- **190.00 MHz IF SAW Filter / 9.30 MHz Bandwidth**
- **Revision 0: 15 Oct. 2012**

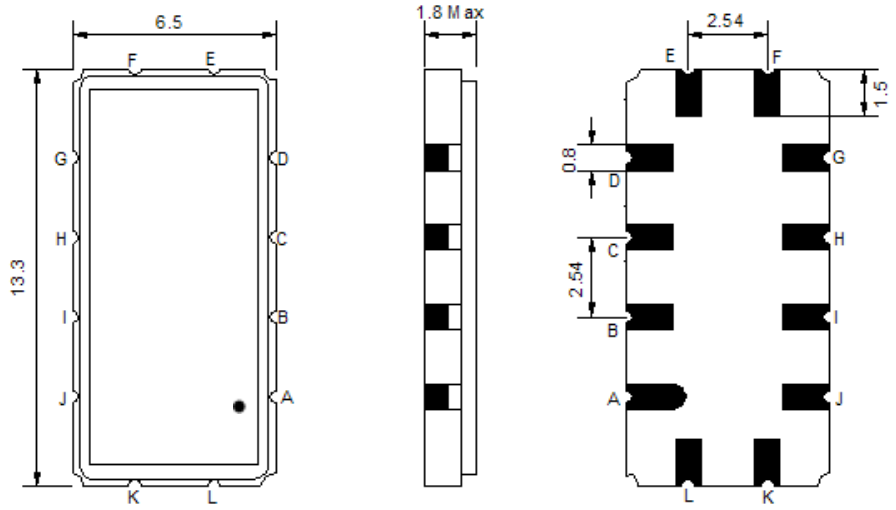
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-45	-	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	S90			
Length x Width	mm²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Center Frequency (Fo)	MHz	-	190.00	-
Insertion Loss at Fo	dB	-	23.20	25.00
Group Delay Variation at Fo ± 4.51 MHz	nsec	-	70	140
Absolute Delay at Fo	usec	-	1.75	-
Passband Ripple Variation at Fo ± 4.51 MHz	dB	-	0.55	1.20
Bandwidth at -1dB	MHz	9.15	9.30	-
Bandwidth at -3dB	MHz	-	9.60	-
Bandwidth at -40dB	MHz	-	10.93	11.10
Ultimate Rejection	dB	40	45	-
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.

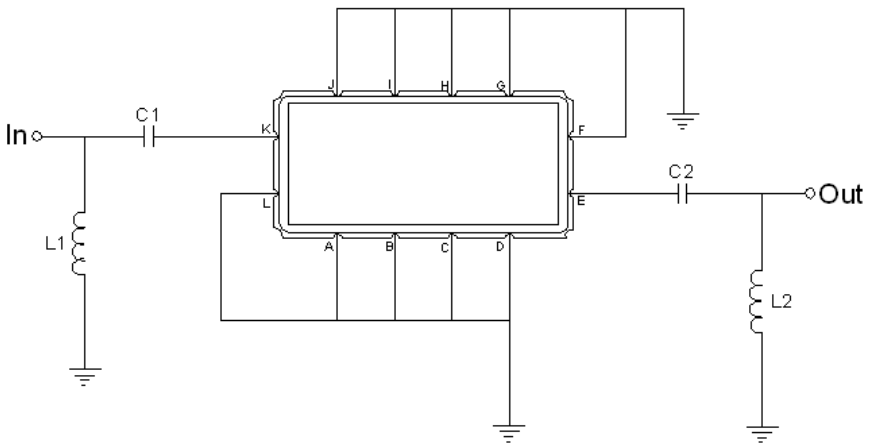
Package Dimensions



① **TRANSKO: Brand**
② **TF-019001: 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



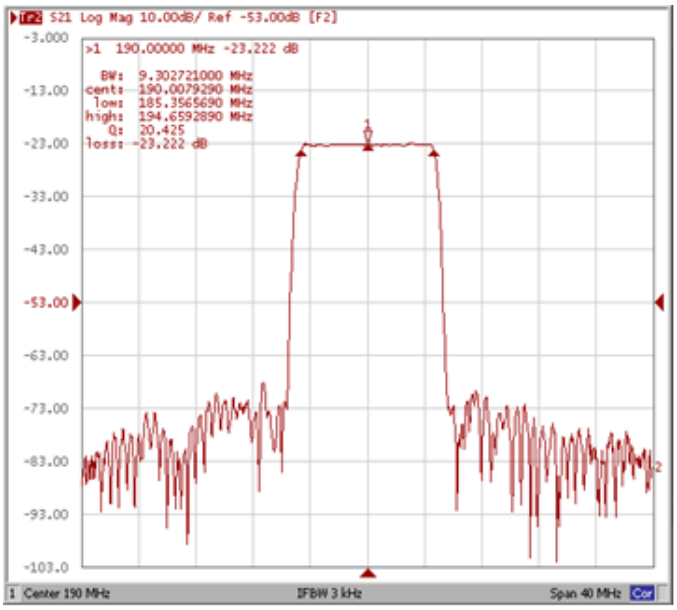
Test Fixture & Values	
Input	L1 = 33nH, C1=51pF
Output	L2 = 27nH, C2=27pF
Source/Load Impedance	50 Ω

Frequency Characteristics

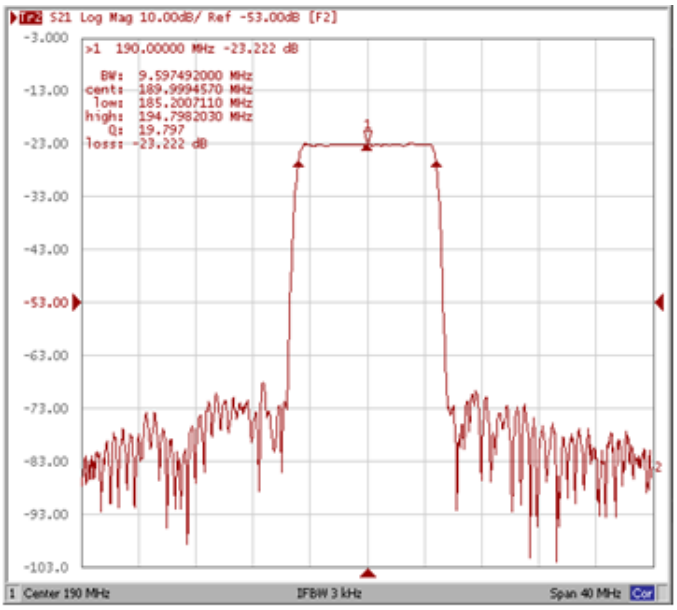
Frequency Response

Operating Temperature: +25°C

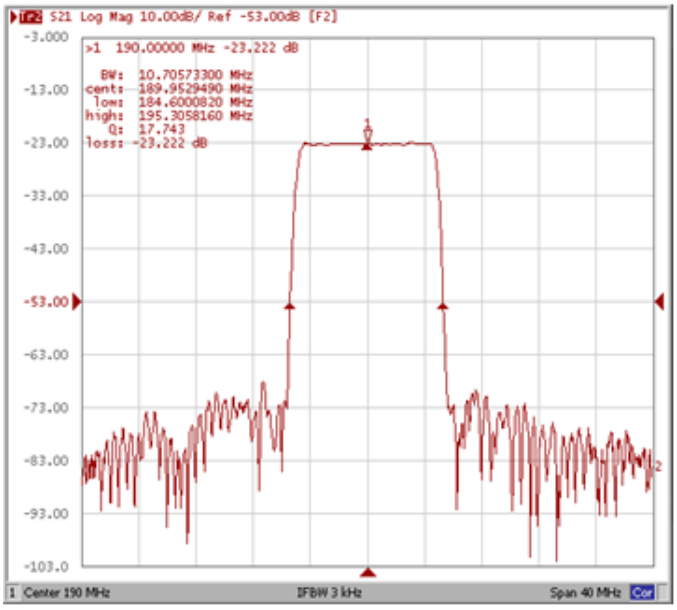
Bandwidth at –1.0 dB



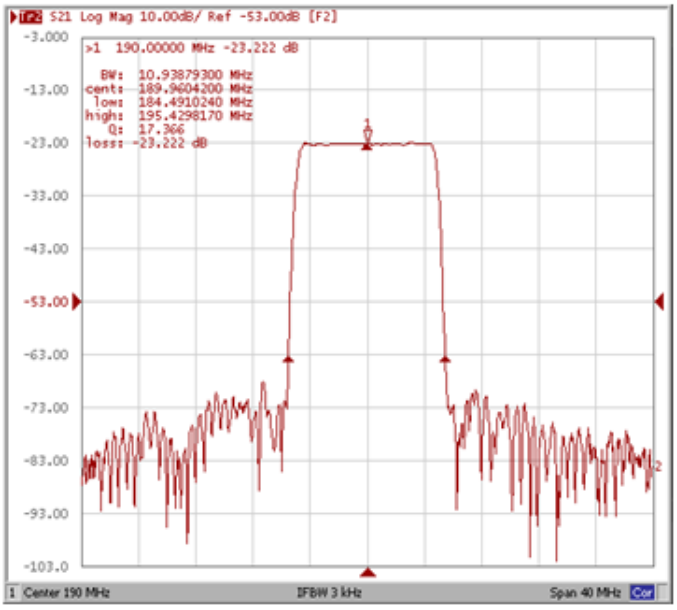
Bandwidth at –3.0 dB



Bandwidth at –30.0 dB

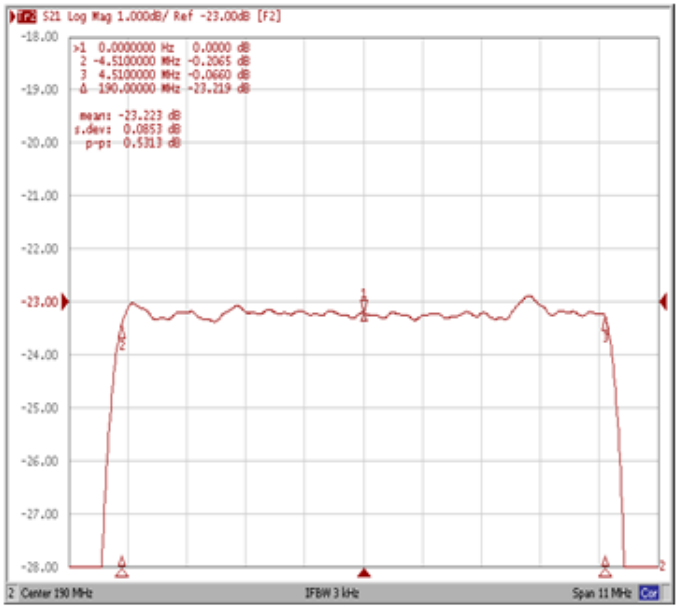


Bandwidth at –40.0 dB

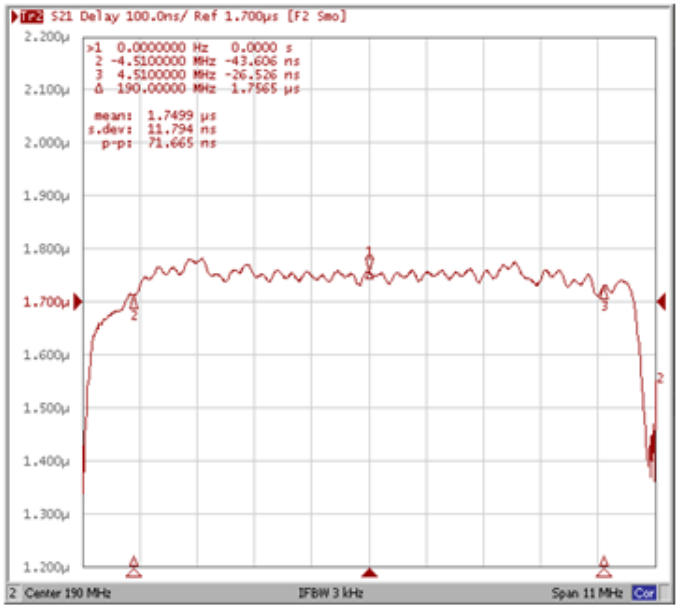


Frequency Response

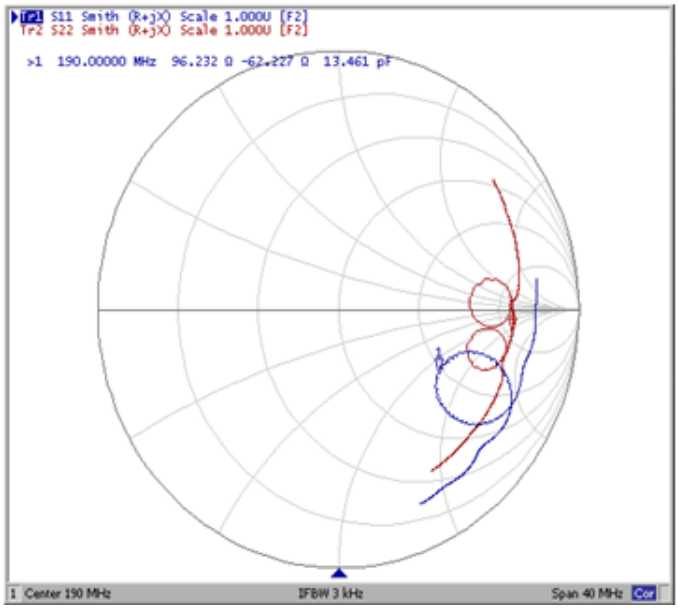
Ripple Variation Fo±4.51MHz



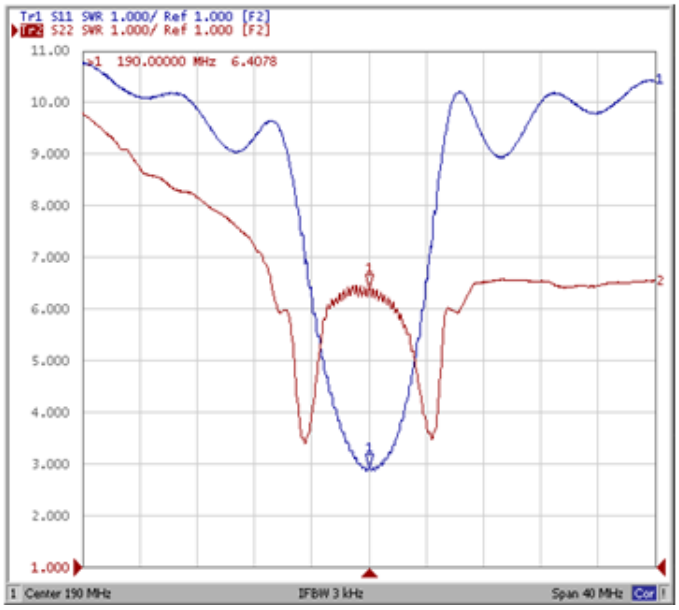
Group Delay Variation Fo±4.51MHz



Smith Chart



VSWR



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