$$\mathbf{F} \longrightarrow \mathbf{J} = -i\frac{k}{Z_0}(\epsilon_{\mathrm{C}} - 1)\mathbf{E} \longrightarrow \mathbf{K} = -i\frac{kT_{\mathrm{C}}}{Z_0}(\epsilon_{\mathrm{C}} - 1)\mathbf{E}$$