

0.1 Parametri Y

$$Y_{IN} = Y_I - \frac{Y_F Y_R}{Y_O + Y_L}$$

$$Y_{OUT} = Y_O - \frac{Y_F Y_R}{Y_I + Y_S}$$

$$G_P = \frac{|Y_F|^2}{|Y_L + Y_O|^2} \frac{g_L}{g_{IN}}$$

$$G_A = \frac{|Y_F|^2 g_S}{\Re \{ (Y_O Y_S + Y_O Y_I - Y_R Y_F) (Y_I + Y_S)^* \}}$$

$$G_T = \frac{4g_S g_L |Y_F|^2}{|(Y_S + Y_I)(Y_O + Y_L) - Y_R Y_F|^2}$$

$$K = \frac{2(g_I + g_S)(g_O + g_L)}{\Re \{ Y_R Y_F \} + |Y_R Y_F|}$$

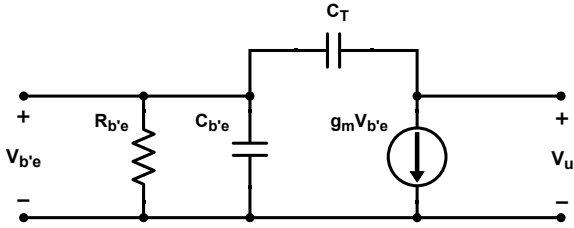
$$C = \frac{|Y_R Y_F|}{2g_I g_O - \Re \{ Y_R Y_F \}}$$

$$g_{S_{opt}} = \frac{\sqrt{[2g_I g_O - \Re \{ Y_R Y_F \}]^2 - |Y_R Y_F|^2}}{2g_O}$$

$$g_{L_{opt}} = g_{S_{opt}} \frac{g_O}{g_I}$$

$$b_{S_{opt}} = -b_I + \frac{\Im Y_R Y_F}{2g_O}$$

$$b_{L_{opt}} = -b_O + \frac{\Im Y_R Y_F}{2g_I}$$



$$Y_{Ie} = 1/R_{b'e} + j\omega(C_{b'e} + C_T)$$

$$Y_{Re} = -j\omega C_T$$

$$Y_{Fe} = g_m - j\omega C_T$$

$$Y_{Oe} = j\omega C_T$$