

1587.1 MHz SAW Filter

188882-101

Features

- Low Cost
- High Reliability

Specifications

Parameter	Unit	Min	Typ	Max
Centre Frequency, f_o	MHz		1587.1	
Passband Insertion Loss, IL	dB			4.5
Passband 1.75dB Bandwidth ^[1]	MHz	55		
Lower 1.75dB Band Edge ^[1]	MHz	-	-	1559.6
Upper 1.75dB Band Edge ^[1]	MHz	1614.6	-	-
Amplitude Ripple ^[2]	dB p-p			1.2
Out-Of-Band Attenuation				
10 – 1500MHz		45	53	
1500 – 1525MHz		25	30	
1653 – 1743MHz	dB	40	60	
1743 – 2500MHz		35	40	
2500 – 3500MHz		40	45	
Group Delay Ripple	ns p-p		14	25
Group Delay Linearity	ns		5	15
Group Delay Linearity Matching	ns		2.5	10
Operating Temperature Range	°C	-40		85
Input Impedance (Single Ended)	Ω	50		
Output Impedance (Single Ended)	Ω	50		
Impedance Matching		See matching Circuit Detail		
Package	mm	SMT 3x3X1.3		

Notes

[1] Referenced to insertion loss at center frequency.

[2] Excluding the rolling off at pass band edge.

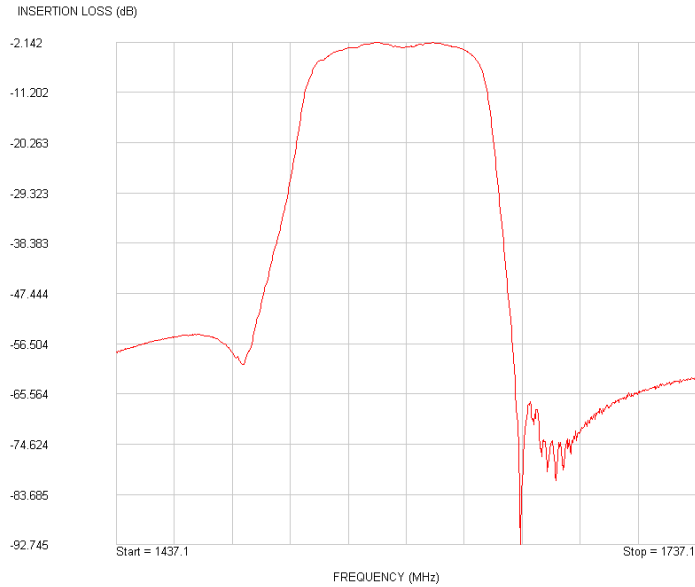
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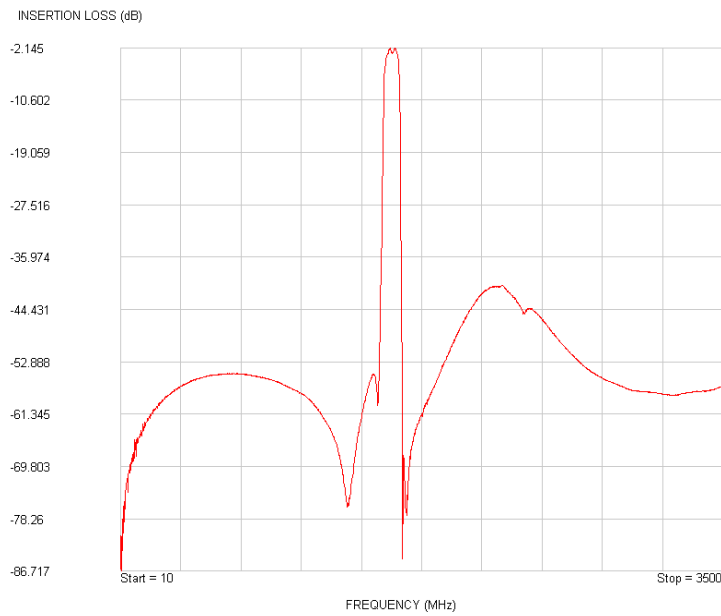
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Typical Measured Performance Data

Narrow Band Performance



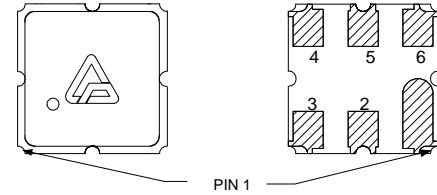
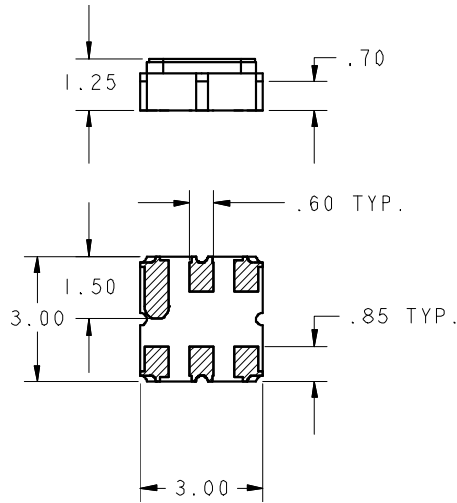
Wide Band Performance



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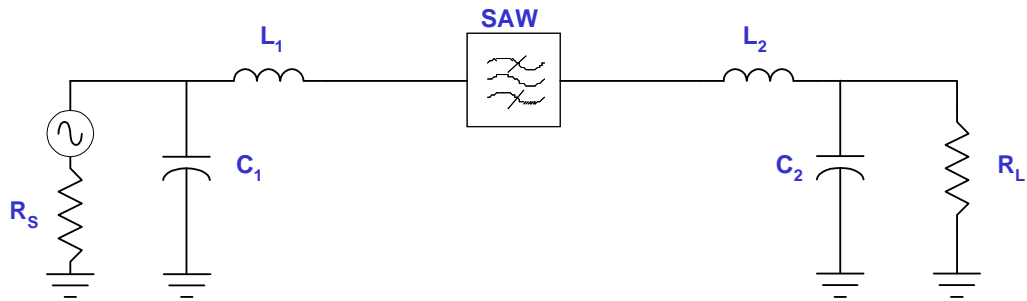
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Package Outline



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

Matching Circuit



Single Ended Input	Single Ended Output
$R_s = 50 \Omega$	$R_L = 50 \Omega$
$L_1 = 2.6nH$	$L_2 = 2.6nH$
$C_1 = 2.1pF$	$C_2 = 2.1pF$

Note: Matching circuit is for COM DEV evaluation PCB. Matching circuit component value may be different on customer PCB.

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