

*Lecture 13 -- Power and S-Parameters*

How can we express port voltages and currents in terms of a and b in a 2-port?

How can we express a and b in terms of port voltages and currents in terms of a 2 port?

How do you find the S11 and S22 of a lumped circuit model?

How do Z parameters relate to S parameters?

How do you find  $S_{21}$  and  $S_{12}$  of a lumped circuit model?

How do you calculate power when you are expressing voltage in an analytic form?

How much power is delivered to a purely imaginary load instantaneously? How about on average?

What happens to power “rejected” by a load?

How much power is carried in the a and b waves in a 2 port system?

How much power is reflected from a 1-port? How much power is dissipated in a 1-port?