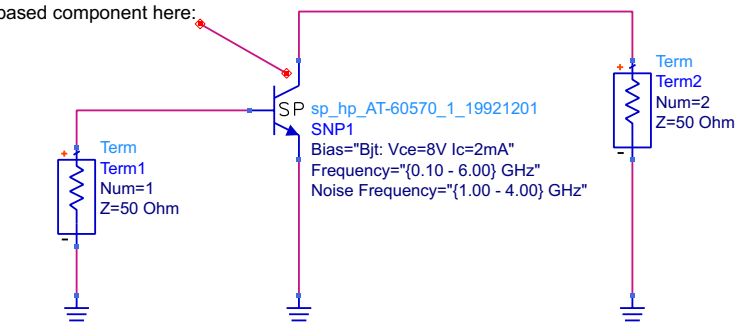
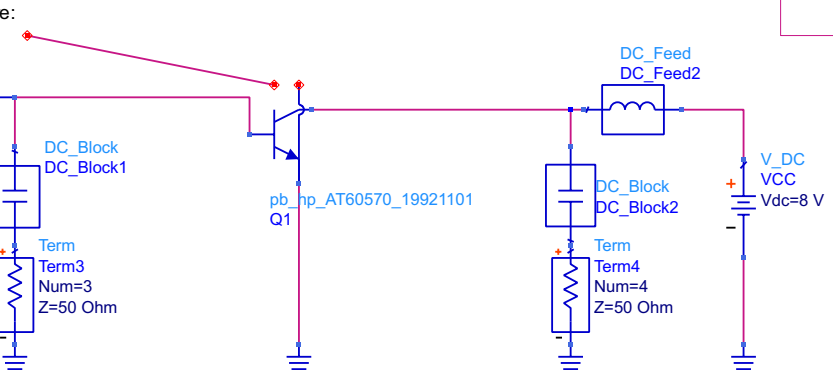
Comparing Representations: Device Data vs. Model

Measured S-parameters on thousands of active devices are available in the S-parameter LIbrary. Select the Library browser icon, and scroll down to "S Parameter Library (No Layout)". No license is required to access these libraries.

Nonlinear, large-signal models are available in the RF Transistor Library, which is also accessed using the the Library Browser. A license is required to access these models.





S_Param
SP1
Start=1.9 GHz
Stop=2.2 GHz
Lin=

S-parameters for both devices will be calculated. Representing the 2 2-port transistors using a single 4-port simulation is an easy way to compare 2 results side-by-side. Results are displayed in ModelVerif.dds.

An equivalent method would be to create 2 separate designs, one for each representation of the device, calculate each set of 2-port paramters, and call the separate data sets in the data display.

Notice that VBE has been set at 0.7753V to ensure the device will draw ICE=10mA for VCC=8V. This value for VBE is calculated in BiasSetup.dsn. Using these values ensures that the model is operating at the same bias that the measured data was taken at.