

Part 1. RLC Topologies: Simulations and calculations: Frequency domain analysis

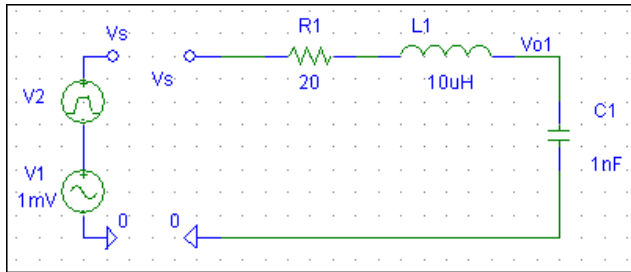


Figure 1.1a: RLC Series topology

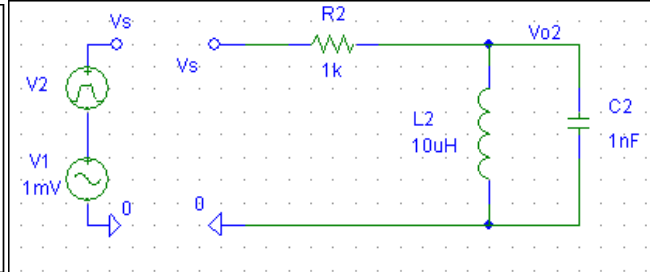


Figure 1.1b: RLC Parallel topology

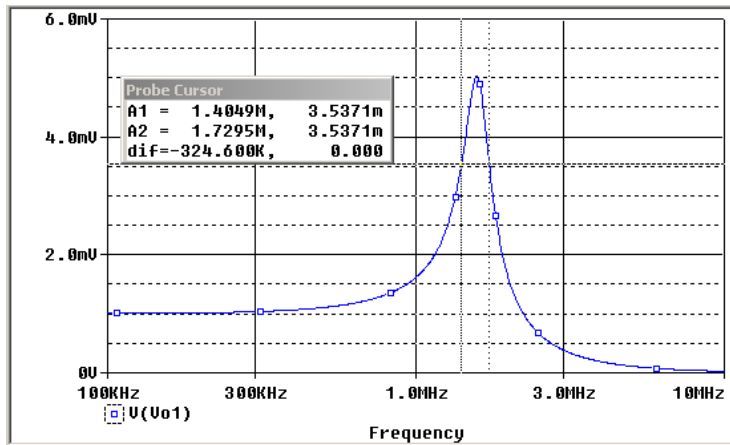


Figure 1.2a: Frequency domain sweep for RLC Series topology: Low-pass

Shrink figures for good placement and layout.

All text must be legible, to include cursor text.

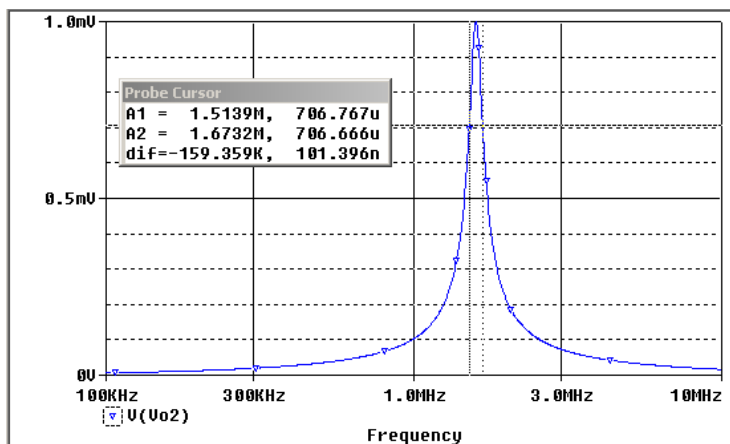


Figure 1.2b: Frequency domain sweep for RLC Parallel topology: Bandpass

Cursor information displayed should be reflected in the data tables.

Part 2. RLC Topologies: Simulations and calculations: Pulse/time-domain analysis

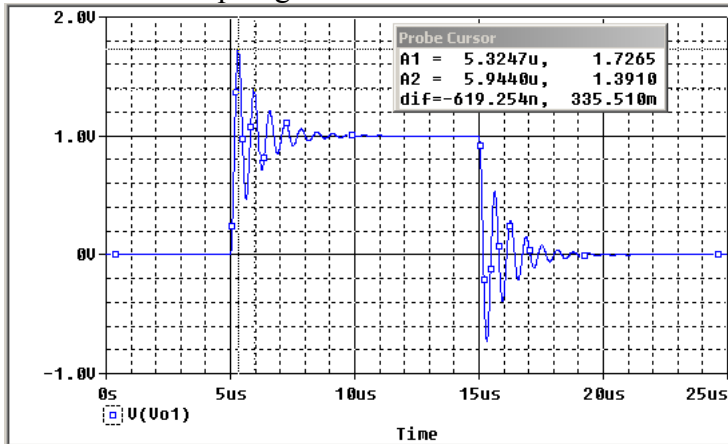


Figure 1.3a: Time domain sweep for RLC Series topology: Pulse input

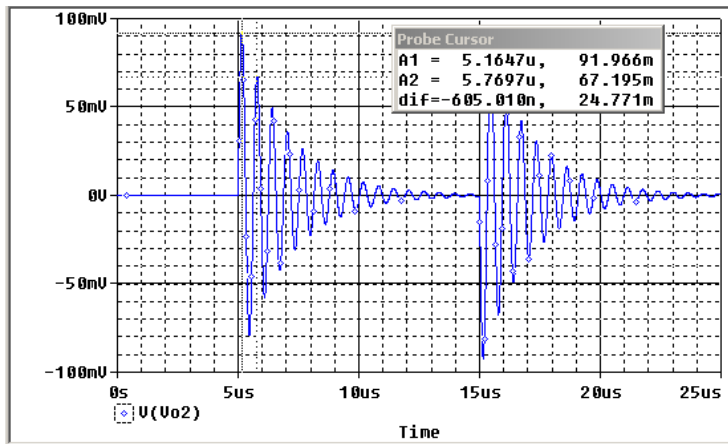


Figure 1.3b: Time domain sweep for RLC parallel topology: Pulse input

		Frequency sweep											
		Measurements					Calculations						
		fD	fL	fH	del_f	Q	L	C	R	fD	RD	del_f	Q
		(MHz)	(MHz)	(MHz)	(MHz)		(uH)	(pF)	(kohm)	(MHz)	(ohm)		
series		1.59	1.405	1.73	0.325	4.9	10	1000	20	1.571	100	0.314	5
parallel		1.591	1.513	1.673	0.16	9.9	10	1000	1000	1.571	100	0.157	10

		Transient sweep (input = pulse)											
		Measurements				Results			Calculations				
		t1	t2	V1	V2	dt	fD	X					
		(us)	(us)	(V)	(V)	(us)	(MHz)						
series		5.325	5.944	1.727	1.391	0.6	1.61	0.099	1.571	100	0.1		
parallel		5.165	5.77	91.97	67.2	0.6	1.65	0.05	1.571	100	0.05		

Information excised from Excel should be pre-organized for good clarity of report.

Table 1.1 Measurements/Calculations (Excel: Screen snapshot)