```
.ac dec 1000 1e1 1e3
.param Re=3.5 Le=1.18e-3 Bl=8.7 Mms=38.64e-3 Cms=0.3e-3 Rms=2.57 Sd=127e-4 Pref=2e-5 pi=3.14159265 rho=1.18 c=343
.tran 1 startup
.param Vbb=0.050 Cabb={Vbb/(rho*c*c)}
.param Lpb=530e-3 apb=30e-3 Spb={pi*apb*apb} Mapb={rho/Spb * (Lpb + 1.5 * sqrt(Spb/pi))}
.op
.param Lpf=297e-3 apf=30e-3 Spf={pi*apf*apf} Mapf={rho/Spf * (Lpf + 1.5 * sqrt(Spf/pi))}
.param Ug=1
.param Rae=\{(Bl*Bl)/(Re*Sd*Sd)\}\ Mas=\{Mms/(Sd*Sd)\}\ Ras=\{Rms/(Sd*Sd)\}\ Cas=\{Cms*Sd*Sd\}
.param Vbf2=0.0065 Cabf2={Vbf2/(rho*c*c)}
                                      L3
                             R1
                                             C2
                                                   R2
         v_in
                                                                                i_L_f
                                    {Mas} {Cas} {Ras}
                            {Rae}
                       V1
                                                                                                  \llL12
                                                                                                                                {rho/(2*pi) * 1/Pref}
                                                                                                     {Mms}
                                                                                                                 i_L_f
                                                                      C6
                                                                                                C7
                                                                               L1
                       AC {BI*Ug/(Re*Sd)}
                                                                      {Cabf2}
                                                                                             {Cms}
                                                                                {Mapf}
                                                                                               R3
                                                                                                                   F3
                                                                      C4
                                                                                L5
                                                                                           {Rms}
                                                                                                                             \simL10
                                                                                {Mapb}
                                                                      {Cabb}
                                                                                                                                {rho/(2*pi) * 1/Pref}
```

i L b

slaved\_pb

i\_L\_b