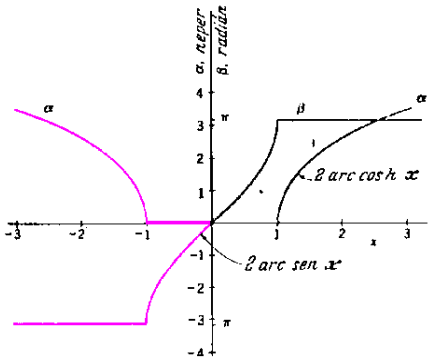
DISEÑO DE FILTRO PASA_ALTOS DE K_{KTE}

DATOS: ω_C y R_O

SELECCIONAR BANDA PASANTE EN CURVA DE K_{CTE}



SELECCIONAR TIPO DE REACTANCIA PARA Z_{K1} Y Z_{K2}

Z_{K1} { PERMITE PASAR FREC.ALTAS; SE OPONE AL PASO DE FREC.BAJAS } $\frac{1}{j\omega C_1}$

Z_{K2} { PERMITE PASAR FREC.BAJAS; SE OPONE AL PASO DE FREC.ALTAS } $j\omega L_2$

DEL GRÁFICO

$$\sqrt{\frac{Z_1}{4 * Z_2}} = -1 \Rightarrow \frac{Z_1}{2 * R_o} = -j1$$

$$Z_{K1} = \frac{1}{j\omega_C C_1} = -j2 * R_O$$

$$\therefore$$

$$C_1 = \frac{1}{2 * R_O * \omega_C}$$

RECORDANDO

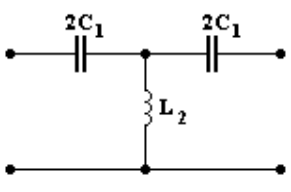
$$Z_{K1} * Z_{K2} = R_O^2$$

$$Z_{K2} = j\omega_C L2 = \frac{R_O^2}{Z_{K1}} = \frac{R_O^2}{\frac{1}{j\omega_C \frac{1}{2 * R_O \omega_C}}}$$

$$L_2 = \frac{R_O}{2 * \omega_C}$$

COMO COMPROBACIÓN

$$\omega_C = \frac{1}{2 * \sqrt{L_2 * C_1}}$$



MATLAB
EWB5
MICROCAP III
PSPICE