

1247.2 MHz SAW Filter

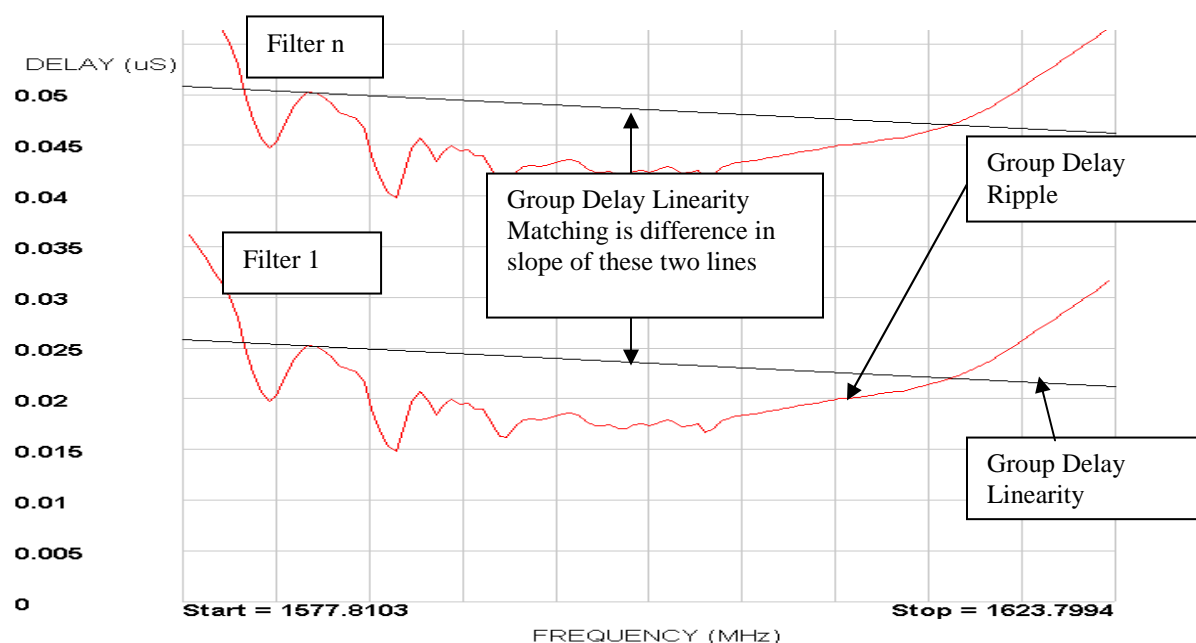
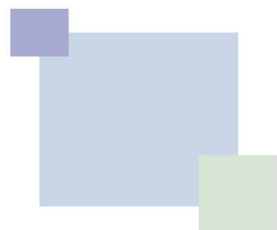
188888-101

SAW PRODUCTS

Parameter	Unit	MIN	TYP	MAX
Centre Frequency, f_o	MHz		1247.2	
Insertion Loss, IL (Over pass band)	dB		2.2	2.5
Passband 1dB bandwidth	MHz	20	32	
Amplitude Ripple in passband (p-p)	dB		0.4	1
Out-Of-Band Attenuation				
10 – 1107MHz	dB	35	38	
1107 – 1197MHz		20	41	
1297 – 1387MHz		20	43	
1387 – 3000MHz		35	43	
Group Delay Ripple ^{1,2} Over 1237.2 – 1257.2MHz			25	40
Group Delay Linearity ^{1,2} Over 1237.2 – 1257.2MHz			3	15
Group Delay Linearity Matching ^{1,2} Over 1237.2 – 1257.2MHz	ns		3	10
Over 70% of 1237.2 – 1257.2MHz			2	4
Operating Temperature Range	°C	-40		85
Input Impedance (single ended)	Ω		50	
Output Impedance (single ended)	Ω		50	
Impedance Matching		Internally matched		
Input Power Level	dBm			10
Input /Output Return Loss	dB	11	13.5	
Package	mm	SMT 3.0x3.0		

Notes:

1. Refer to typical group delay performance plot
2. The following definitions apply:



Definitions:

(1) Group Delay Linearity

Within 1dB pass band, fit group delay curve into a straight line using least-squares method, maximum variation of the straight line in 1dB pass band is defined as Group Delay Linearity.

(2) Group Delay Ripple

After Group Delay Linearity slope was taken away from the group delay, the maximum variation of group delay in 1dB pass band is defined as Group Delay ripple.

(3) Group Delay Linearity Matching

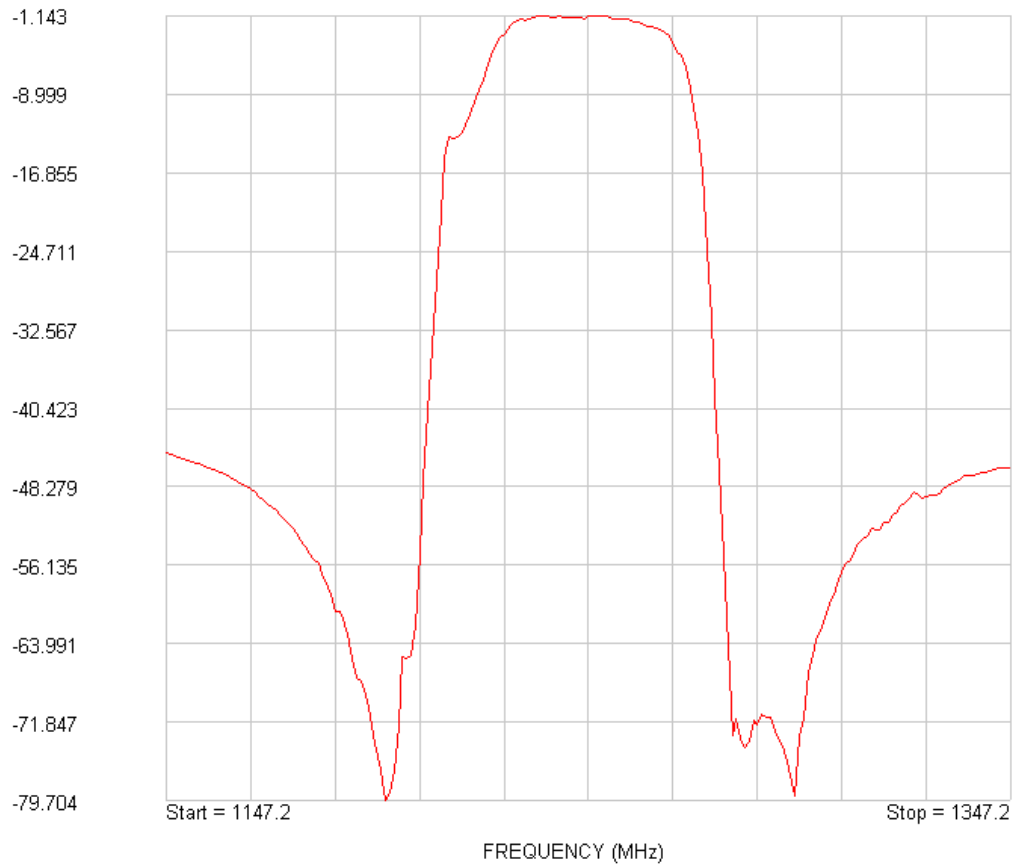
The difference in Group Delay Linearity slope between any two different devices excluding absolute Group Delay offset.

Measured Performance

SAW PRODUCTS

Narrow band performance

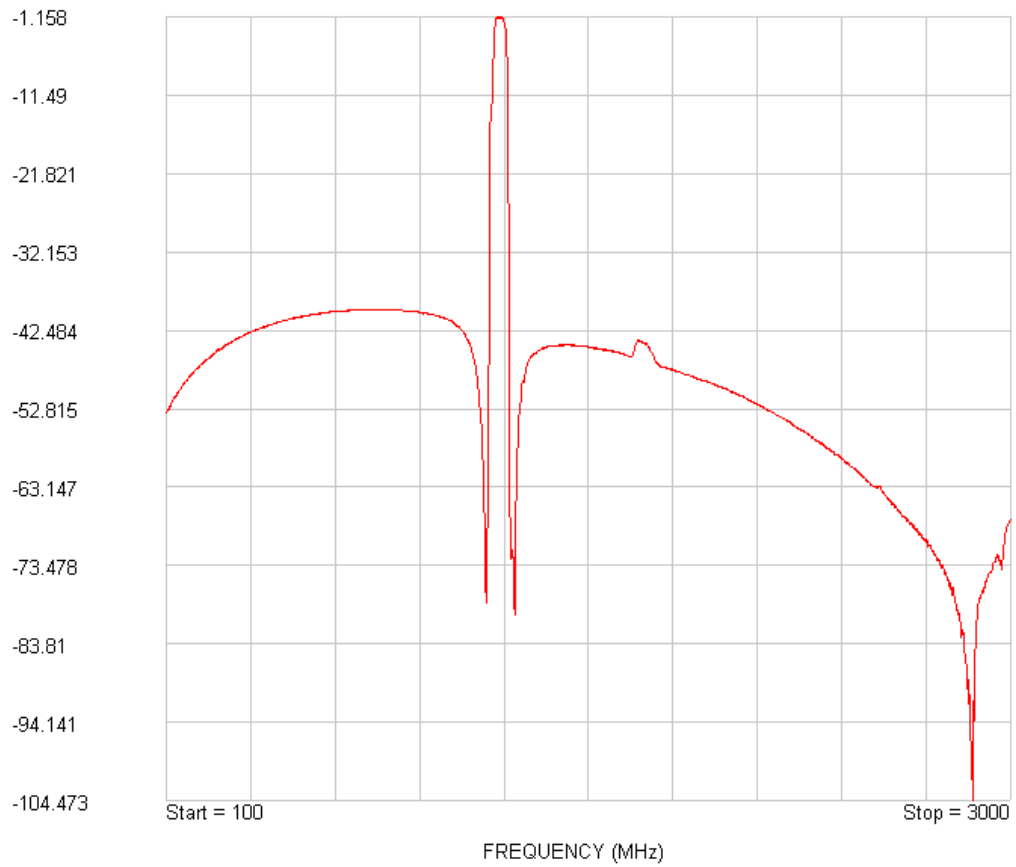
D:\DATA\product\trimble\1247\package\data\sn72_2_2K38_1_POSTSEAL\un001ph001pa0001ac001ax000.pch
INSERTION LOSS (dB)



Measured Performance

Out of band rejection performance

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INSERTION LOSS (dB)



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COM DEV

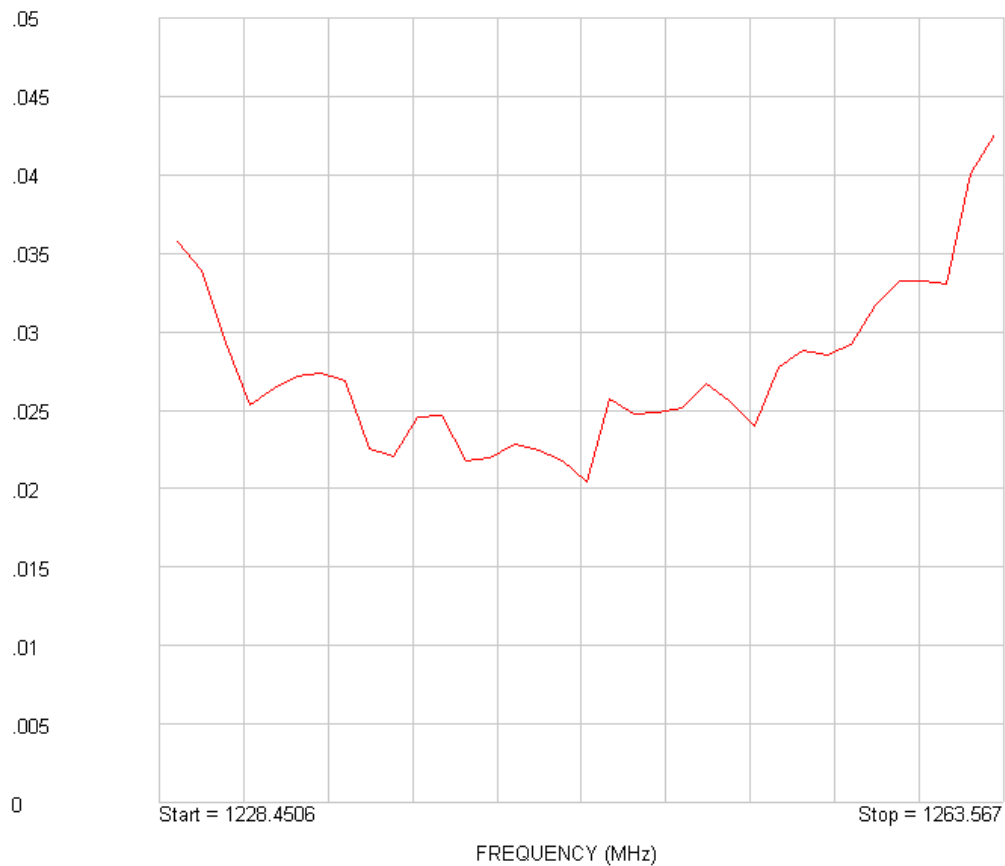
Measured Performance

COM DEV
SAW PRODUCTS

In band group delay performance

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DELAY (μ S)

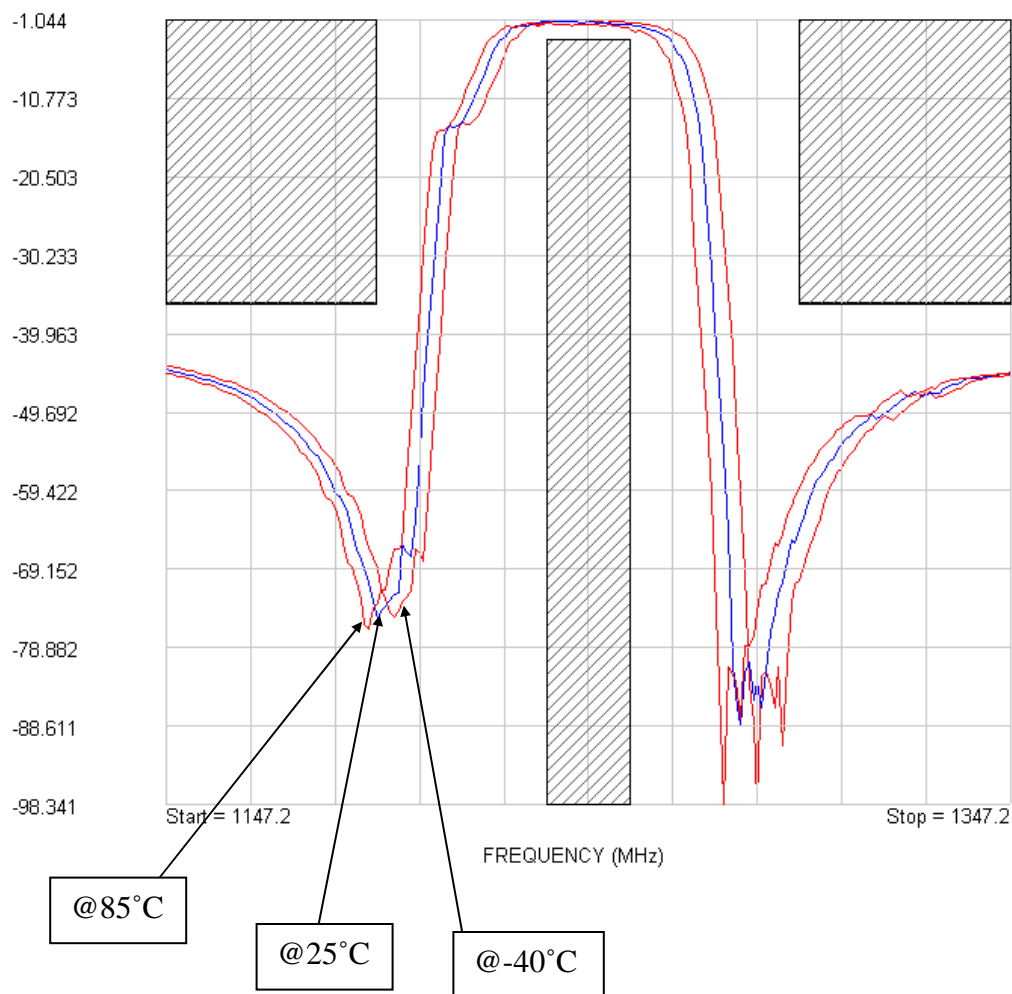


Measured Performance

Performance over temperature range

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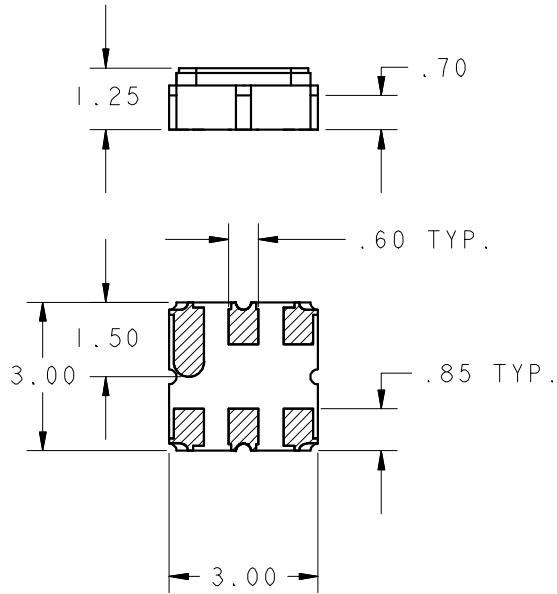
INSERTION LOSS (dB)



Package Outline

COM DEV

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Pin	Function
2	RF Input
5	RF Output
1,3,4,6	Ground

