

- 297.00 MHz IF SAW Filter / 2.95 MHz Bandwidth
- Revision 0: 25 Jul. 2012

Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-45	-	85
Storage Temperature Range	°C	-45	-	85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	5
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	297.00	-
Insertion Loss at Fo	dB	-	15.0	17.0
Group Delay Variation at Fo ± 1.10 MHz	nsec	-	35	80
Absolute Delay at Fo	usec	-	1.25	1.50
Passband Ripple Variation at Fo ± 1.10 MHz	dB	-	0.45	1.00
Bandwidth at -1dB	MHz	2.50	2.95	-
Bandwidth at -30dB	MHz	-	4.85	5.30
Out of Band Rejection				
Fo ± 3.0 MHz	dB	30	47	-
Fo ± 53.0 MHz	dB	50	60	-
Temperature Coefficient	ppm/°C	-	-0.03	-

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.

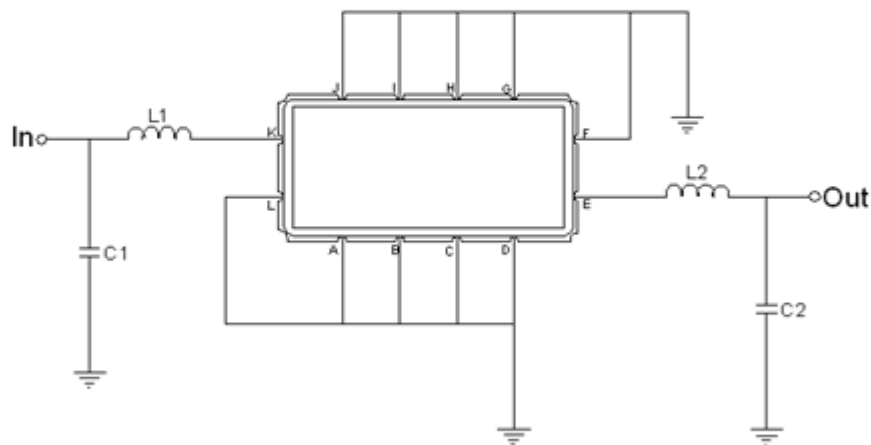
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL297002A:** Model Name
- ③ **X :** Date Code (Year)
- ④ **Y :** Date Code (Month)
- ⑤ **Z :** Date Code (Date)
- : Index Dot

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

Testing Environment



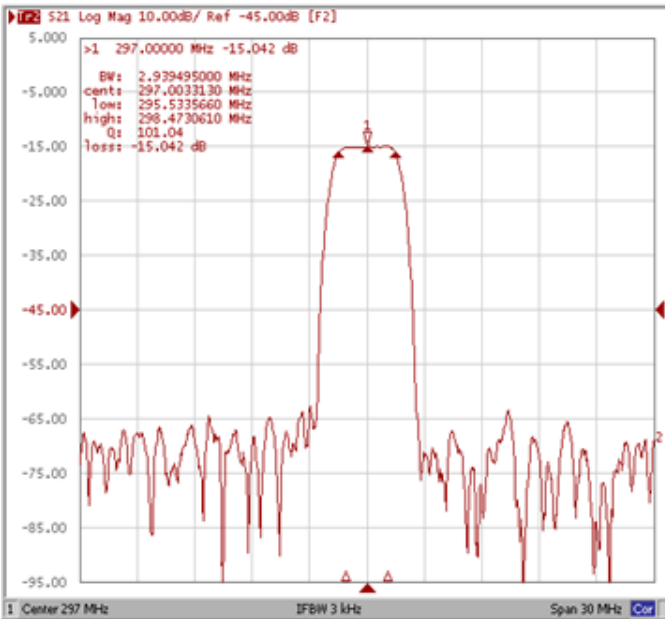
Test Fixture & Values	
Input	L1 = 27nH, C1 = 27pF
Output	L2 = 27nH, C2 = 30pF
Source/Load Impedance	50 Ω

Frequency Characteristics

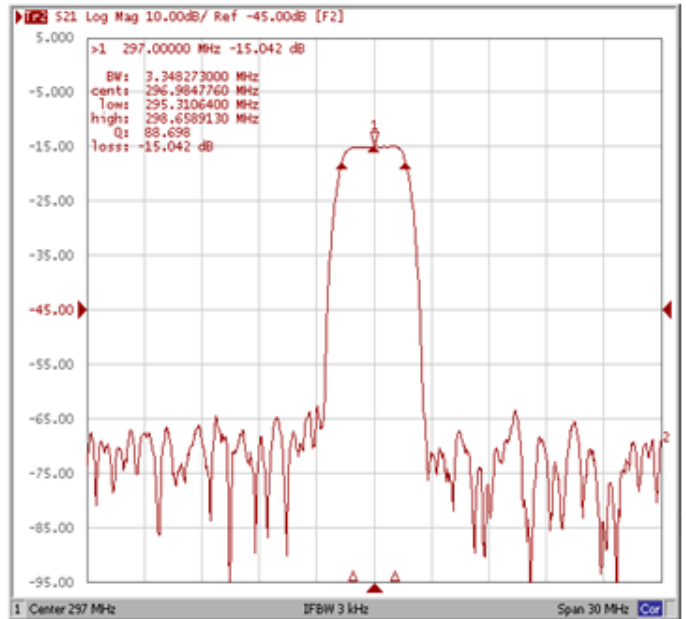
Frequency Response

Operating Temperature : +25 °C

Bandwidth at -1.0 dB



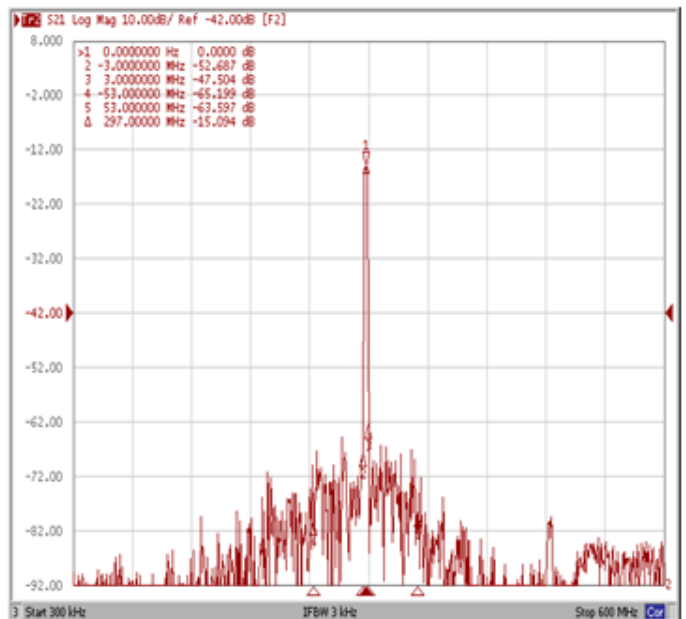
Bandwidth at -3.0 dB



Bandwidth at -30.0 dB

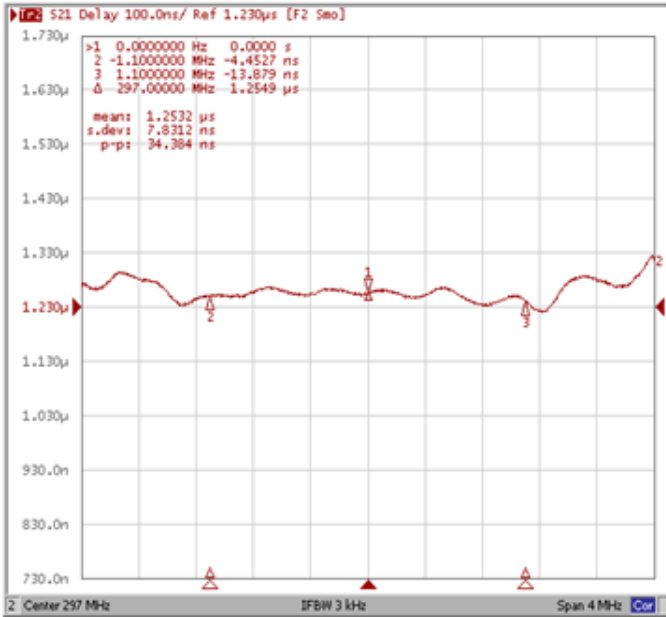


Out of Band Rejection

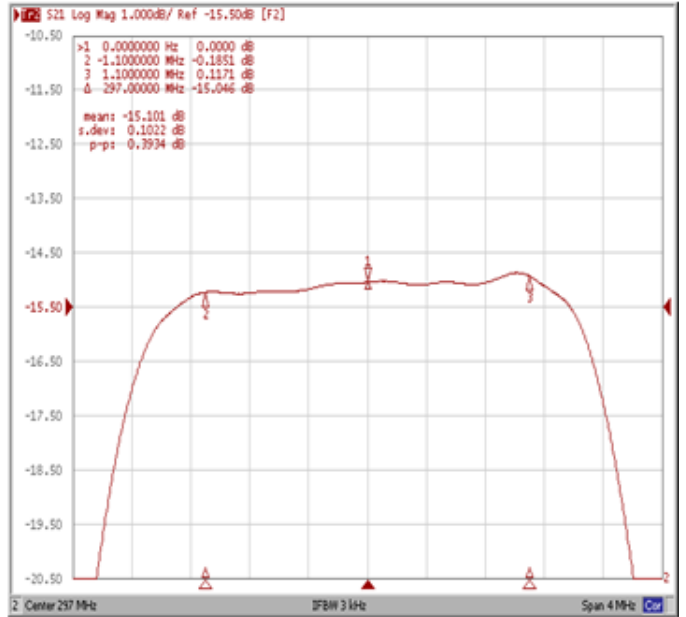


Frequency Response

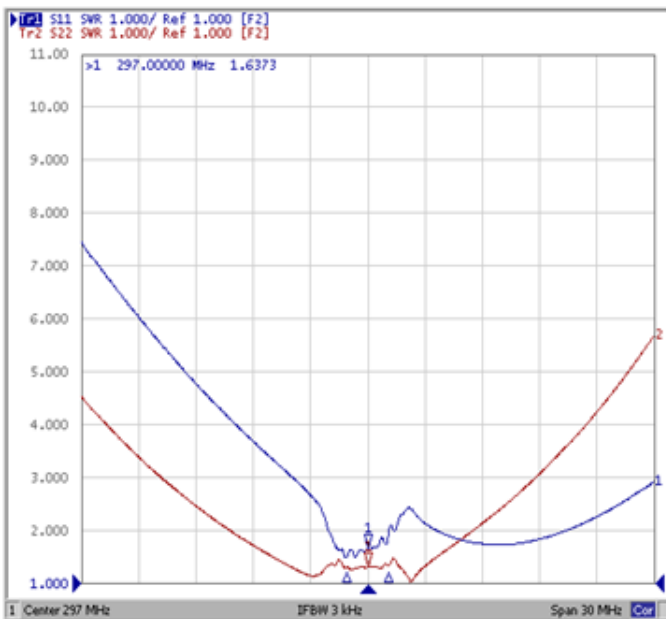
Group Delay Variation (Fo±1.10MHz)



Passband Ripple Variation (Fo±1.10MHz)



VSWR



Smith Chart

