Shunt Peaking:
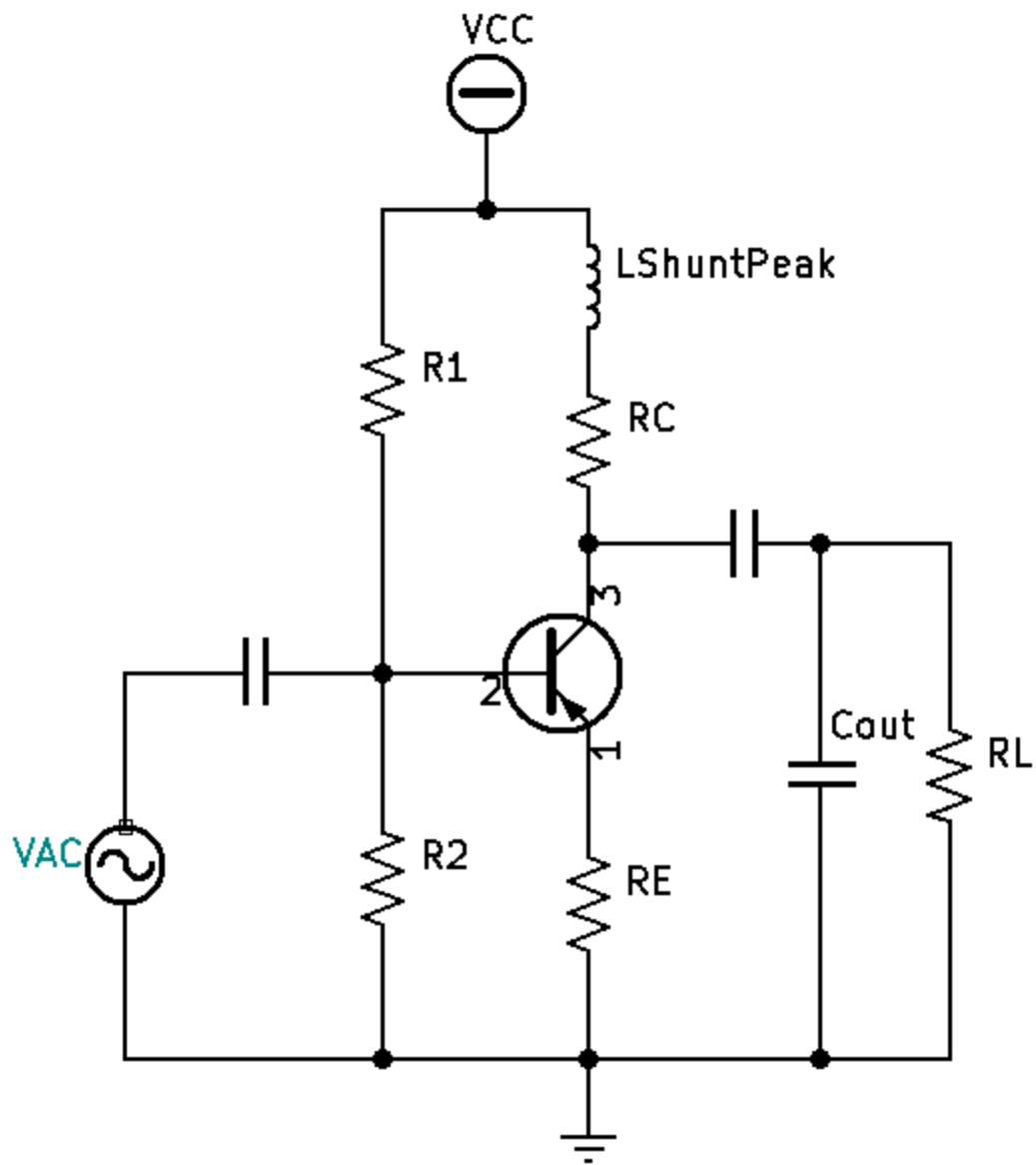
- Calculate and or Measure your existing fch.

- Determine your actual $Cout$ based off measured fch .

- Design Shunt Peaking of optimal flatness using an Improvement Factor of $k = 1.414$

  - Calculate $newfch$:

    - $newfch = oldfch \times k$

    - $newfch = oldfch \times 1.414 \ (optimal \ flatness)$

  - Calculate L:

    - Make $fr = .707(oldfch)$

    - $fr = \dfrac{1}{2\pi\sqrt{LC}}$

    - $.707(oldfch) = \dfrac{1}{2\pi\sqrt{LC_{out}}}$

    - $\sqrt{LC_{out}} = \dfrac{1}{2\pi(.707oldfch)}$

    - $LC_{out} = (\dfrac{1}{2\pi(.707oldfch)})^2$

    - $L = \dfrac{(\dfrac{1}{2\pi(.707oldfch)})^2}{C_{out}}$

    - $L = C_{out}^{-1}(\dfrac{1}{2\pi(.707oldfch)})^2$