

## *Lecture 10 -- S-Parameters*

What is driving point impedance? What is the driving point impedance of an infinite line?

How does the driving point impedance of a terminated line driven by a square pulse vary with time?

How do you calculate the driving point impedance of a terminated line driven with a sinusoid?

What is a port?

What is a 1 port model and how does it relate to Thevenin impedance?

Why can't Thevenin impedance be used on two port circuits?

Can 1 port and 2 port models that we discuss capture non-linearity? What if the signals are small?

What equations and circuit models describe Z-parameters?

What loads and test sources do you attach to your 2 port to measure Z-parameters?

What are the Z-parameters of a resistor divider?

What are two reasons that we don't we use Z-parameters for RF measurements?

What are the input and output variables for S-parameters?

What loads and test sources do you attach to your 2 port to measure S-parameters?