

January 10th, 2014
VERSION: 2.0

High-temperature_triacs PSpice models PC/WINDOWS INSTALLATION STEPS

1. Copy all the files to the ORCAD\CAPTURE\LIBRARY\PSICE directory.
2. Run ORCAD Schematics program.
3. Select the PART... option in the PLACE menu.
4. Click on ADD LIBRARY... button.
5. Search and select the high-temperature_triacs_symbols.olb file.
6. Press the OPEN button. The symbols will be automatically loaded.
7. Press CANCEL button.
8. Now, select EDIT SIMULATION PROFILE option in the PSPICE menu.
9. Select LIBRARY option in Configuration files menu.
10. Click BROWSE... button
11. Search and select the high-temperature_triacs_pspice.lib file.
12. Press the OPEN button.
13. Press the ADD AS GLOBAL button.
14. Press the OK button.
15. Congratulations, you are now ready to use your new STMicroelectronics model library.

* High-temperature triacs PSpice Models *

* This High Temperature Junction (High Tj) TRIAC model simulates:

* -I_{GT} (the same for all quadrants) MAX of the specification

* -I_L (the same for all quadrants) typ of the specification ($I_{L_Spice} = I_H / 2$)

* -I_H (the same for both polarity) typ of the specification ($I_{H_Spice} = I_H / 3$)

* -V_{DRM}

* -V_{RPM}

* -(dI/dt)_C and (dV/dt)_C parameters are simulated only if those constraints exceed very highly the specified limits.

* -Power dissipation is realistic and correspond to a typical High Tj TRIAC

* All these parameters are constant, and don't vary neither with temperature

* nor other parameters.

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* All High Tj TRIACs are snubberless TRIACs (STANDARD = 0).

* The "STANDARD" parameter maintains or suppress the triggering

* possibility of the TRIAC in the fourth quadrant, and has absolutely NO EFFECT

* on other parameters.

* For a correct High Tj TRIAC behavior, the "Maximum step size" must be below or equal 20μs
