

C. Microwave Sources

Q: A passive load Z_L specifies $Z(z)$ and $\Gamma(z)$, but we still don't explicitly know $V(z)$, $I(z)$ or $V^+(z)$, $V^-(z)$. How are these functions determined?

A: All of these quantities are zero, unless a source (generator) is applied to trans. line. The **boundary condition** enforced by the generator will then **explicitly** determine these functions!

HO: A Transmission Line Connecting Source and Load

Q: OK, we can **finally** ask the question that we have been concerned with since the very beginning: How much **power** is delivered to the load by the source?

A: HO: Delivered Power

Q: So the power transferred depends on the **source**, the **transmission line**, and the **load**. What combination of these devices will result in **maximum** power transfer?

A: HO: Special Cases of Source and Input Impedances