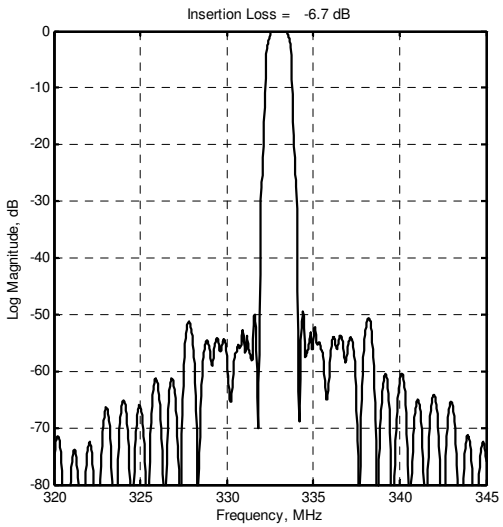
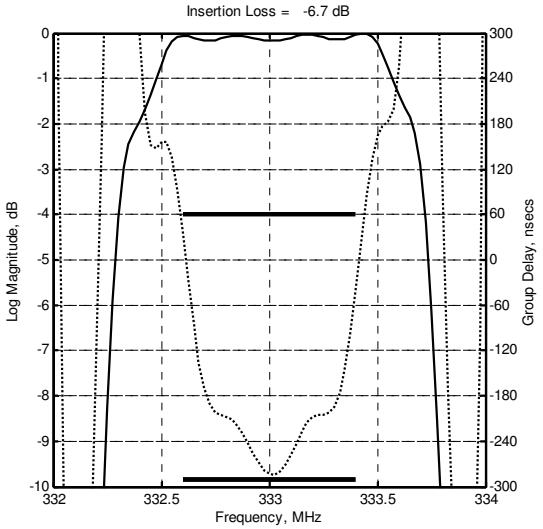
IntraSAW

333 MHz SAW Filter
WLL Low-Loss SAW Filter

Preliminary Datasheet (Simulation)





Specifications

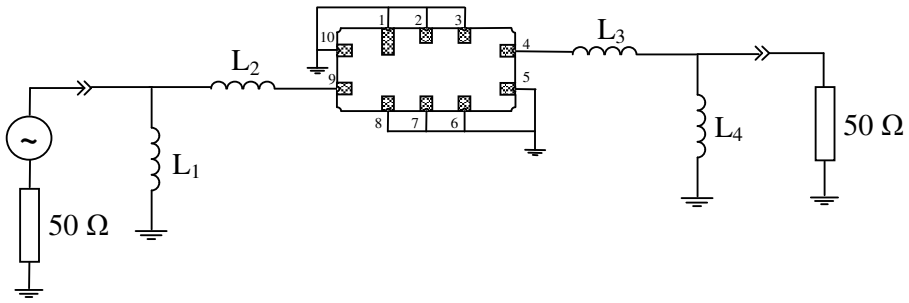
Parameter	Unit	Min	Typ	Max	Note
Center Frequency f_o	MHz		333		
Insertion Loss at f_o	dB		6.7	8	Matched, Q=30
Passband Width	MHz				
-3 dB			1.34		
-20 dB			1.77		
-30 dB			2.07		
-40 dB			2.15		
-50 dB			2.21		
Relative Attenuation	dB				
f_o-50 MHz … f_o- 3 MHz			-50		
f_o+ 3 MHz … f_o+20 MHz			50		
f_o+20 MHz …f_o+40 MHz			64		
f_o+40 MHz …f_o+50 MHz			70		
Passband Ripple	dB		0.25	1	At f_o±0.4 MHz (p-p)
Phase Linearity	degs		5	8	At f_o±0.4 MHz (p-p)
Group Delay Variation	nsecs		350	500	At f_o±0.4 MHz (p-p)
Absolute Group Delay	μsec		1.1		
Reflected Wave Signal Suppression	dB		60		12 … 20 μsec after main pulse
Substrate Material			Quartz		
Temperature Coefficient of Frequency (TCF)*	ppm/$^oC^2$		-0.036		
Turnover Temperature	^oC		15		
Operating Temperature	^oC	-55	25	85	
Storage Temperature	^oC	-55		85	
Package Size	mm		9.1 x 4.5		SMD

* Temperature dependence $f_o(T) = f_o(T_o)(1+TCF(T-T_o)^2)$

Tel.: +49 89 976 00 973
Mob.: +49 173 654 7820
IntraSAW, Dr. A.S.Rukhlenko
E-mail: *rukhlenko@intrasaw.com*

Matching Configuration

L_1= 8.2 nH, L_2=15 nH
L_3= 15 nH, L_4=11 nH
Source/Load
Impedance=50 Ω



Time Response