

```
1 clear;
2 home;
3
4 R = 43.0; %Units: Ohms
5 C = 230.0e-10; %Units: Farads
6 L = 34.0e-6; %Units: Henries
7
8 omega_LC = 4.0/(sqrt(L*C));
9 tau = R*C;
10 omega = [0.0:1.0e3:2.0e6]*2.0*pi;
11 k = sqrt(1-(omega/omega_LC).^2);
12 d = k.^4+(omega*tau).^2;
13 x = k.^4;
14 y = k.^2.*omega*tau;
15 h = x./d - i*y./d;
16
17 plot(omega/2/pi/1e6,20*log10(abs(h)),'linewidth',2.0,'color','blue')
18 set(gca(),'fontname','Courier','fontsize',18)
19 xlabel('Frequency [MHz]')
20 ylabel('Transfer [dB]')
```