

Reading questions Sections 3.8, 4.1 and 4.2

What are the steps used in analyzing a nonlinear electronic circuit?

What effects cause the Shockley equation for a diode to be inaccurate?

What are the 3 operating regions of a Bipolar Junction Transistor?

Which region of operation is used to obtain amplification of a signal?

What device conditions are needed to achieve a high Beta (Current gain)?

What is the meaning of a transistors alpha and beta, and what is the mathematical relationship between them?

How can alpha and beta be determined from the devices characteristic curves?

What are the important secondary effects in BJT operation?

What is the difference between avalanche breakdown and punch through?

How is the load line method related to the simultaneous solution of a system of non-linear equations?