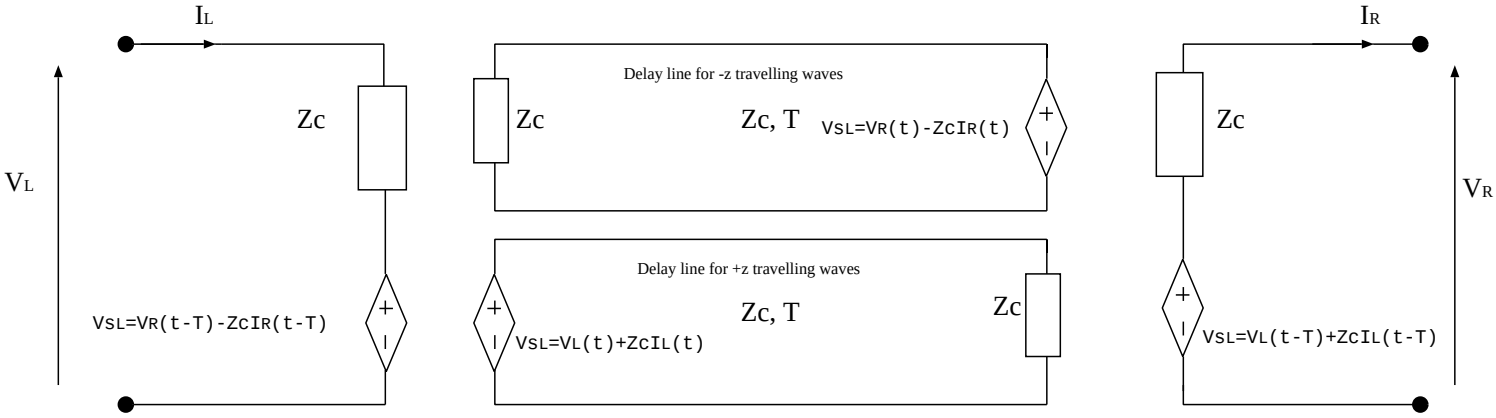Method of characteristics network