$$x(t) \xrightarrow{h(t)} y(t) = h(t) * x(t)$$

$$\downarrow \mathcal{F} \qquad \qquad \downarrow \mathcal{F}$$

$$X(j\omega) \xrightarrow{H(j\omega)} Y(j\omega) = H(j\omega)X(j\omega)$$