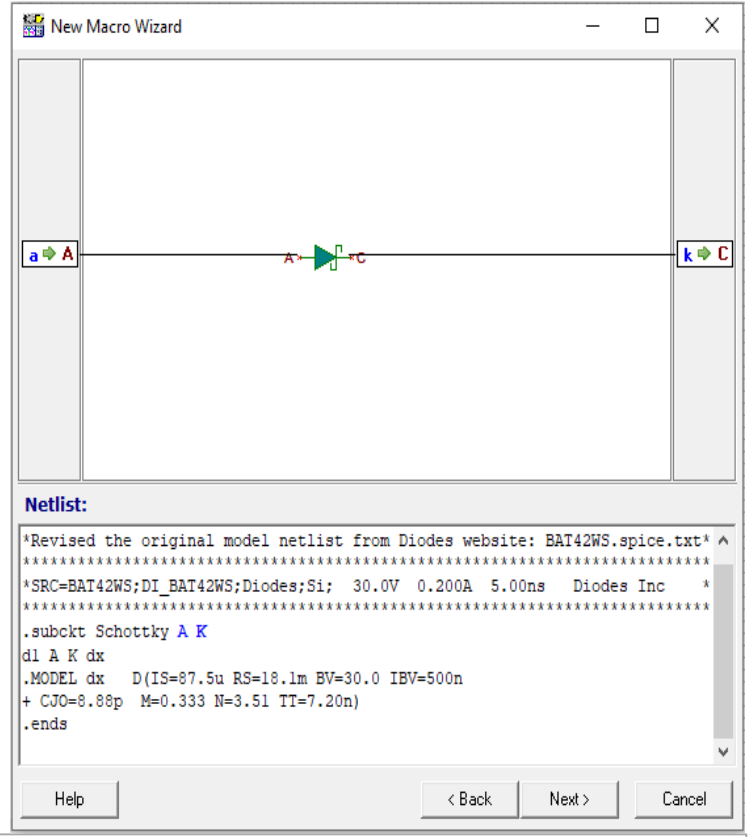
- Select the downward arrow and a drop-down list of symbols appears.
- Select Schottky symbol for the new micromodel.
- Click the "Next" button.

Assign pins for new micromodel

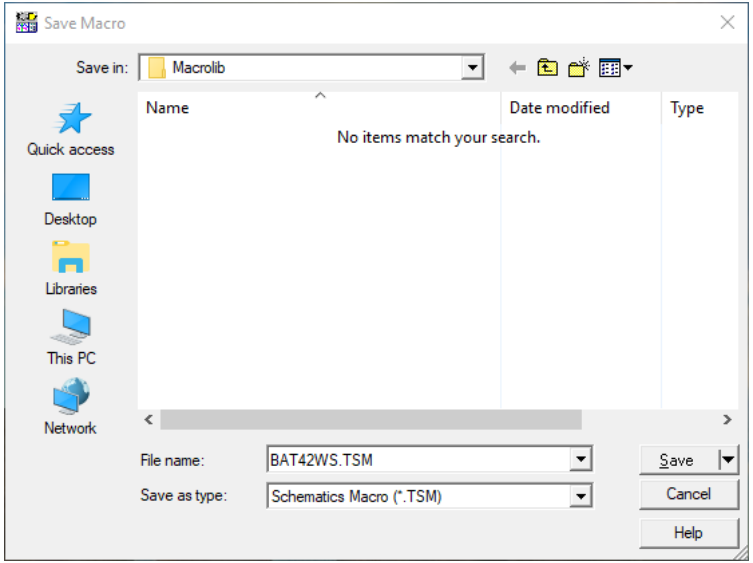


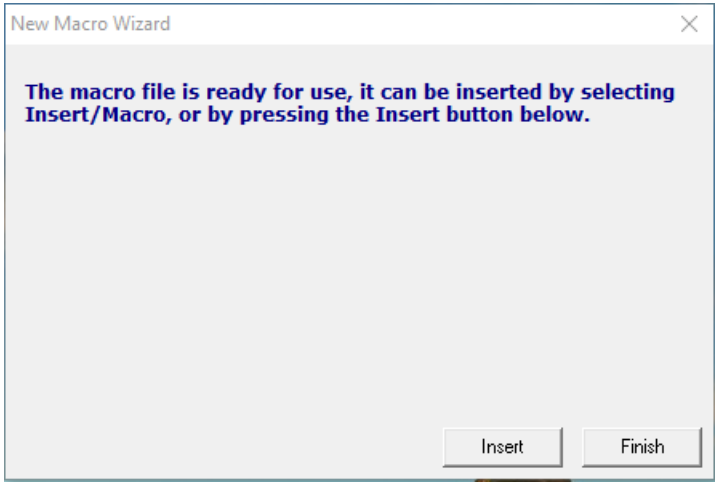
Step 11:

Assign Pins.



TINA-TI macromodel for Schottky diode is created

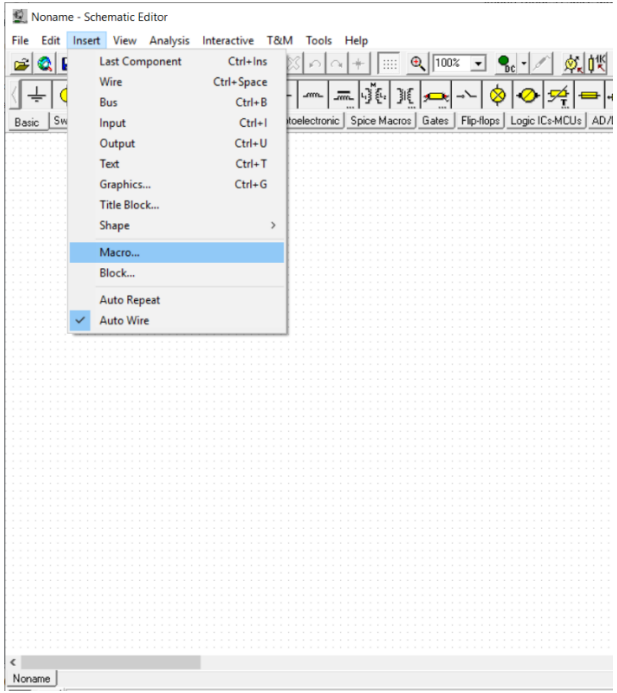


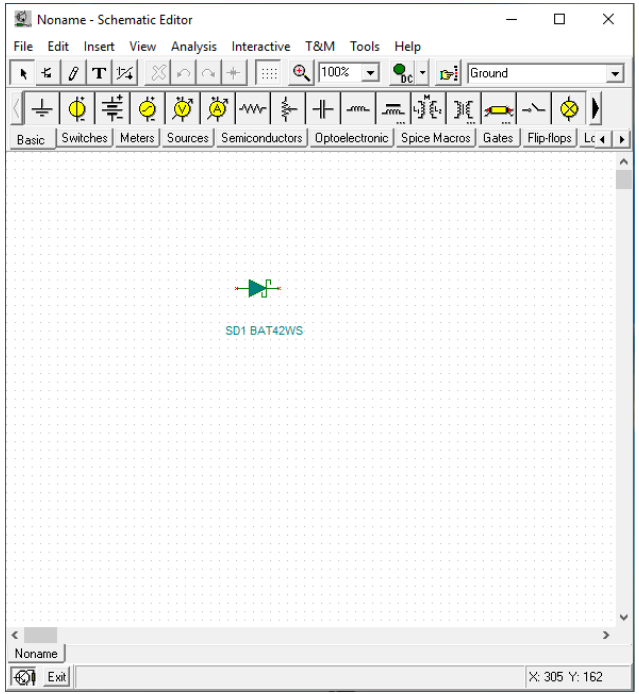


Step 12:

- Click the “Next” button.
- Save the new micromodel file(.TSM)

Place and Use new micromodel

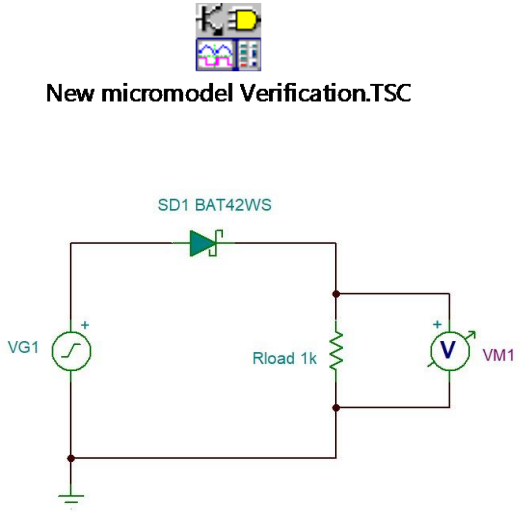


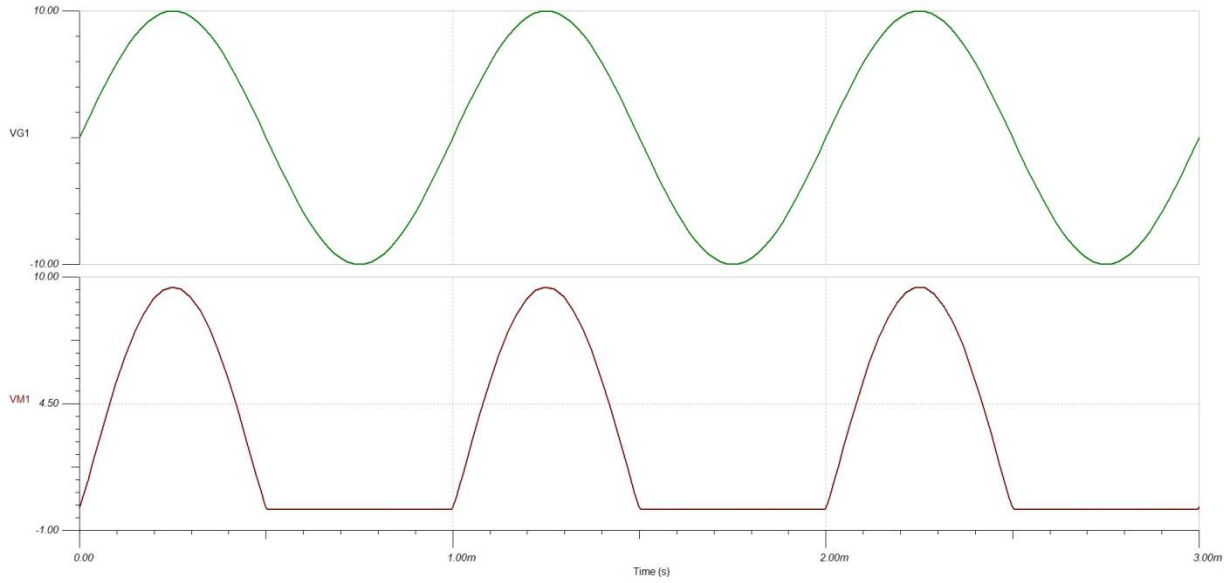


Step 13:

- Select “Insert” ->“Micro…” in TINA, Find your micromodel file(.TSM), Insert to the schematic.

Verify new micromodel





Step 14:

- Verify new micromodel with Transient Analysis in TINA-TI.

Thanks for your time!