

EE 610
09/01/11

Note Title

9/1/2011

Topics: $\left. \begin{array}{l} \text{KVL} \\ \text{KCL} \end{array} \right\} \begin{array}{l} \text{out-lets} \\ \text{tie-sets} \end{array}$

Circuit equations semi-state eqs.
admittance = $Y(a)$, $S(a) =$ scattering matrix
 Y indefinite

\Rightarrow another is given $Y(a)$, $S(a) \Rightarrow$ get a circuit

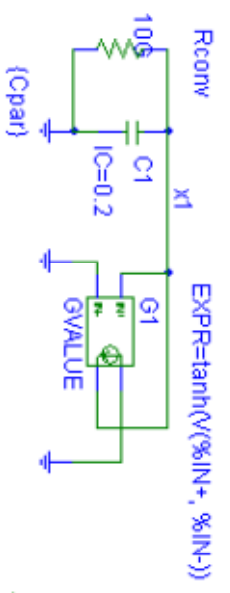
passive & active

\Downarrow
positive-real $Y(a) \Rightarrow$ Richards' function
bounded-real $S(a)$

if time \Rightarrow G'_t solutions of nonlinear differential

Main tool is Spice \Rightarrow PS spice

1



file: F:\610_tanh.sch

dx1/dt=tanh(x1) x1(0)=0.2

PARAMETERS:
Cpar 1