

- 45.0 MHz IF SAW Filter / 10.0 MHz Bandwidth
- Revision 0: 19. May 2008

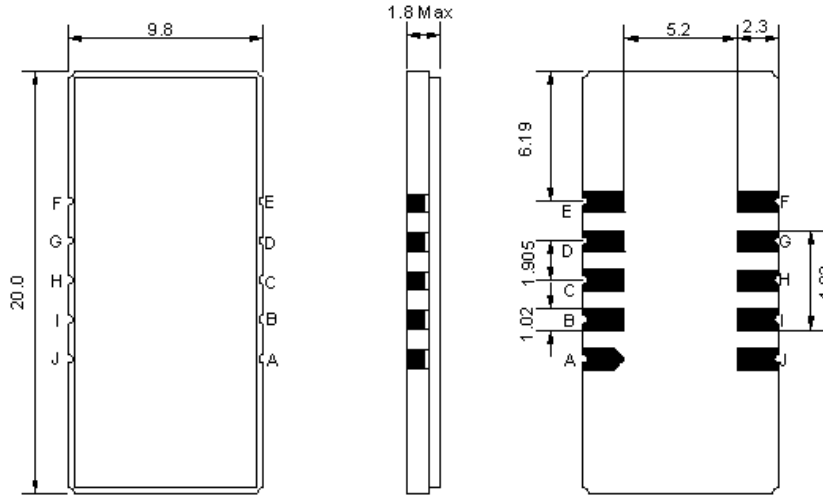
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D1			
Length x Width	mm ²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	44.9	45.0	45.1
Insertion Loss at Fo	dB	-	24.0	26.0
Group Delay Variation at Fo ±4.42 MHz	nsec	-	45	100
Absolute Delay at Fo	usec	-	2.48	-
Passband Ripple Variation at Fo ±4.42 MHz	dB	-	0.4	0.8
Bandwidth at -1dB	MHz	9.70	10.00	-
Bandwidth at -3dB	MHz	-	10.40	-
Bandwidth at -40dB	MHz	-	11.90	-
Ultimate Rejection	dB	48	50	-
Temperature Coefficient	ppm/°C	-	-72	-

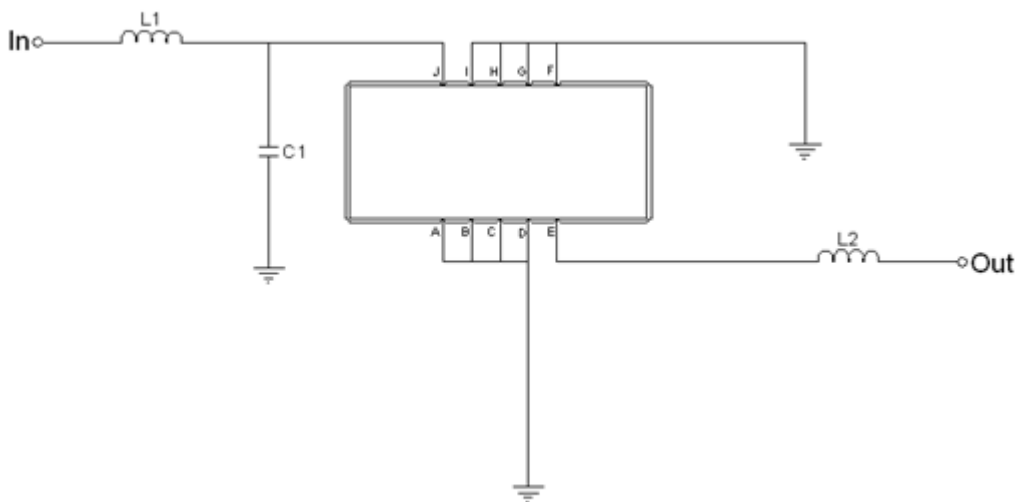
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



Pin Description	
A, B, C, D, F, G, H, I	Ground
J	Input
E	Output

Testing Environment



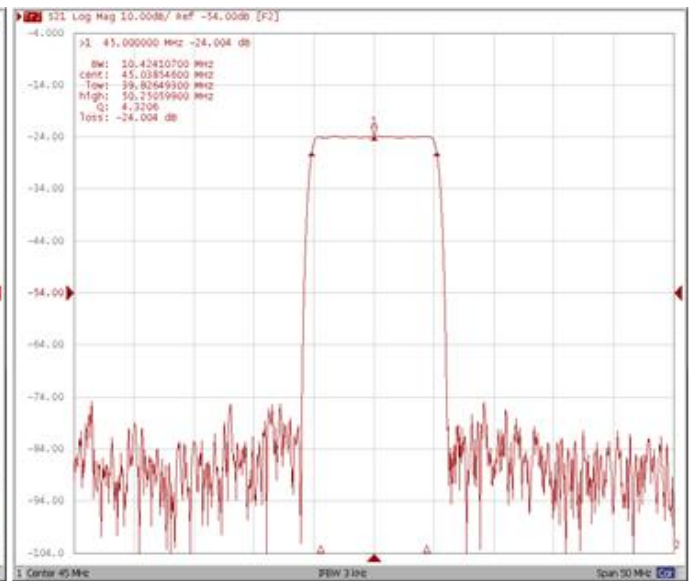
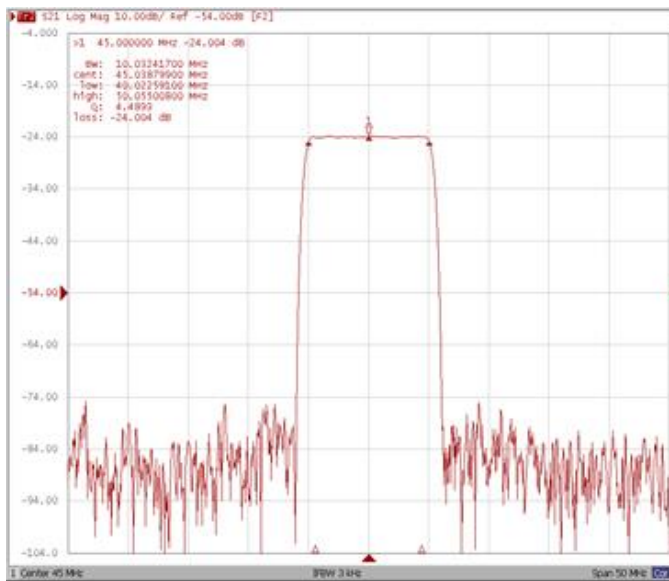
Test Fixture & Values	
Input	L1 = 220 nH , C1 = 30 pF
Output	L2 = 220 nH
Source/Load Impedance	50 Ω

Frequency Characteristics

Frequency Response

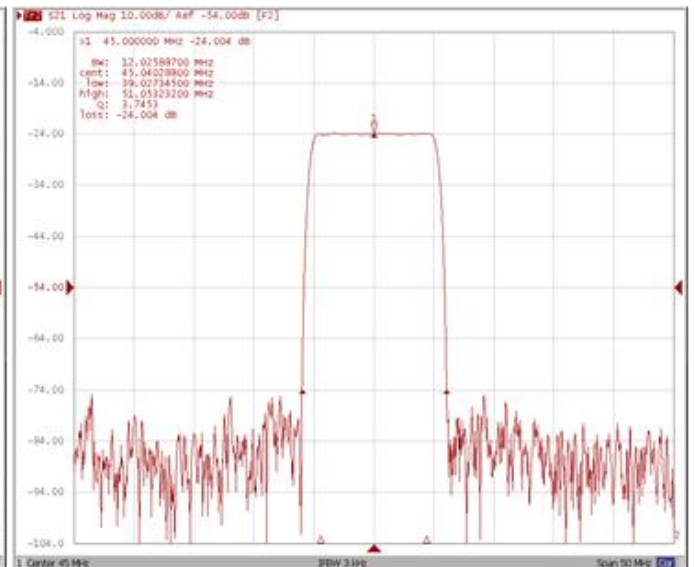
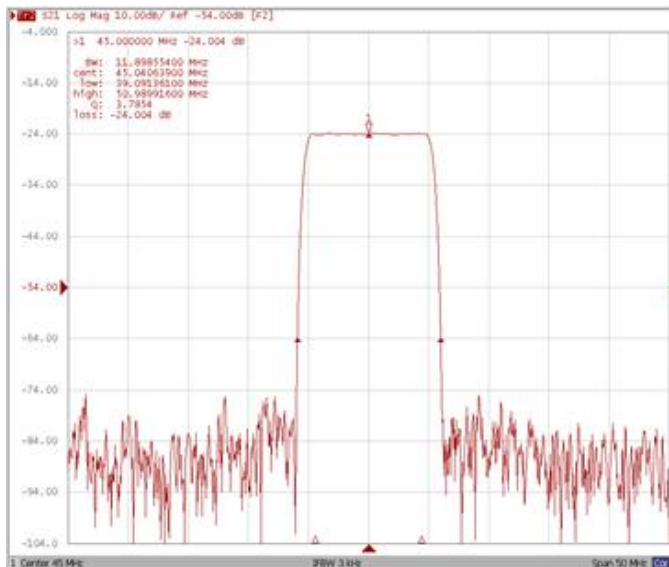
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

Bandwidth at -50.0 dB

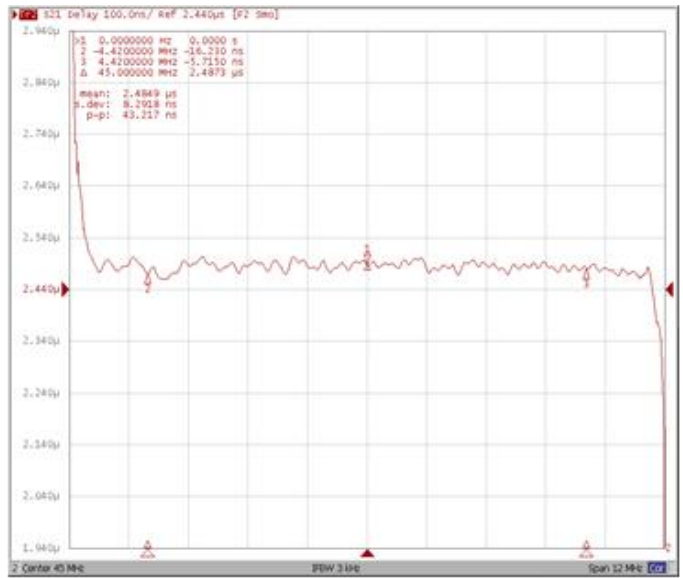


Frequency Response

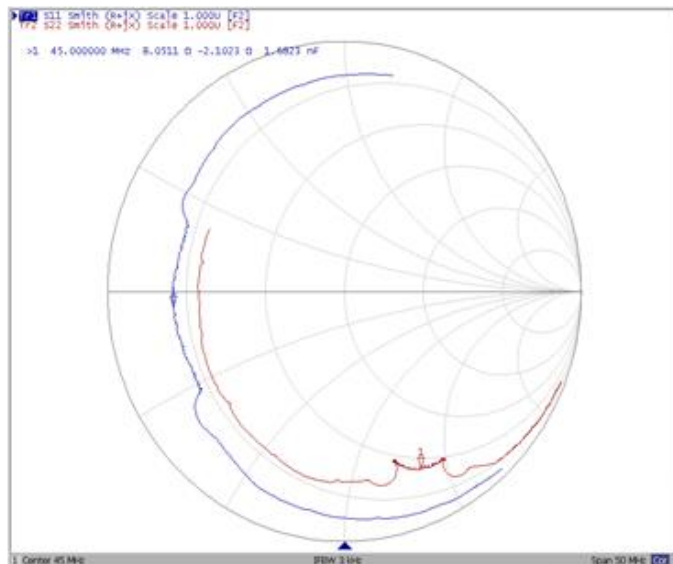
Ripple Variation Fo±4.42MHz



Group Delay Variation Fo±4.42MHz



Smith Chart



SWR

