**Importing the SPICE Model of 1N4007 Diode to LTSpice**

1. Have the latest version of LTSpice (or TINA TI) installed in your PC.

Note: If you want to use TINA TI, you do not need to import the 1N4007 SPICE Model. It is already included in its library (once you place a diode, search and select 1N4007 from TINA Library).

1. Download the SPICE Model of 1N4007 from the manufacturer’s website by visiting the link below:

<http://www.onsemi.com/PowerSolutions/supportDoc.do?type=models&part=1N4007>

Note: You only need to download the ‘PSpice Model’ file (the one on the top row). The downloaded file will have a default name ‘1N4007.REV0.LIB’.

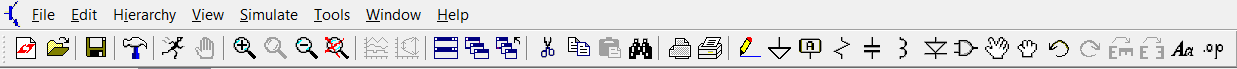
1. Locate the LTSpice installation directory in your computer. For Win 7 PC, it is something like this:

C:\Program Files\LTC\LTspiceXVII

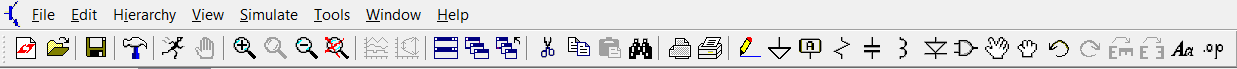
Once you locate the installation directory, go to the folder 🡪 lib 🡪 sub. Remember, you created a folder named ‘EE3401’ inside this ‘sub’ folder during HW1! Go to the folder 🡪 ‘EE3401’. Copy the downloaded ‘1N4007.REV0.LIB’ file here and rename it to ‘1N4007.LIB’.

Note: You should put all imported models in this ‘EE3401’ folder in the future.

1. Open the ‘1N4007.LIB’ using a text editor ([Notepad++](https://notepad-plus-plus.org/download/v7.7.1.html) is recommended). Search for the line starting with ‘.MODEL’. Edit this line: change ‘D1n4007’ to ‘1n4007’ by deleting the ‘D’.
2. Open LTSpice and create a new schematic by clicking 🡪 File 🡪 New Schematic.
3. Click on the ‘Component’ button on the top menu bar.



1. In the search box, search for ‘diode’. Place the diode in your schematic. If this is the first diode, it will be automatically tagged as D1 and will have a value ‘**D**’.
2. Right click on ‘**D**’ and ‘Enter new Value for D1’ as ‘**1N4007**’. Click OK.
3. On the top menu bar, click on the ‘SPICE Directive’ button. In the textbox, type ‘.include’. Now click OK and place it in your schematic by left click. Then right click on it and click on the ‘SPICE.lib directive’ radio button. Now click the ‘browse’ button and search for the ‘1N4007.LIB’ file inside the EE3401 folder (where you saved it in step 4). It should be something like this: "C:\Program Files\LTC\LTspiceXVII\lib\sub\EE3401\1N4007.LIB"



1. Select the ‘1N4007.LIB’ file and click OK.
2. You are done! Now wire the 1N4007 diode and simulate!