

- 273.78 MHz IF SAW Filter / 5.70 MHz Bandwidth
- Revision 0: 24 May 2012

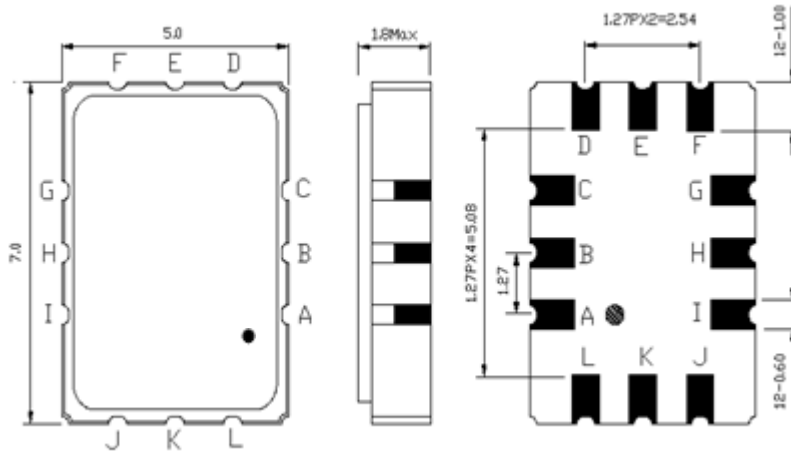
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-30	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	5
Source Impedance (Single-ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (Single-ended) ⁽¹⁾	Ω	-	50	-
Package type & size	S1			
Length x Width	mm ²	-	7.0 x 5.0	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	273.78	-
Insertion Loss at Fo	dB	-	10.3	12.0
Amplitude Ripple at Fo ± 1.925MHz	dB _{p-p}	-	0.25	1.0
Group Delay Variation at Fo ± 1.925MHz	ns	-	23	70
Absolute Delay at Fo	µs	-	0.68	0.75
Bandwidth at -1.0 dB	MHz	5.00	5.70	-
Relative Attenuation:				
Fo ± 7.0MHz	dB	40	50	-
Temperature Coefficient	ppm/°C	-	-20	-

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.

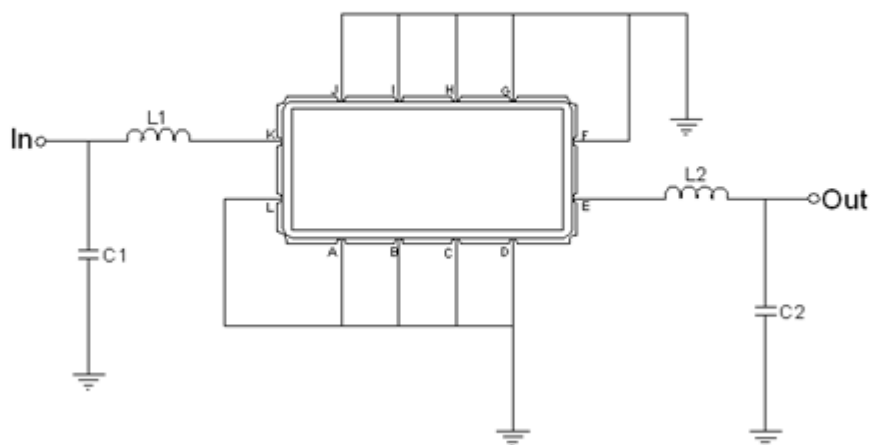
Package Dimensions



- ① TRANSKO: Brand
- ② TL27305A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z: Date Code (Date)
- : Index Dot

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

Testing Environment



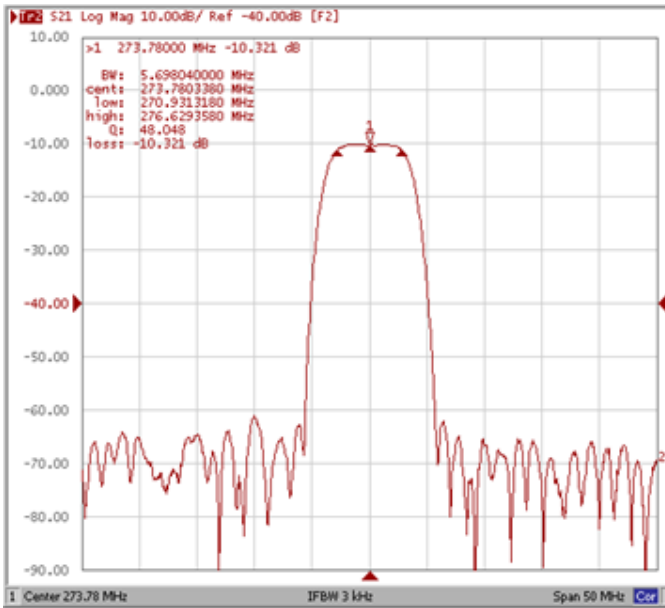
Test Fixture & Values	
Input	L1=22 nH, C1=14pF
Output	L2=27 nH, C2=16pF
Source/Load Impedance	50 Ω

Frequency Characteristics

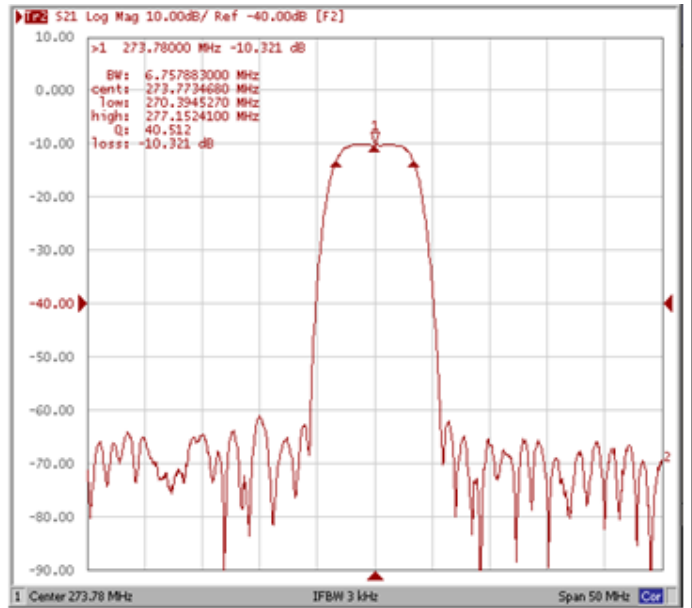
Frequency Response

Operating Temperature : +25 °C

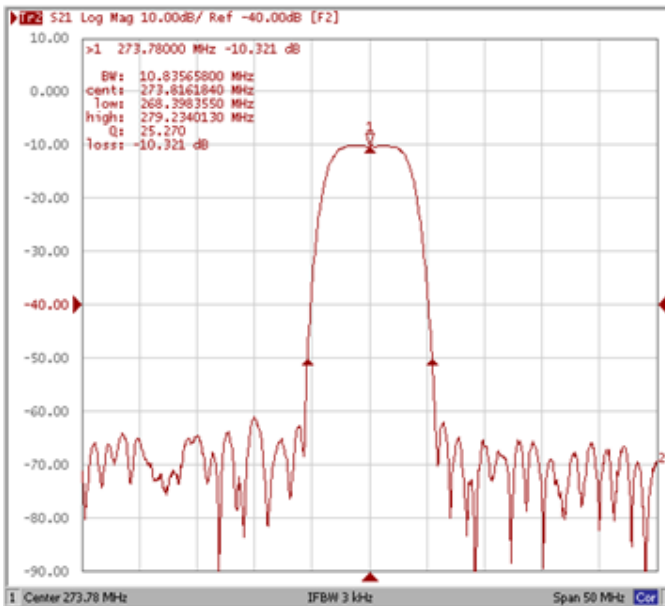
Bandwidth at -1.0 dB



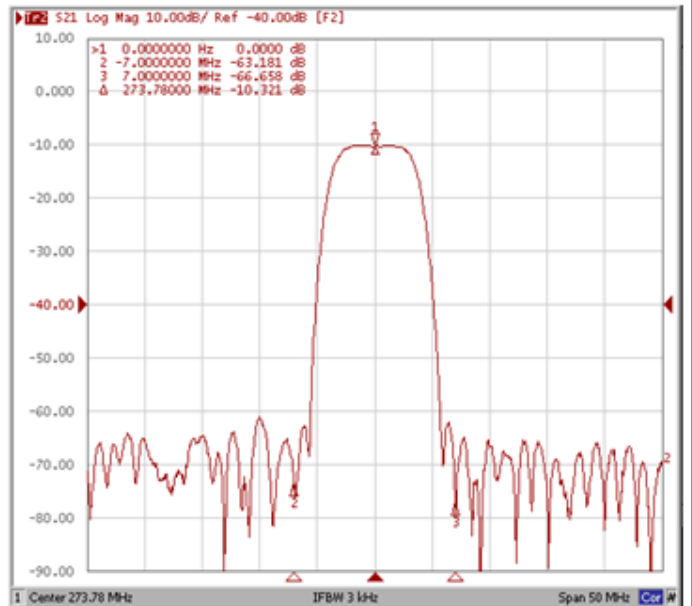
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



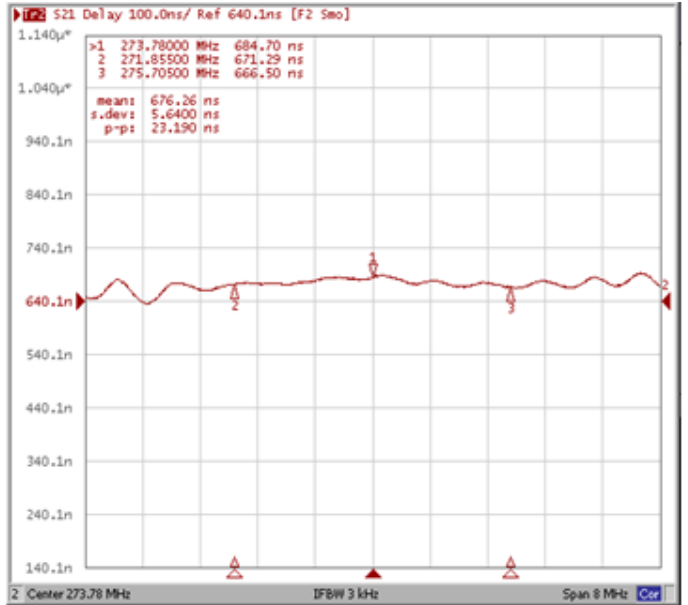
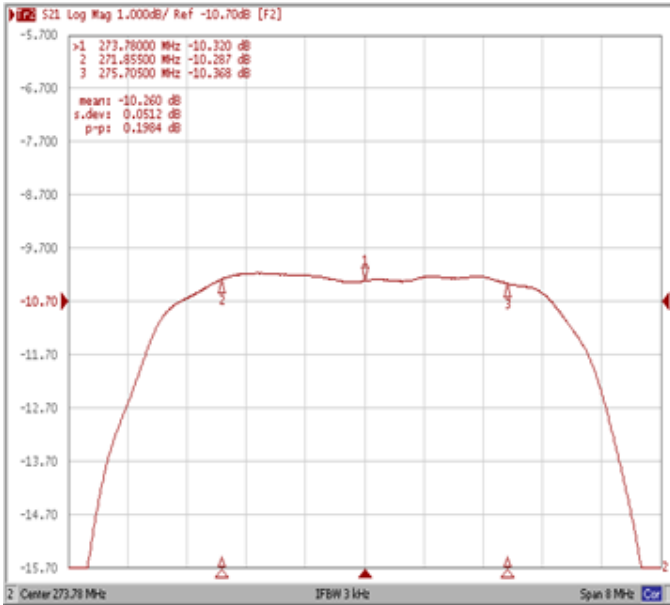
Attenuation



Frequency Response

Ripple Variation at Fo ±1.925MHz

Group Delay Variation at Fo ±1.925MHz



Smith Chart

VSWR

