

Equation

Eqn2
 $R_{series} = R_s / EXP1$
 $EXP1 = (1 - W \cdot W \cdot L_s \cdot C_p)^2 + (W \cdot C_p \cdot R_s)^2$
 $X_{series} = (W \cdot (-C_p \cdot R_s \cdot R_s + L_s \cdot (1 - W \cdot W \cdot L_s \cdot C_p))) / EXP1 + W \cdot L_{lead} / (1 - W \cdot W \cdot L_{lead} \cdot C_{shunt})$
 $ZB = (R_{series} + j \cdot X_{series}) / ((1 - W \cdot C_{shunt} \cdot X_{series}) + j \cdot W \cdot C_{shunt} \cdot R_{series})$
 $ZBR = \text{real}(ZB)$
 $ZBI = \text{imag}(ZB)$
 $Z = ZB + j \cdot W \cdot L_{lead}$
 $ZR = \text{real}(Z)$
 $ZI = \text{imag}(Z)$

dc simulation

DC1

Parameter sweep

SW1
Sim=DC1
Type=log
Param=Freq
Start=1e6
Stop=1.3e9
Points=151

Equation

Eqn1
 $W = 2 \cdot \pi \cdot \text{Freq}$
 $R_s = 47.3$
 $L_s = 10.43n$
 $C_p = 0.69p$
 $L_{lead} = 1.47n$
 $C_{shunt} = 0.08p$

