

*Lec 04 -- Diode-Resistor Problem, Small Signal Diodes*

What physical phenomenon causes junction capacitance?

Is there a closed-form analytical solution for the series diode-resistor I-V relationship?

Draw a load line graph for a series diode-resistor circuit

What mathematical concepts do we invoke when we do a small signal analysis?

What is the notation convention for total signal, DC signal and small signal?

When drawing small signal equivalent circuits, what do you do to DC voltage sources?

What is the small signal model for a diode? How did we derive it?

What is the difference between a DC simulation, an AC simulation and a transient simulation?