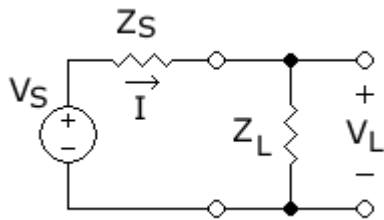


Answer on Question #43357-Physics-Atomic Physics

What is the circuit which makes the matching?

Answer

In electronics, impedance matching is the practice of designing the input impedance of an electrical load or the output impedance of its corresponding signal source to maximize the power transfer or minimize signal reflection from the load.



In the case of a complex source impedance Z_S and load impedance Z_L , maximum power transfer is obtained when the source impedance equals the complex conjugate of the load impedance

$$Z_S = Z_L^*$$

where the asterisk indicates the complex conjugate of the variable.