

- 100.0 MHz IF SAW Filter / 3.07 MHz Bandwidth
- Revision 0: 26 Aug. 2008

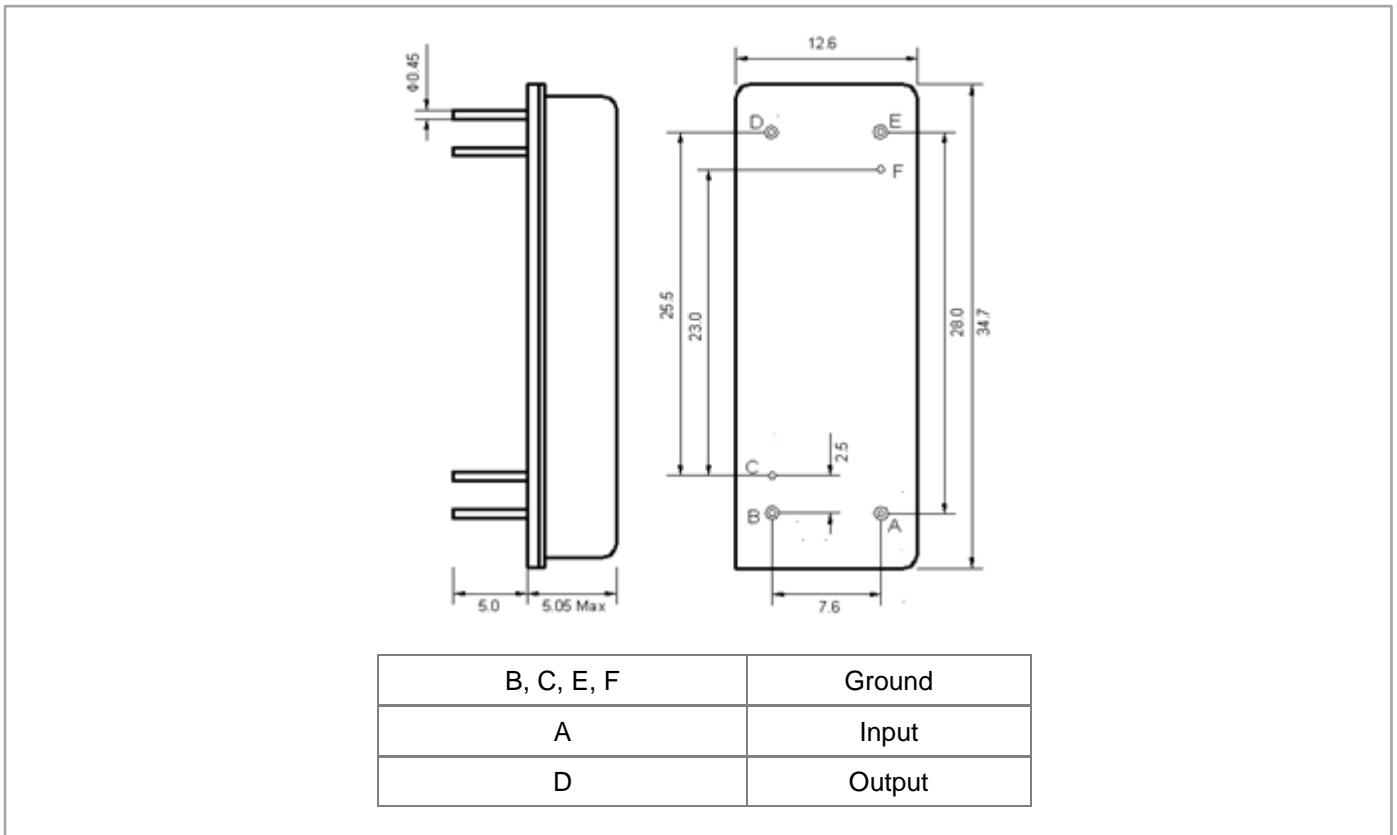
## Electrical Characteristics

MAXIMUM RATING				
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	45	-
Storage Temperature Range	°C	-20	-	70
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	28
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	F			
Length x Width	mm <sup>2</sup>	-	34.7 x 12.6	-
Height	mm	-	-	5.05

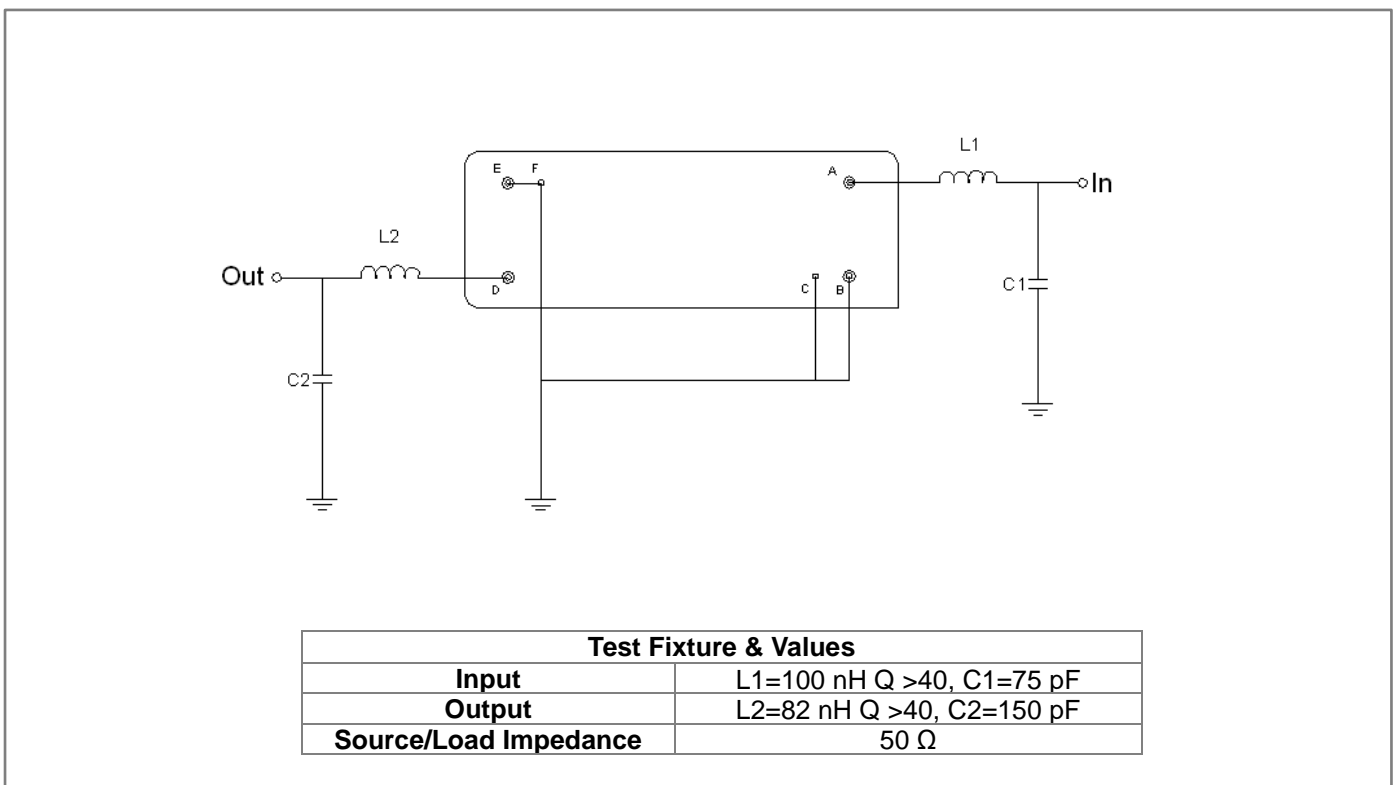
ELECTRICAL SPECIFICATION				
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	100.5	-
Insertion Loss at Fo	dB	-	23.50	25.00
Group Delay Variation (Fo±1.44MHz)	ns	-	147	180
Phase Linearity (Fo±1.44MHz)	deg	-	6.5	10
Absolute Delay Time at Fo	us	-	4.78	4.85
Temperature Coefficient	ppm/°C	-	-0.03	-
Amplitude Ripple (Fo±1.44MHz)	dB	-	0.50	1.10
Bandwidth at -1dB	MHz	2.88	3.07	-
Bandwidth at -45dB	MHz	-	3.75	4.00
Input & Output Return Loss	dB	-	9	-
Triple transit attenuation	dBc	35	-	-
Relative Attenuation				
10MHz~95.0MHz	dBc	45	55	-
@98.49 MHz	dBc	40	56	-
@98.59 MHz	dBc	33	52	-
@102.41 MHz	dBc	33	52	-
@102.51 MHz	dBc	40	52	-
105.0MHz ~300.0MHz	dBc	45	47	-

**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



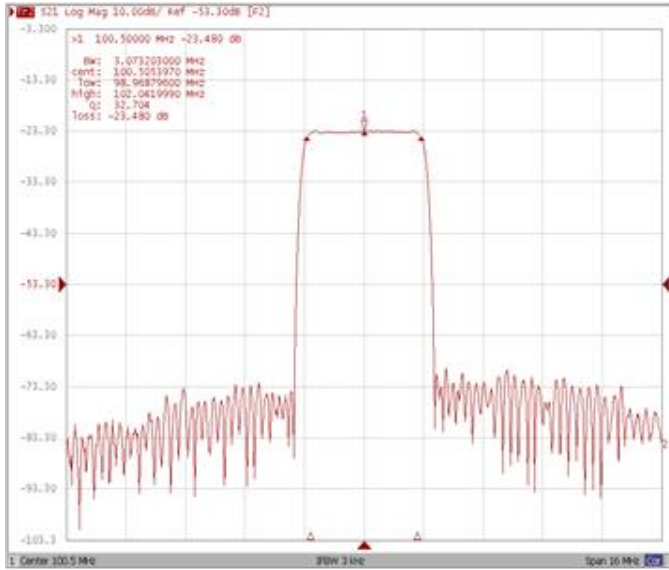
## Testing Environment



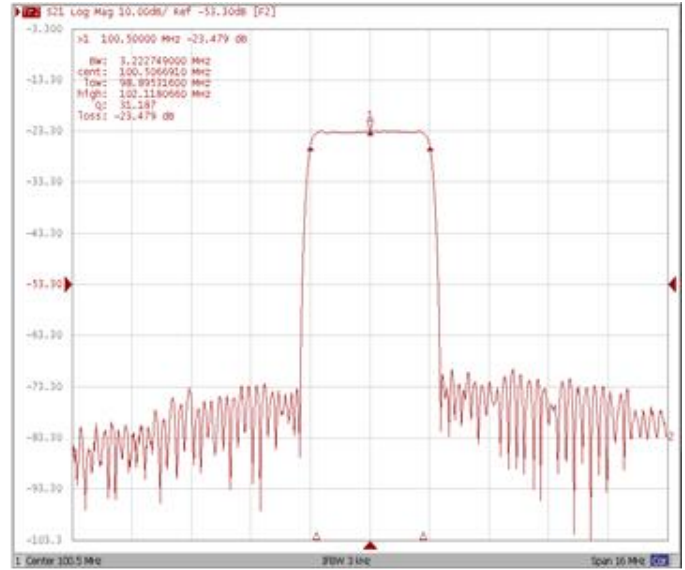
## Frequency Characteristics

### Frequency Response

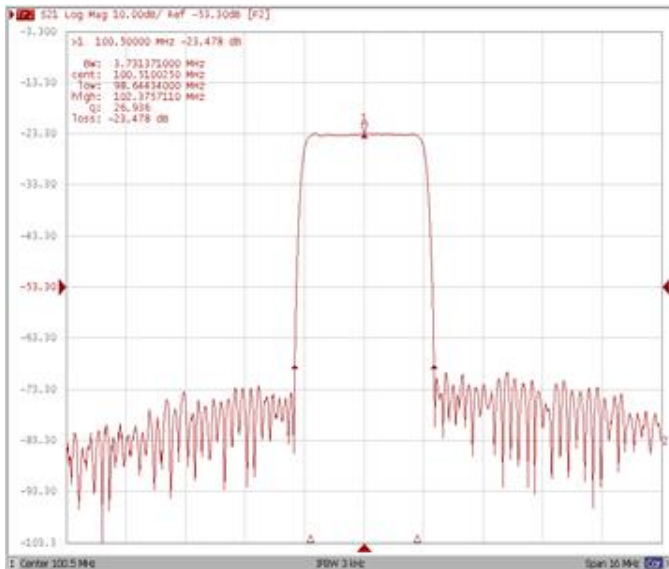
**Bandwidth at -1.0 dB**



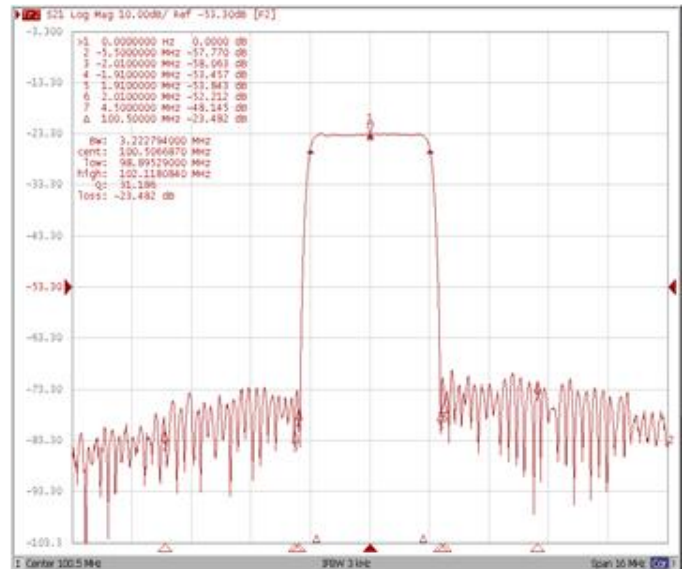
**Bandwidth at -3.0 dB**



**Bandwidth at -45.0 dB**



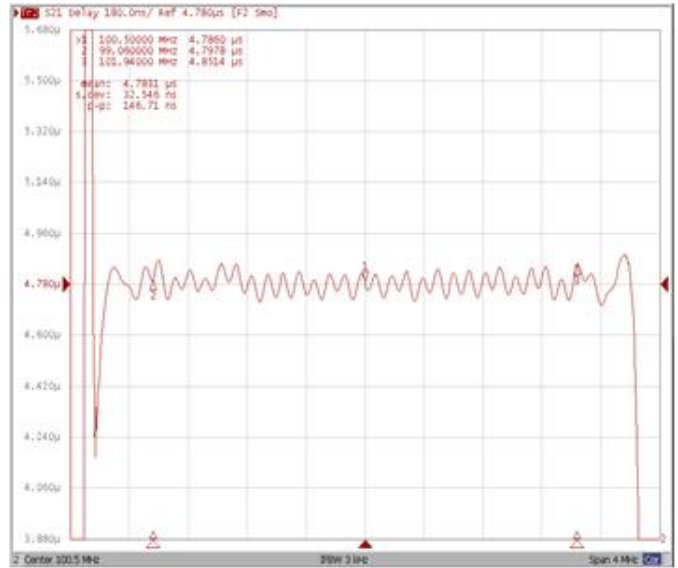
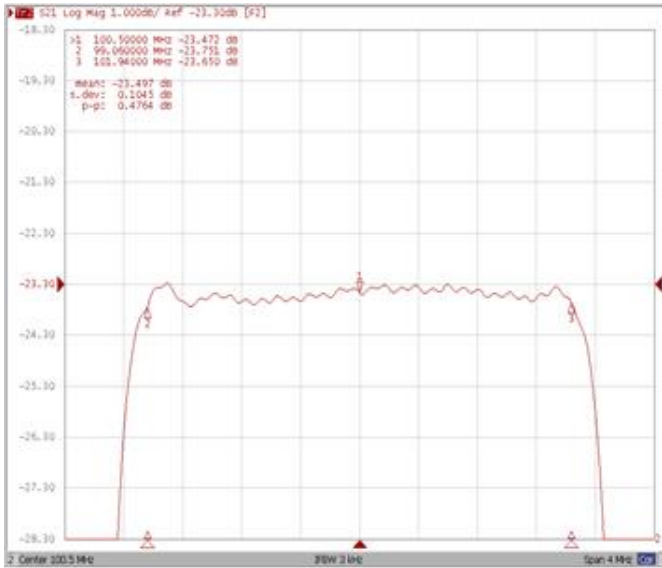
**Relative Attenuation**



**Frequency Response**

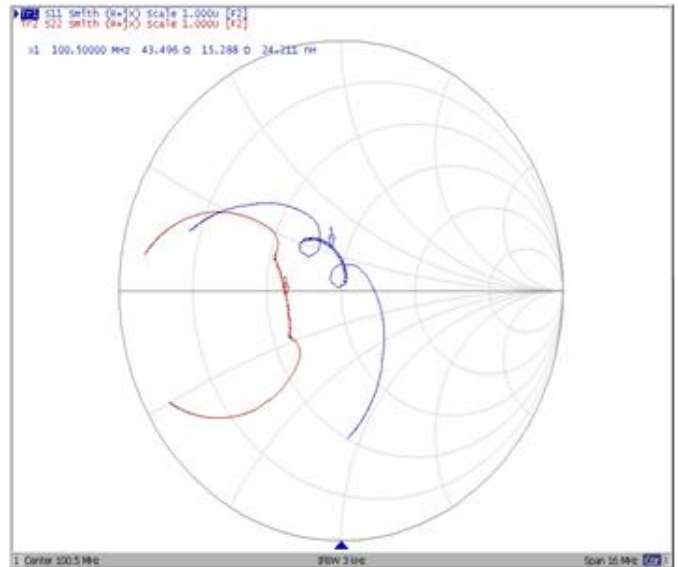
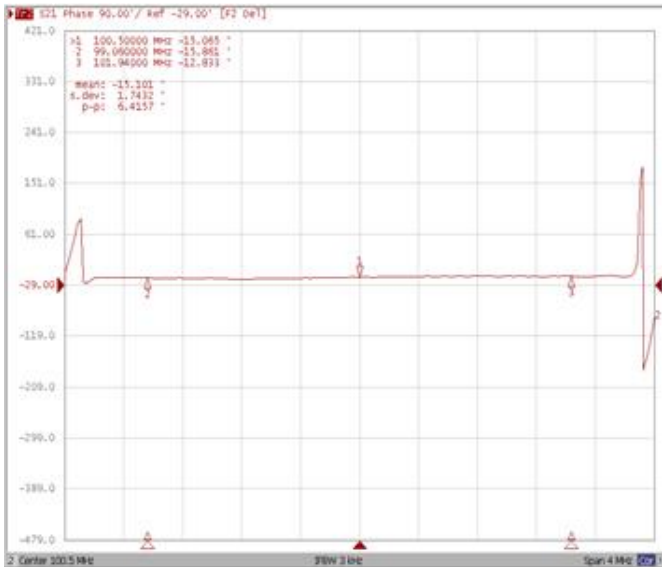
**Ripple Variation Fo±1.44MHz**

**Group Delay Variation Fo±1.44MHz**



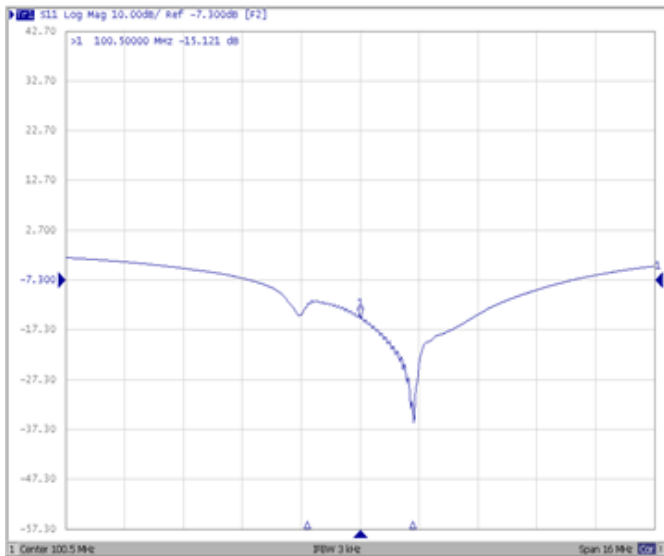
**Phase Linearity Fo±1.44MHz**

**Smith Chart**

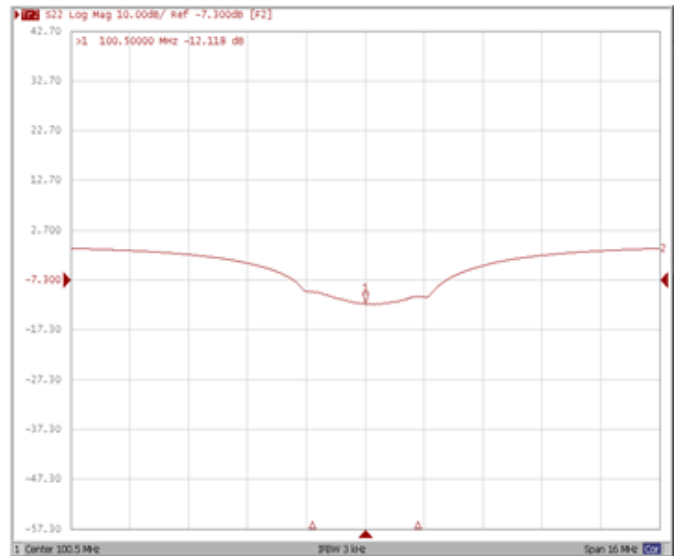


**Frequency Response**

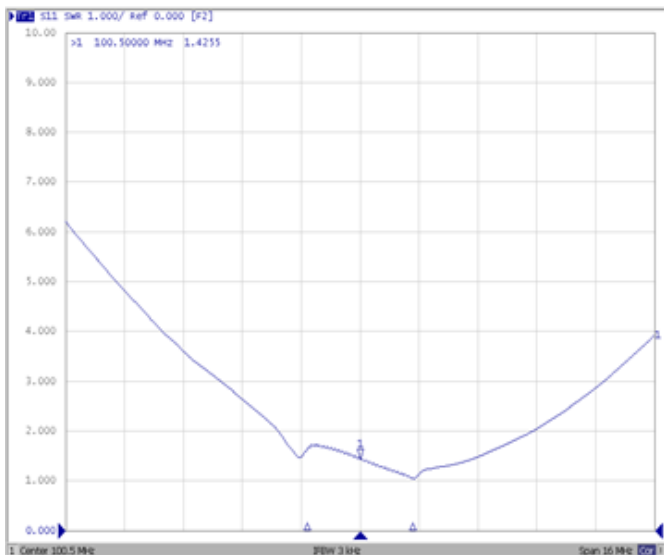
**Return Loss S11**



**Return Loss S22**



**VSWR S11**



**VSWR S22**

