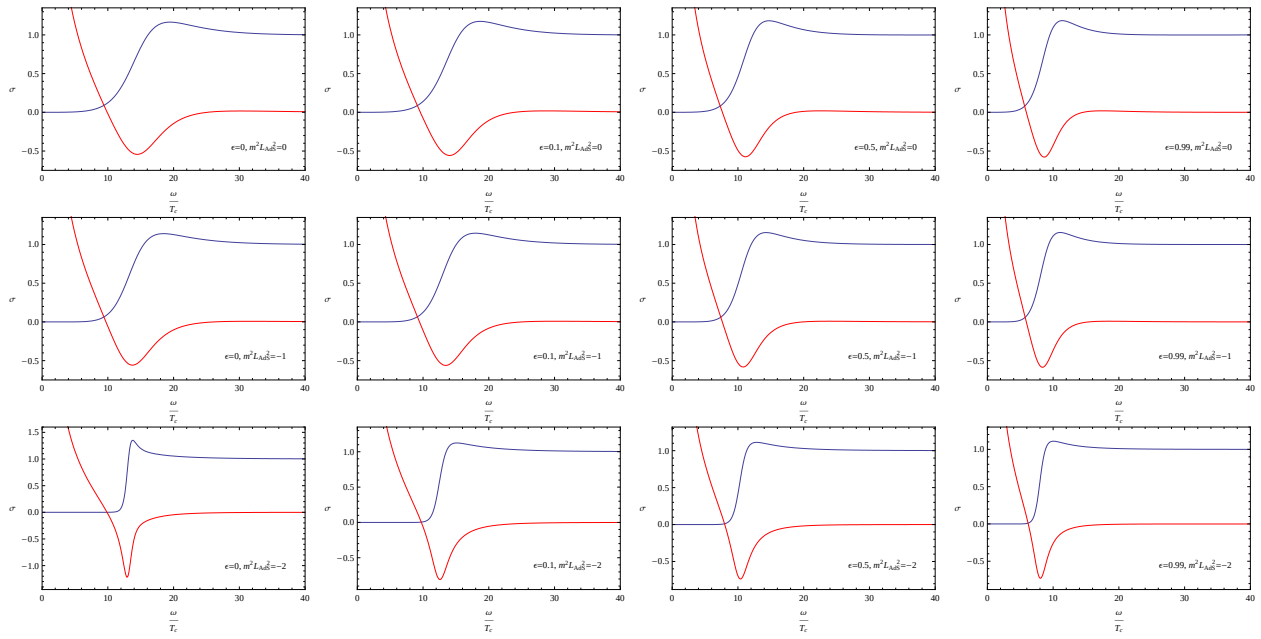

FIG. 4: (Color online) The conductivity of the superconductors for $\epsilon = 0,\ 0.1,\ 0.5$ and 0.99 with $m^2L^2_{AdS} = 0,\ -1$ and -2. The solid (blue) line represents the real part of the conductivity, $Re(\sigma)$, and dashed (red) line is the imaginary part of the conductivity, $Im(\sigma)$.

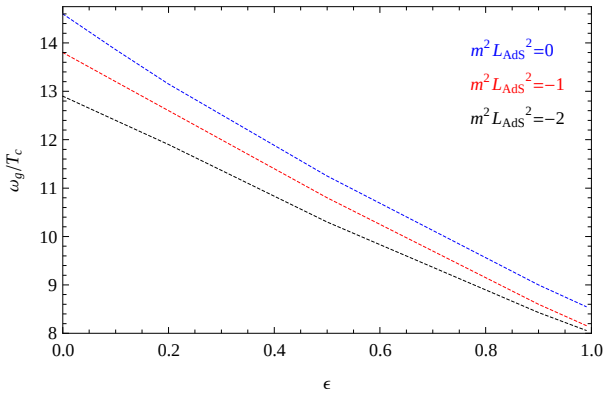

FIG. 5: (Color online) The ratio ω_g/T_c as a function of the balance parameter with fixed values $m^2L^2_{AdS}$.

In Fig. 4 we plot the frequency dependent conductivity obtained by solving the Maxwell equation numerically for $\epsilon = 0,\ 0.1,\ 0.5$ and 0.99 with $m^2L^2_{AdS} = 0,\ -1$ and -2. We find a gap in the conductivity with the gap frequency ω_g. For the same value of $m^2L^2_{AdS}$, the gap frequency ω_g decreases with the increase of the constant ϵ. In each plot, the real part of the conductivity, Re[σ], approaches to a limit when the frequency grows. The limit for the case $\epsilon = 0$ is one, but general it increases as ϵ increases. The imaginary part of conductivity Im[σ] becomes zero when $\omega \to \infty$, but it goes to