

LE RETI DI ADATTAMENTO A "L"

By iw2fnd Lucio

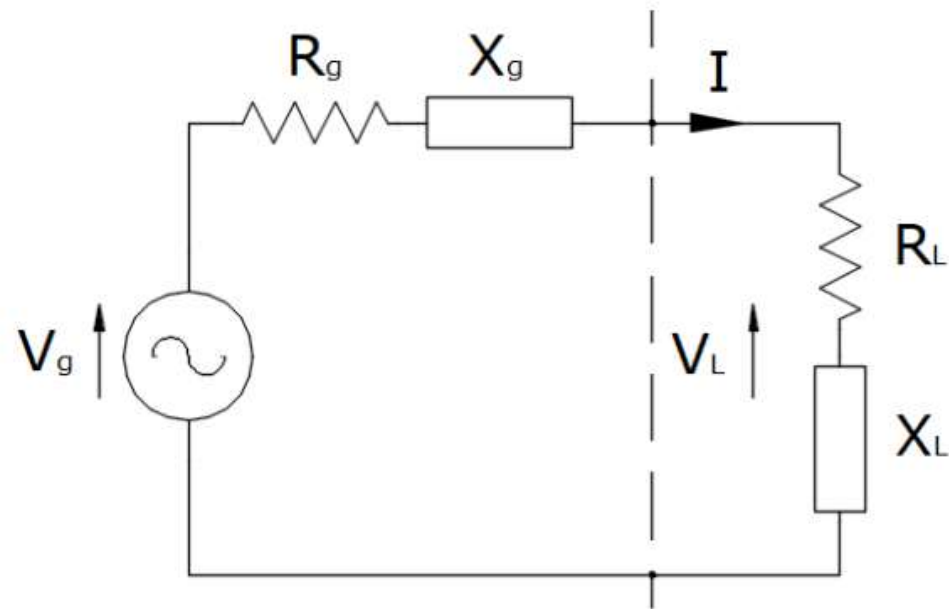
MASSIMO TRASFERIMENTO di ENERGIA

Condizione di massimo

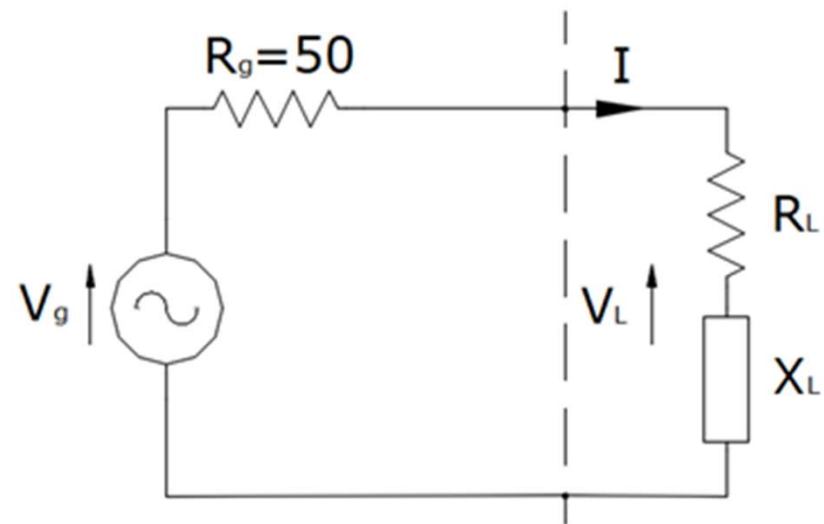
$$\begin{cases} R_g = R_L \\ X_g + X_L = 0 \end{cases}$$

Massima Potenza trasferibile

$$P = \frac{|V_g|^2}{4R_g}$$



MODELLO LINEA - ANTENNA



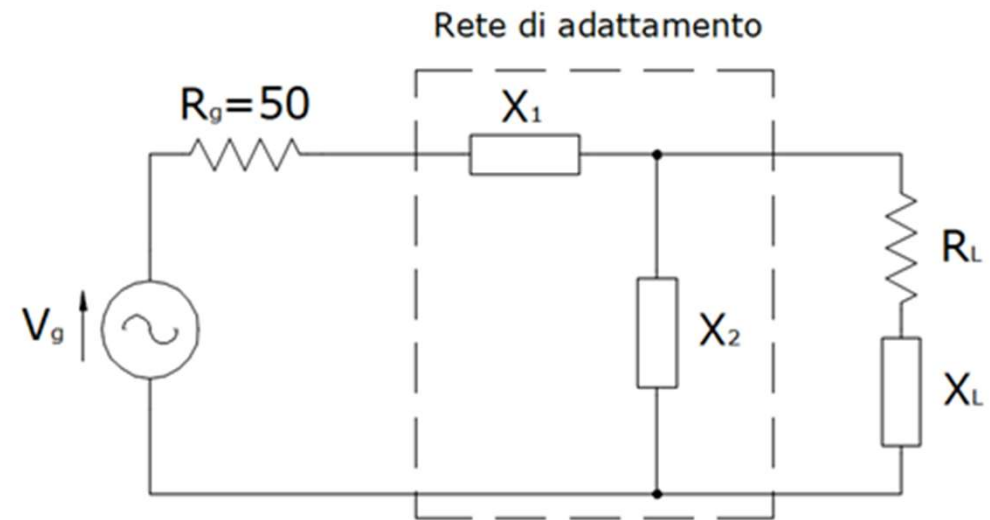
ADATTAMENTO ENERGETICO con RETE ad "L"

Fattore di merito

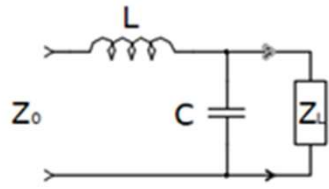
$$Q = \sqrt{\frac{R_{Max}}{R_{min}} - 1}$$

Banda passante

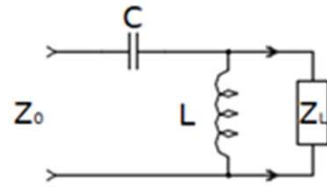
$$BW = \frac{f}{Q}$$



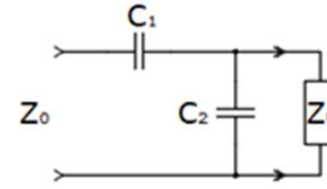
RETI ad "L" POSSIBILI



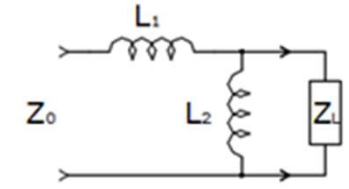
Tipo A



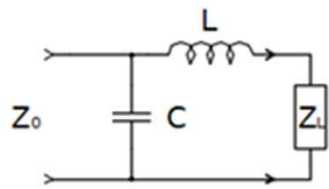
Tipo B



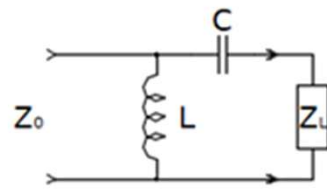
Tipo E



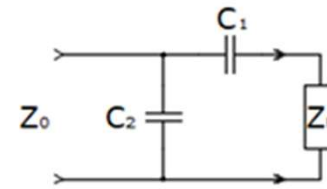
Tipo F



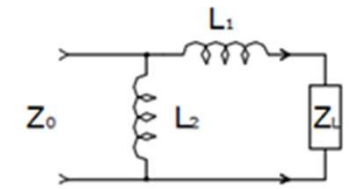
Tipo C



Tipo D

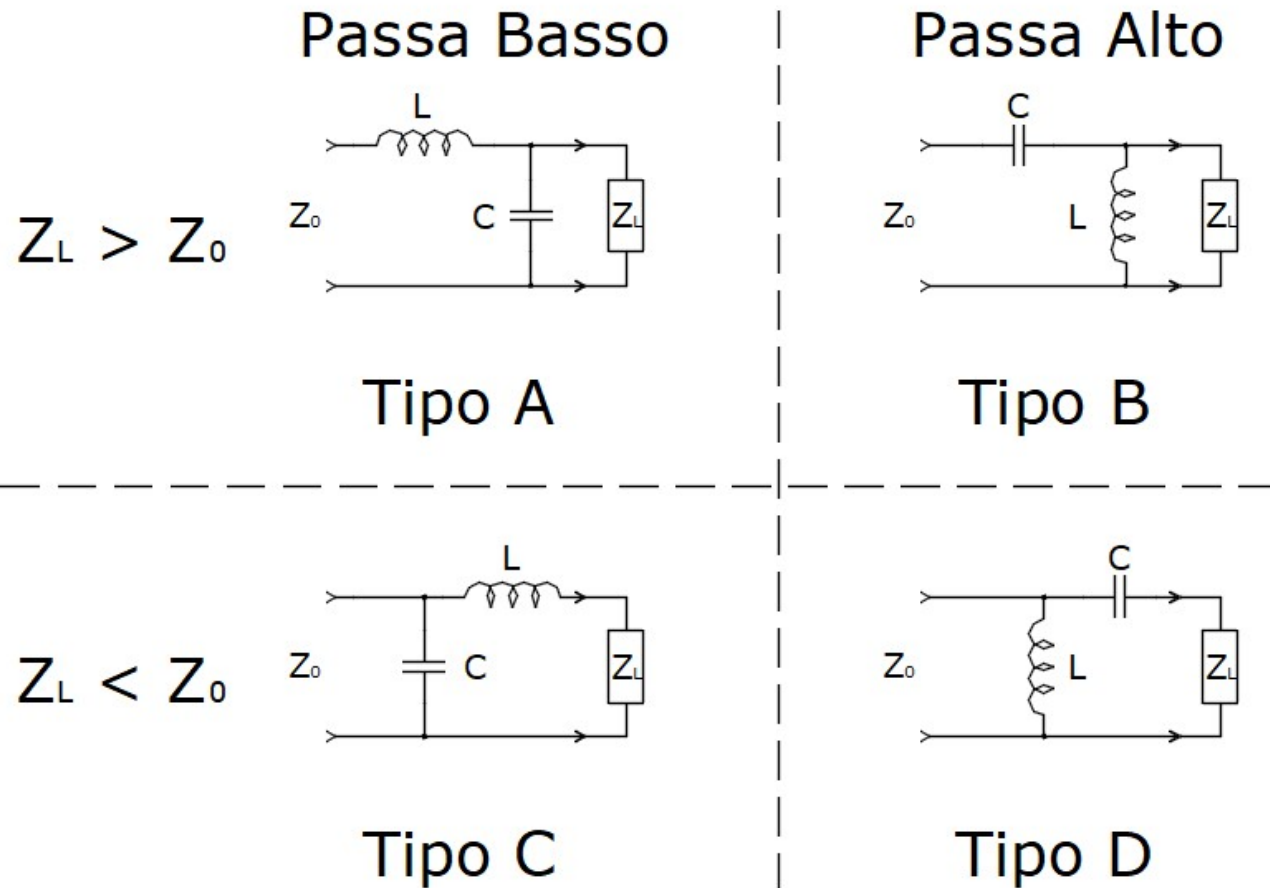


Tipo G

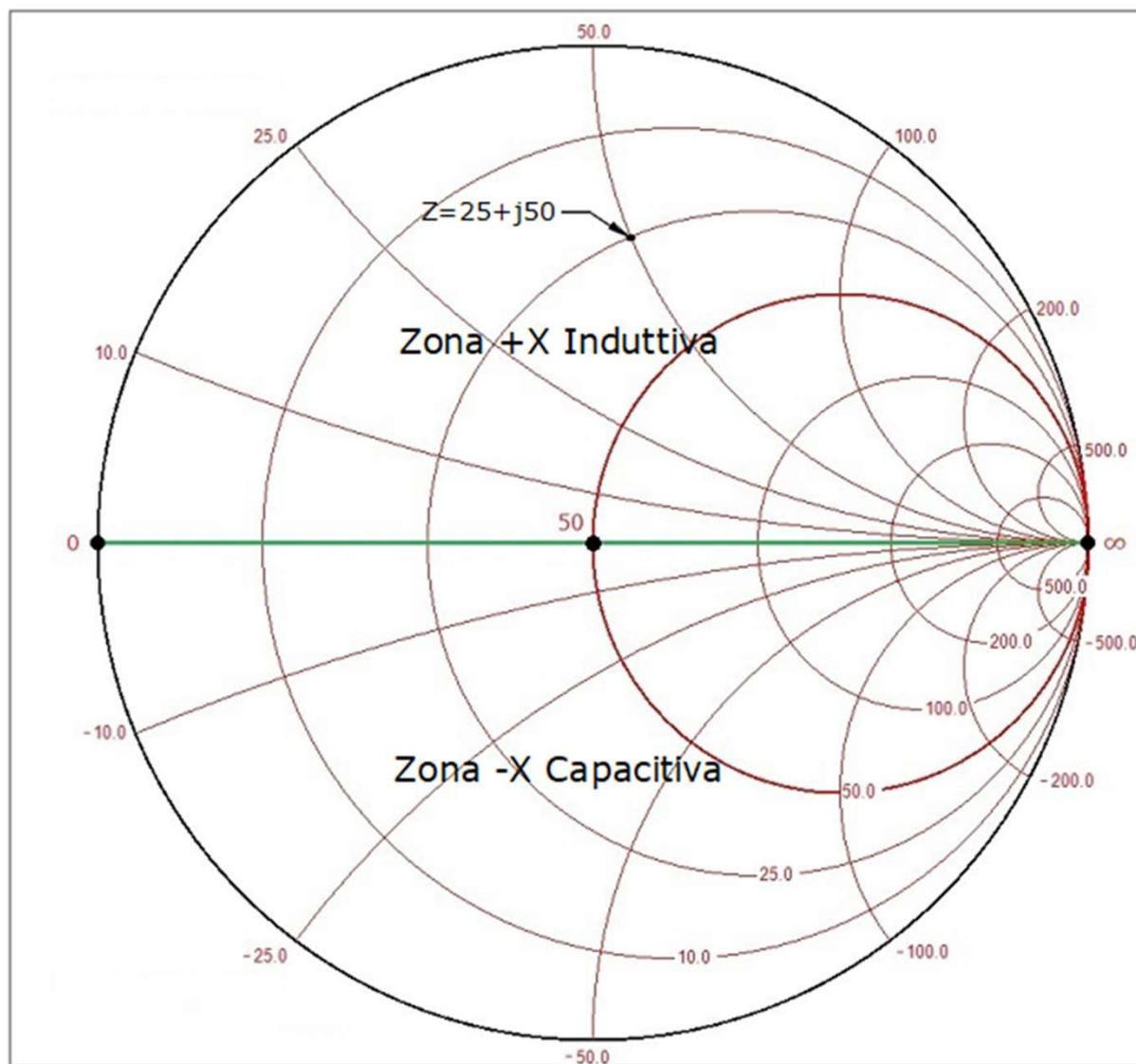


Tipo H

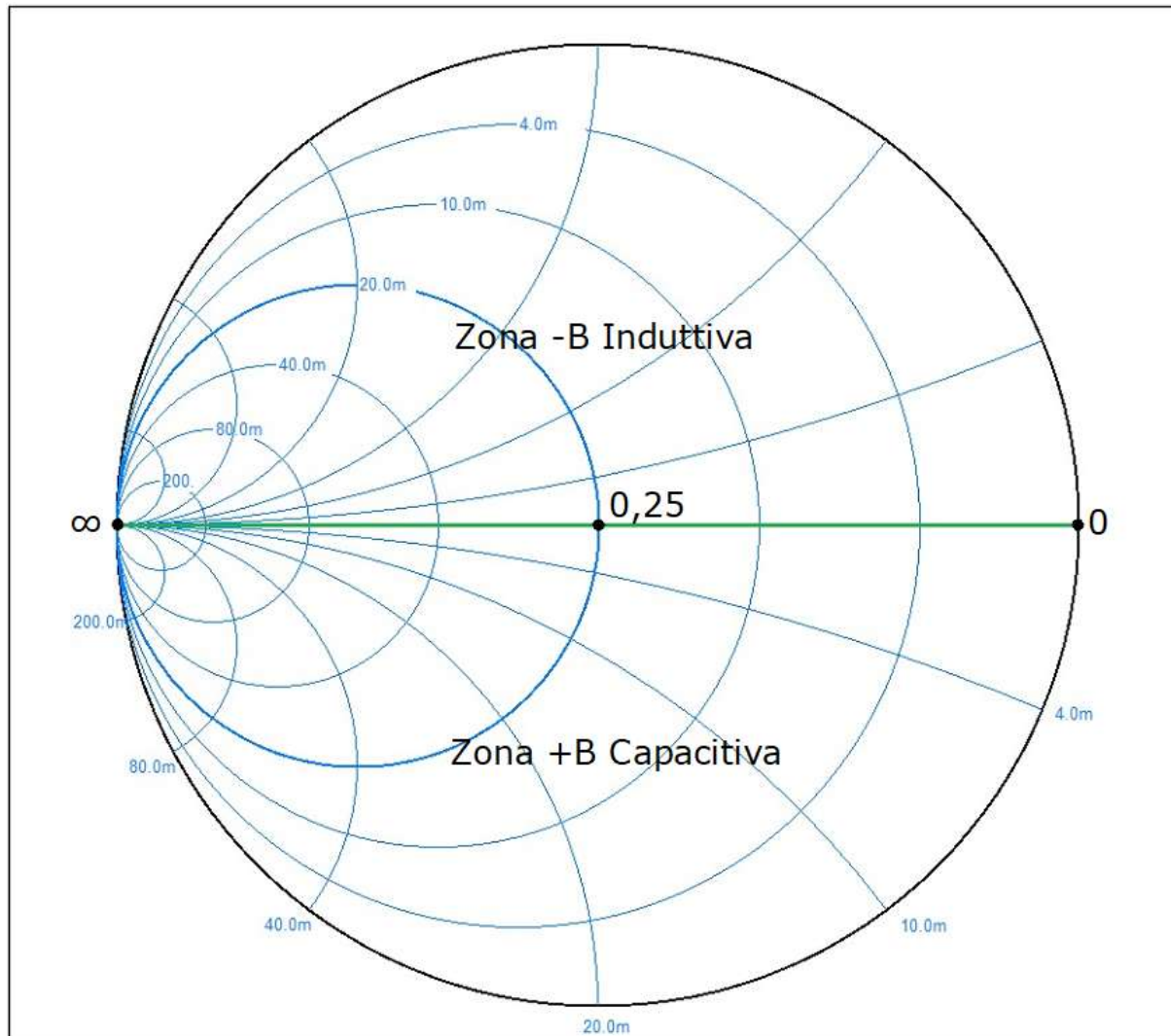
USO delle RETI ad "L"



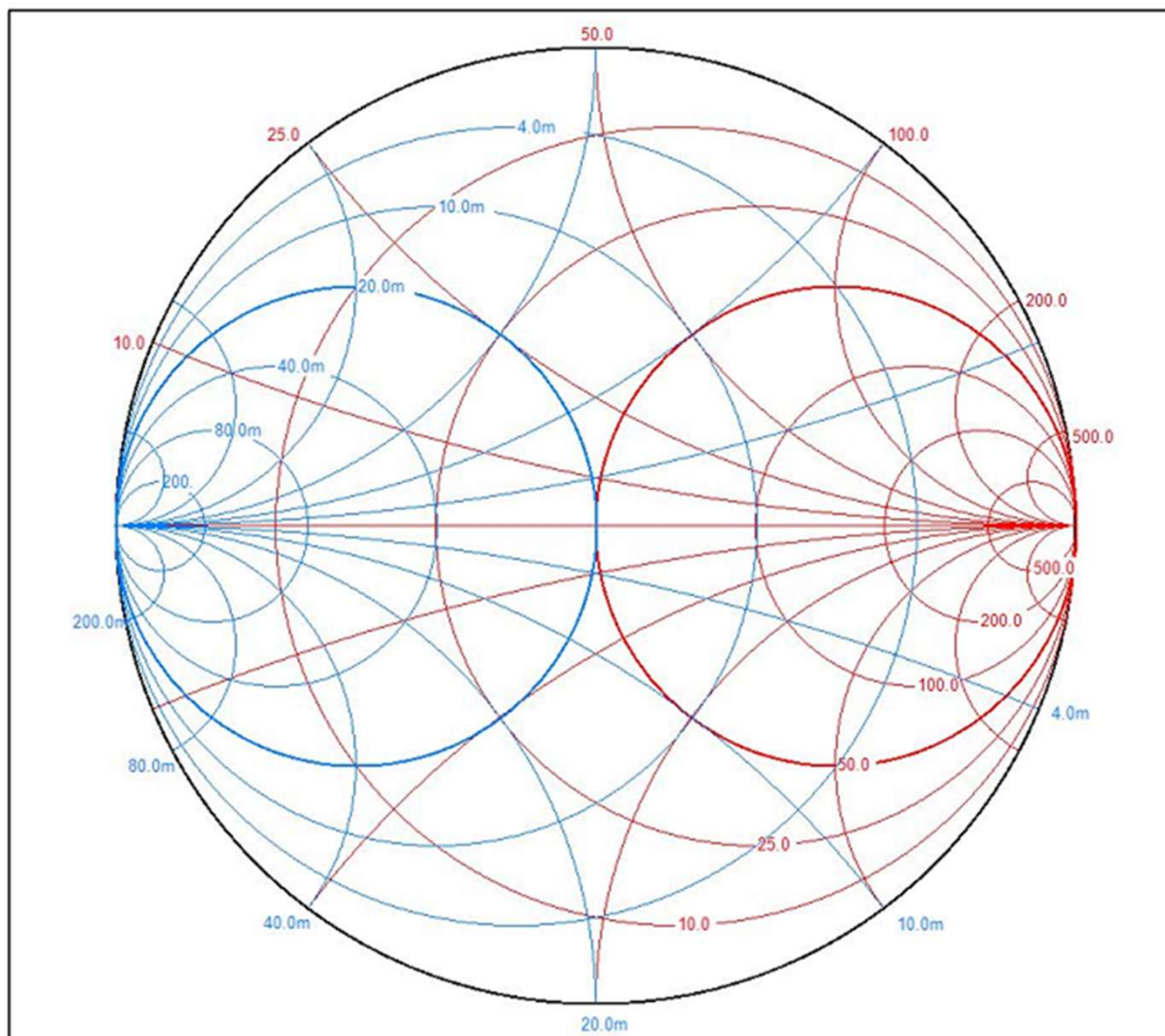
La CARTA di SMITH
delle IMPEDENZE Z



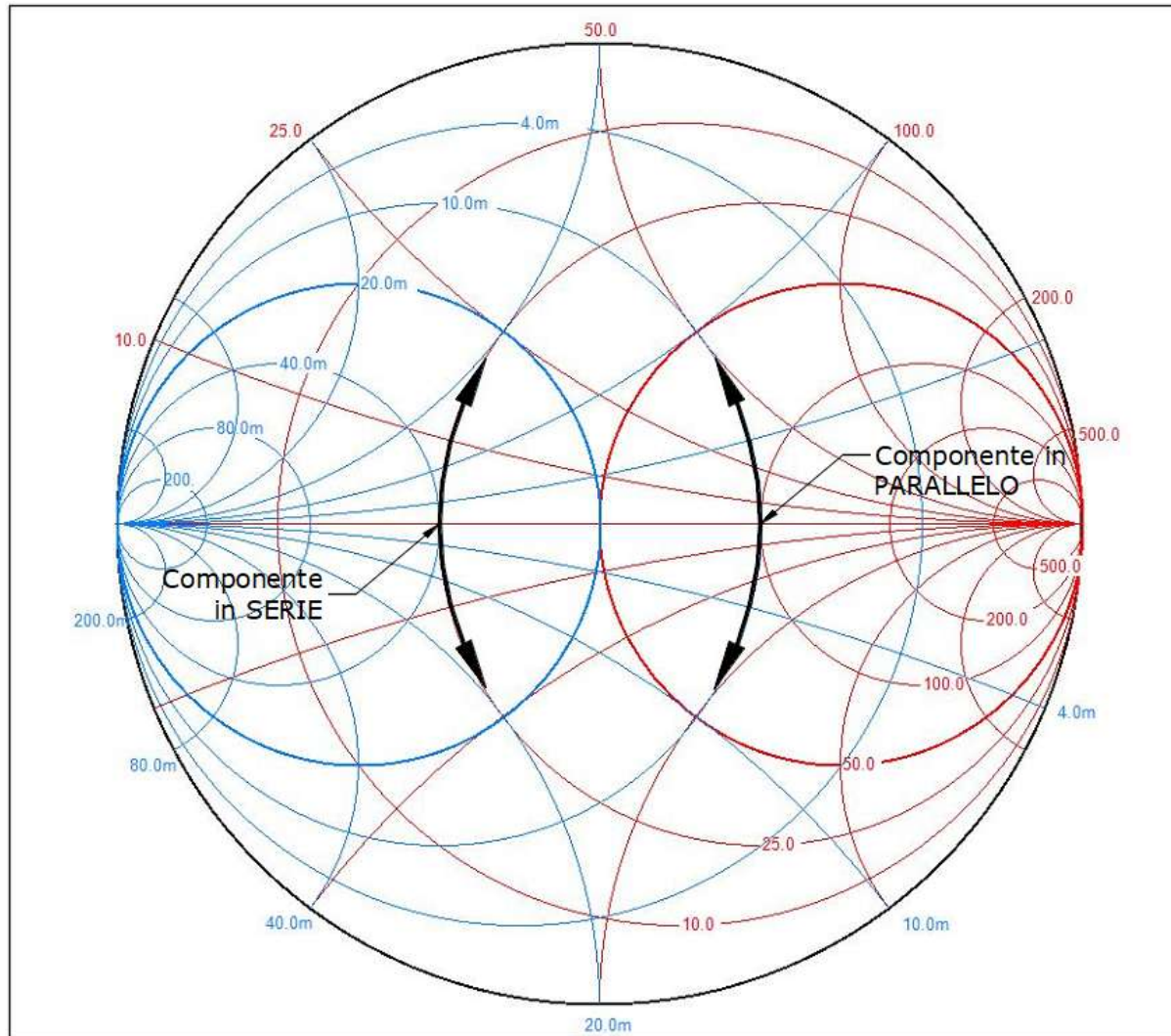
La CARTA di SMITH
delle AMMETTENZE Y



La CARTA di SMITH
COMBINATA Z-Y



La CARTA di SMITH



Il SW Smith V4.1



Smith V4.1

This software has been designed by Prof. Fritz Dellsperger
and Dipl. Ing. M. Baud

© 1995 – 2018 Bern University of Applied Sciences
Switzerland

Licensed version

This version of Smith is licensed to:

Attolini Lucio, IW2FND
Via XXV Aprile, 52/b
I-26037 San Giovanni in Croce (CR)

Bern University of Applied Sciences
Prof. F. Dellsperger

fritz@dellsperger.net
www.fritz.dellsperger.net

OK

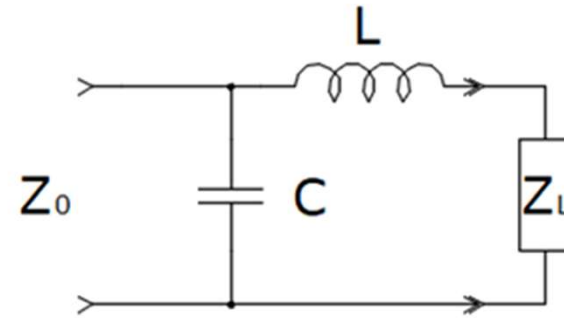
Current assembly version: 4.1.00

L'ESEMPIO

Antenna per i 40m

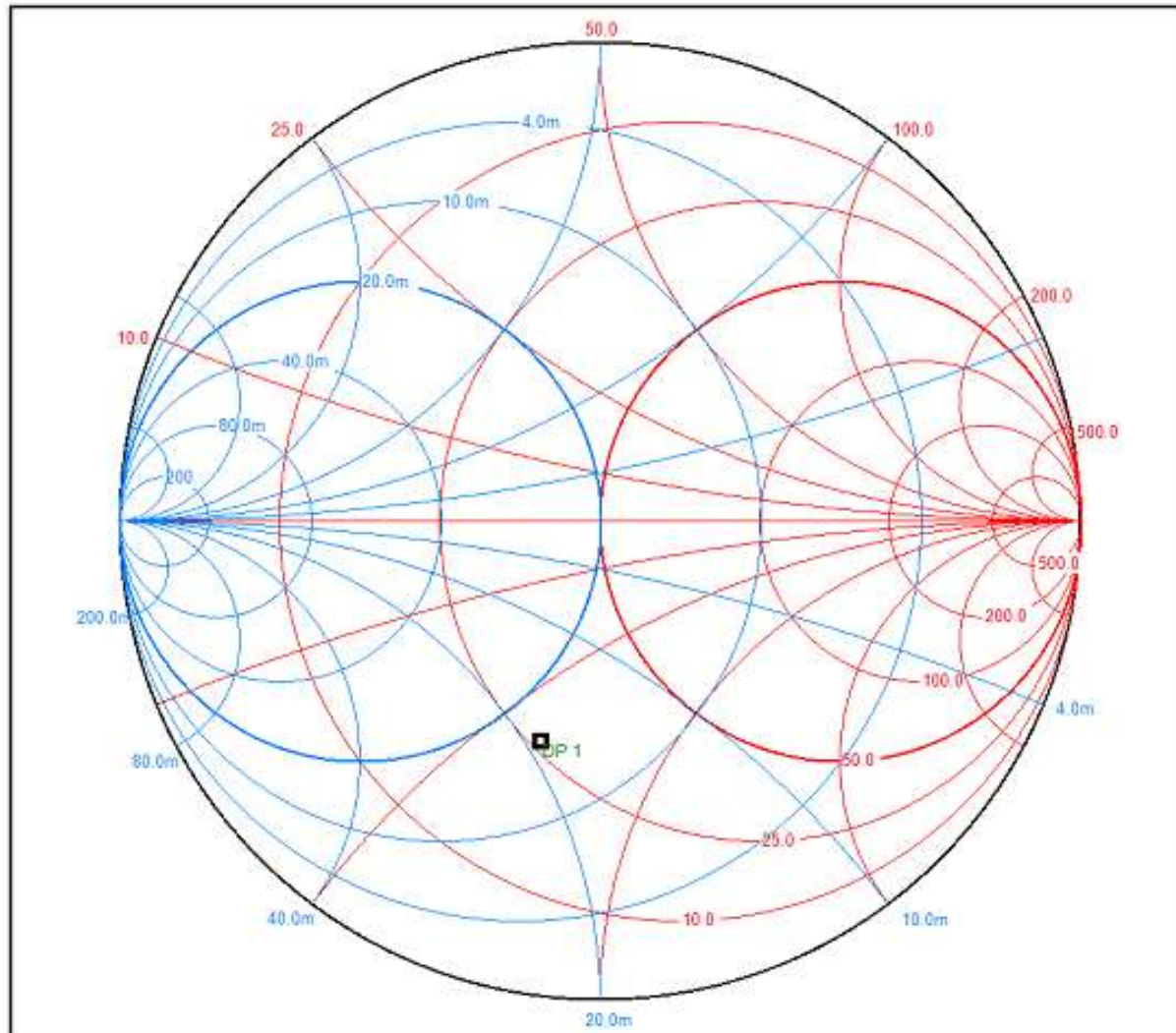
$$f = 7,100 \text{ MHz}$$

$$Z_L = 27 - j32,9$$



Tipo C

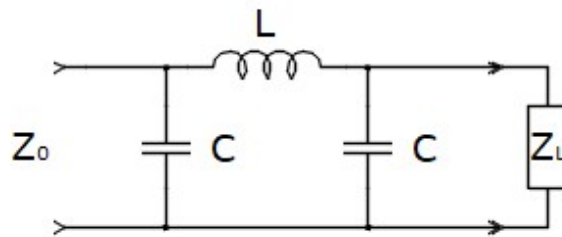
Adattamenti diversi



RETI a Pi-Greco e a "T"

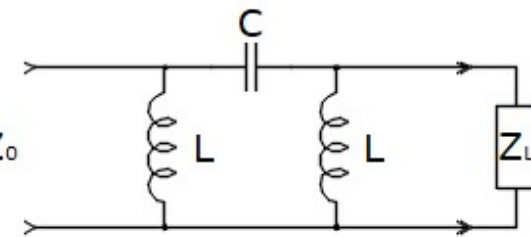
Passa Basso

$$Z_L > Z_0$$

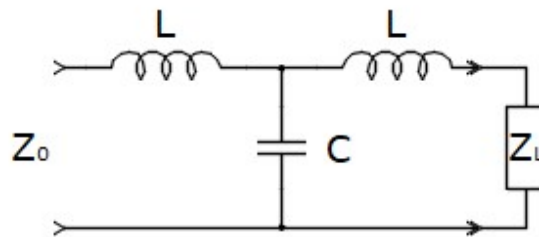


Passa Alto

$$Z_0$$



$$Z_L < Z_0$$



$$Z_0$$

