

With Interference $\Delta Y = -800 \text{ mV}$ $20 \text{ MHz}, 1 \text{ Vpp}$

$\Delta Y = 1.925 \text{ V}$

With choke $\Delta Y: -375 \text{ mV}$

$2.5 \text{ Vpp } 20 \text{ MHz}$

With 2 chokes: $\Delta Y = 500 \text{ mV}$

With 2 chokes $\Delta Y: -262.5 \text{ mV}$

Attenuation $_{dB} = 20 \log_{10} \left(\frac{-262.5 \text{ mV}}{-800 \text{ mV}} \right) = -9.679$ 20 MHz
 1 Vpp

Attenuation $_{dB} = 20 \log_{10} \left(\frac{500 \text{ mV}}{1.925 \text{ V}} \right) = 20 \log_{10} \left(\frac{0.5}{1.925} \right) = -11.709$ 20 MHz
 2.5 Vpp

Diminishing Returns \rightarrow 2 chokes max is the best & most practical.

1 uH W/inductor @ 2.5 V : 937.5 mV

W/o inductor @ 2.5 V : 1.787 V

10 mH W/inductor @ 2.5 V : It spiked and then smoothed out

Adding a large inductor: introduces a lot of noise