

- 49.785 MHz IF SAW Filter / 21.45 MHz Bandwidth
- Revision 1: 15 Feb. 2013

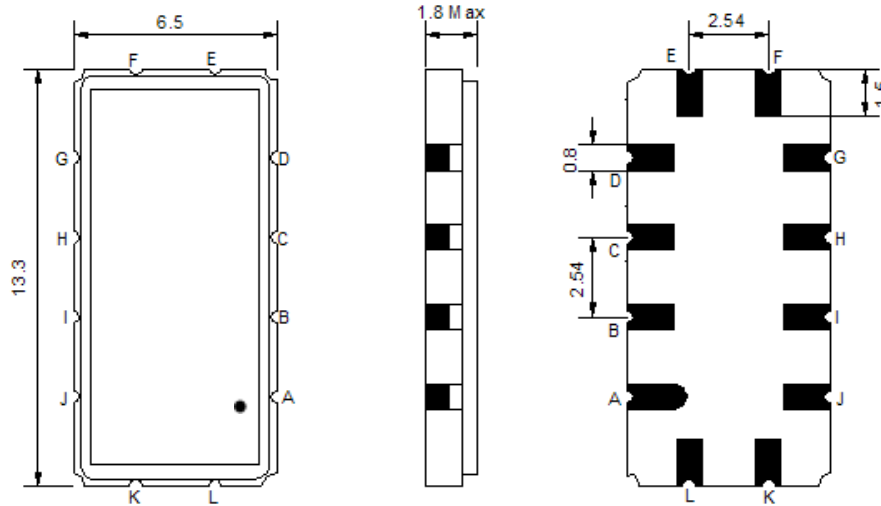
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-	25	-
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	S90			
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	-	49.785	-
Insertion Loss at Fo	dB	-	21.6	23.5
Group Delay Variation at Fo ± 9.535 MHz	nsec	-	15	60
Absolute Delay at Fo	usec	-	0.63	0.65
Passband Ripple Variation at Fo ± 9.535 MHz	dB	-	0.4	1.0
Bandwidth at -1dB	MHz	21.00	21.45	-
Bandwidth at -3dB	MHz	-	23.00	-
Bandwidth at -30dB	MHz	-	29.10	29.60
Ultimate Rejection	dB	25	30	-
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.

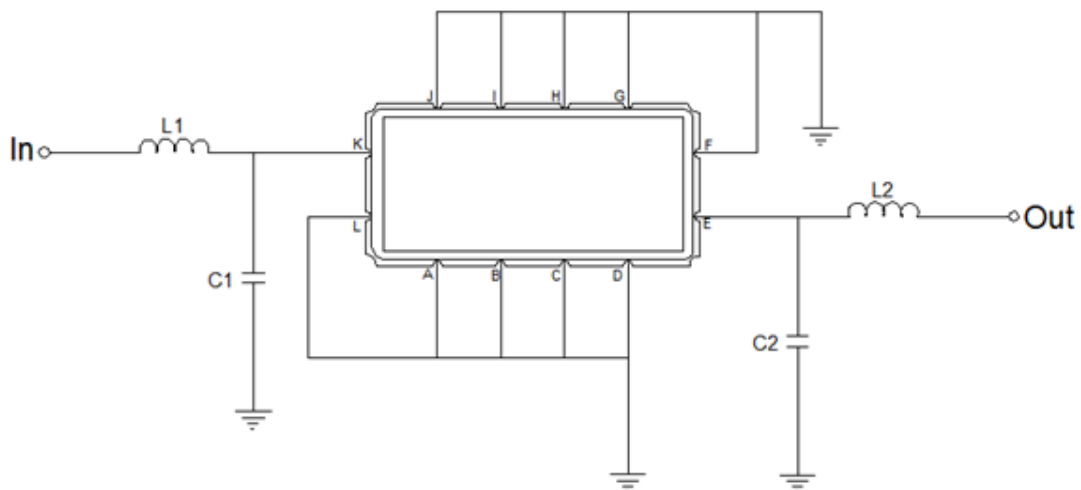
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TF-004902:** 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



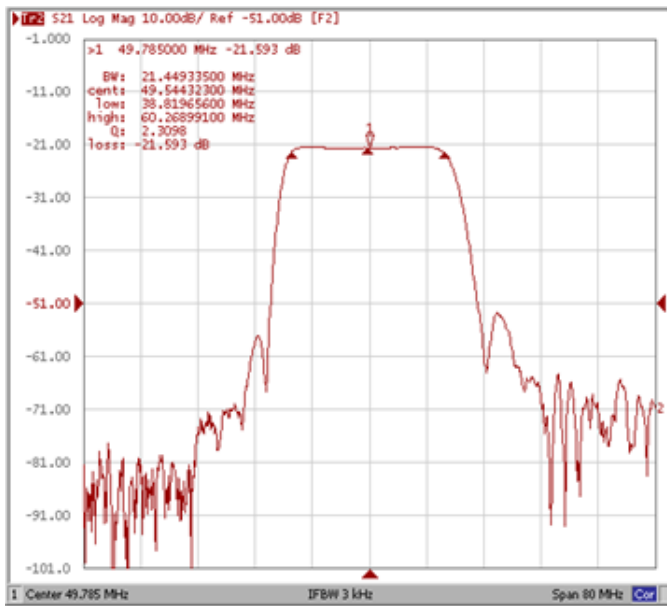
Test Fixture & Values	
Input	L1 = 220nH, C1=1.5pF
Output	L2 = 270nH, C2=13pF
Source/Load Impedance	50 Ω

Frequency Characteristics

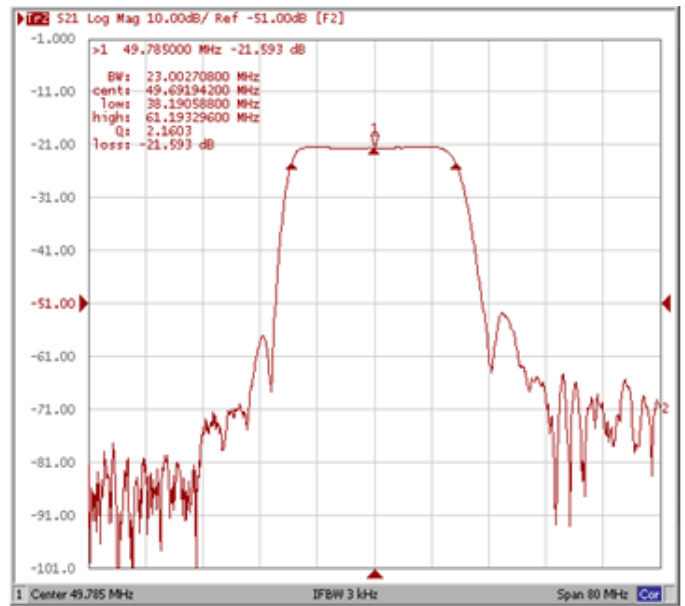
Frequency Response

Operating Temperature: +25°C

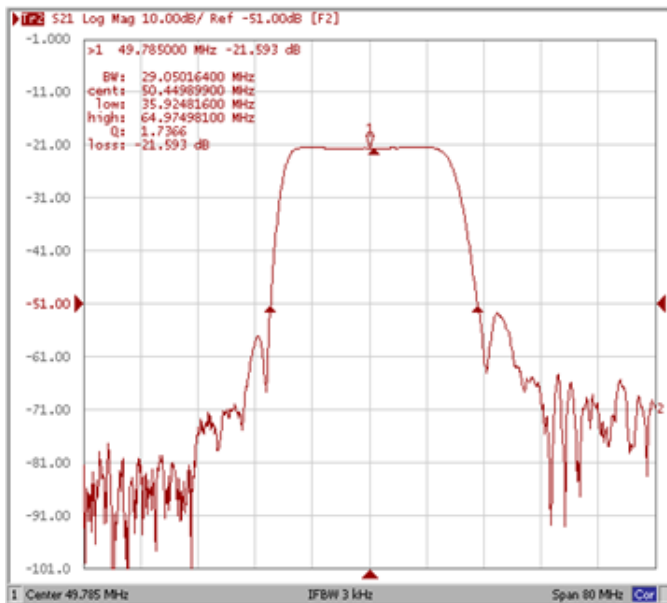
Bandwidth at -1.0 dB



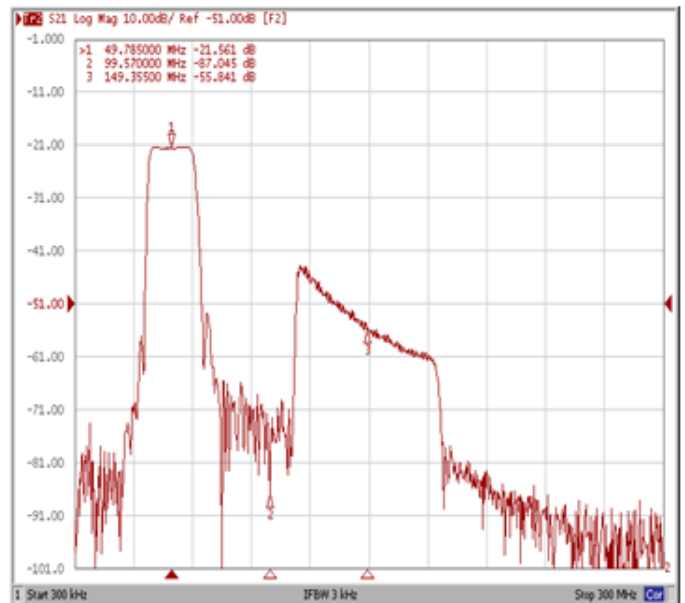
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

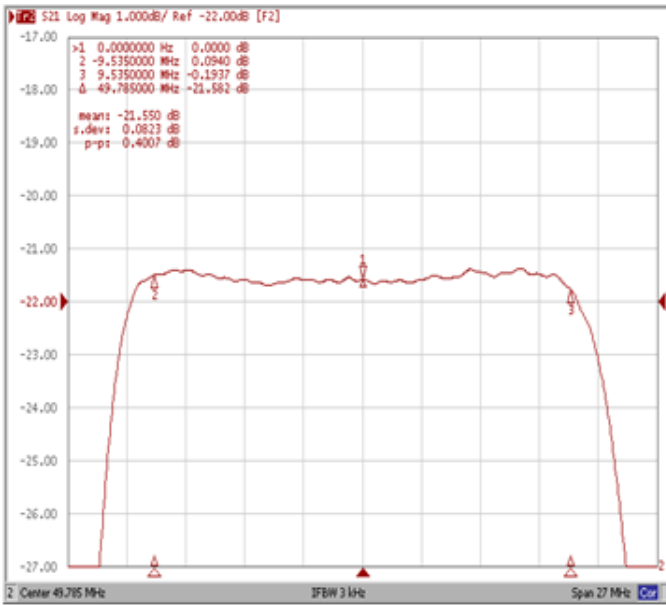


Wide-Band

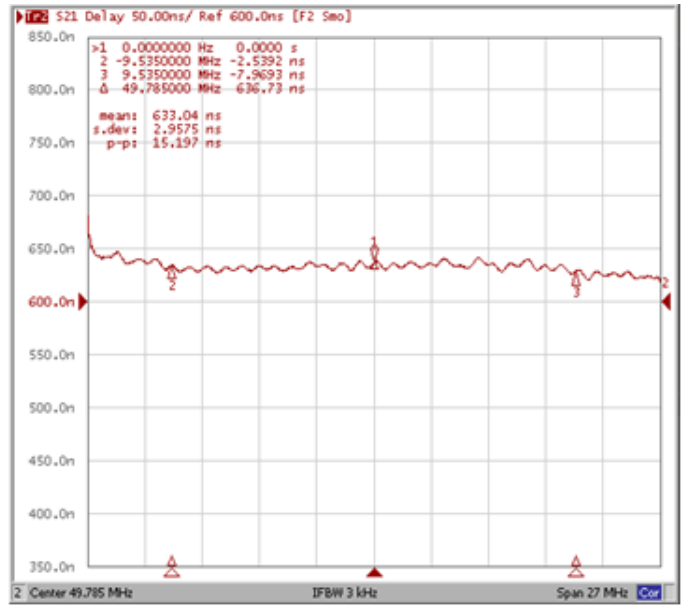


Frequency Response

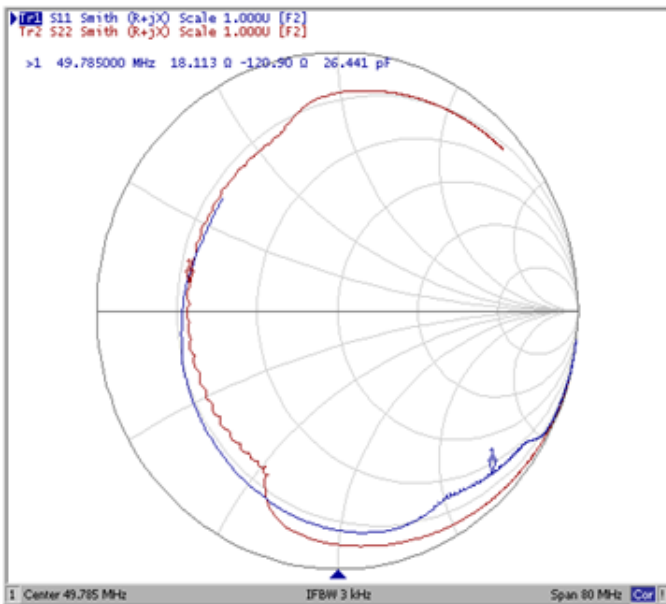
Ripple Variation Fo±9.535MHz



Group Delay Variation Fo±9.535MHz



Smith Chart



VSWR

