



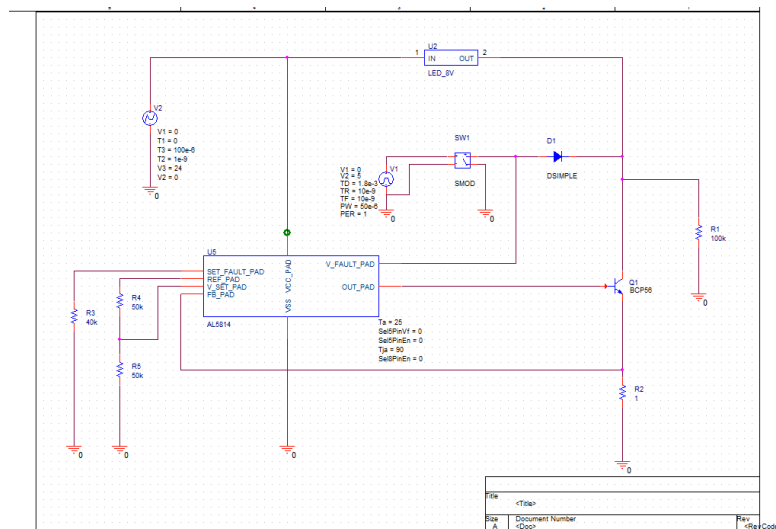
AL5814 PSPICE Model

The AL5814 macro-model provides a basic simulatable model of the device. To use the model follow these steps:

1. In OrCad Capture, add the AL5814_ENC.lib to both the Library and Model Libraries folders for your design hierarchy.
2. Then from the schematic capture window,
 - a. Select -> Add Parts
 - b. Then -> Add Library
 - c. And add the AL5814_ENC.OLB file

Now you can place the AL5814_ENC.OLB in a schematic. Set the two required input parameters: Tja and Ta. Tja is Theta-JA and Ta is the ambient temperature. The three remaining parameters: Sel5PinVf, Sel5PinEn, and Sel8PinEn are set to 0 and should not be changed. These parameters are used internally to configure the model.

A sample test circuit TB_AL5814.cir has been included. To use this circuit, just define the path to the AL5814_ENC.lib file in the .LIB line near the top of the file.



The following examples illustrate how to use the macro-model. In this case, Tja= 90 and Ta=25. The test circuit voltage supply is set to 24V.



Note that in this test circuit the value of $R3$ is set based on the value of VCC .

Here is the resulting waveform for this example with the circuit in normal operation:

