

## **EE4306 Tutorial**

### **Mixer Simulation**

Using Microwave Office, use one of the examples to design a single diode mixer and a double balanced mixer to have an IF frequency of 10.7 MHz and an RF frequency covering the FM band of 88 to 108 MHz. The LO frequency should be higher than the RF frequency. Measure the conversion loss of both mixers and show the RF spectra when using the mixers as up-converters.

C. J. Kikkert  
October 2004