

- 42.50 MHz IF SAW Filter / 4.86 MHz Bandwidth
- Revision 0: 29 Nov. 2012

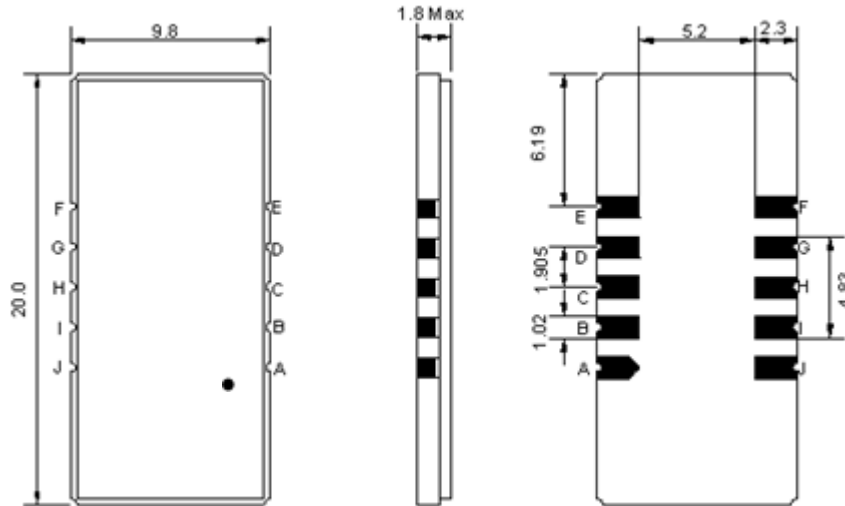
## Electrical Characteristics

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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	SC0			
Length x Width	mm <sup>2</sup>	-	20.0 x 9.8	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	42.5	-
Insertion Loss at Fo	dB	-	22.5	24.0
Group Delay Variation at Fo ± 2.25 MHz	nsec	-	60	120
Absolute Delay at Fo	usec	-	2.25	-
Passband Ripple Variation at Fo ± 2.25 MHz	dB	-	0.6	1.2
Bandwidth at -1dB	MHz	4.70	4.86	-
Bandwidth at -3dB	MHz	-	5.18	-
Bandwidth at -45dB	MHz	-	6.50	6.65
Ultimate Rejection	dB	45	48	-
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.

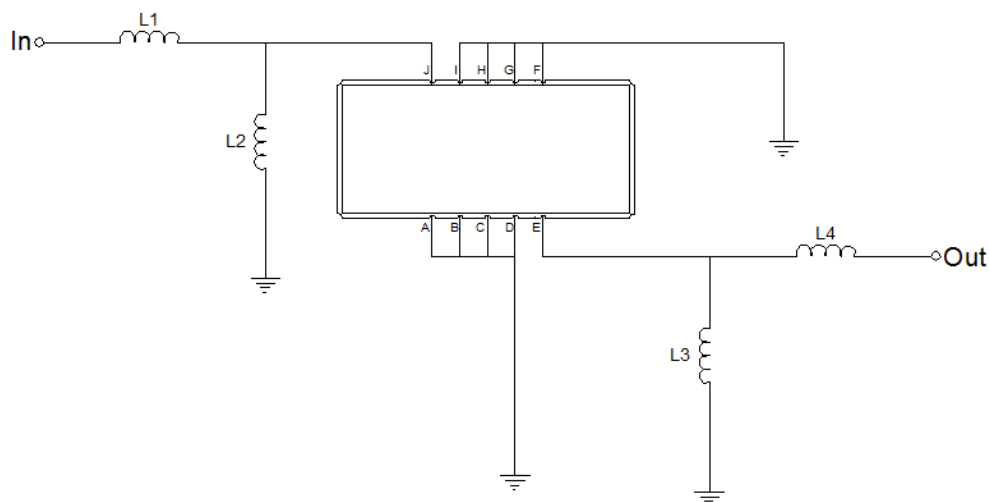
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TF-004201:** 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	Ground
J	Input
E	Output

## Testing Environment



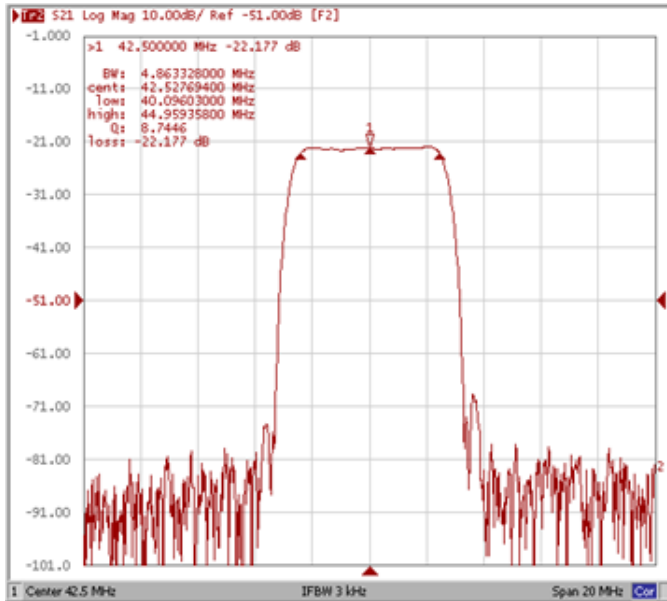
Test Fixture & Values	
Input	L1 = 39nH, L2=330nH
Output	L3 = 330nH, L4=39nH
Source/Load Impedance	50 Ω

## Frequency Characteristics

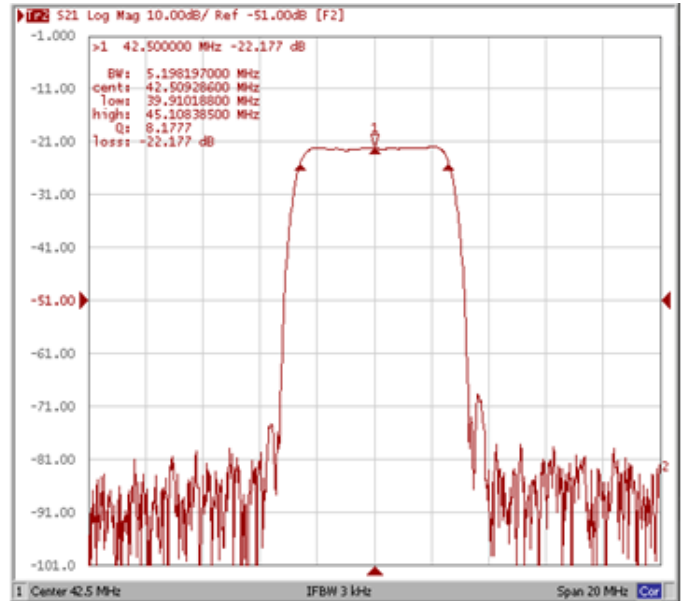
### Frequency Response

Operating Temperature: +25°C

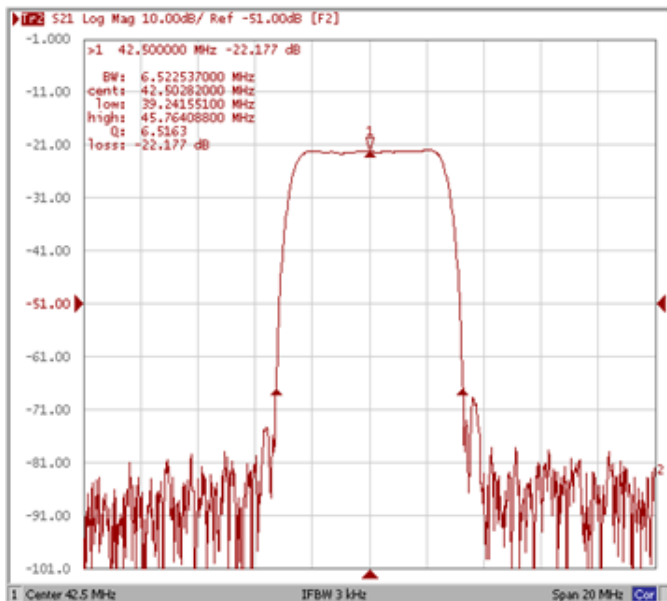
#### Bandwidth at -1.0 dB



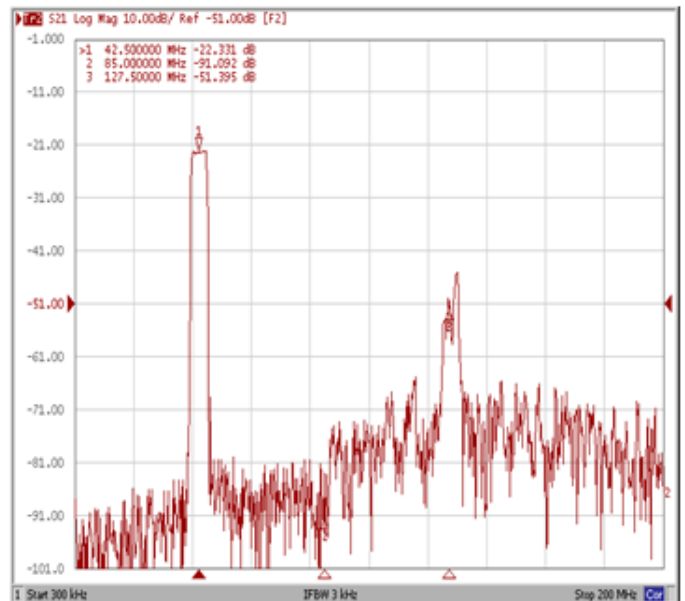
#### Bandwidth at -3.0 dB



#### Bandwidth at -45.0 dB

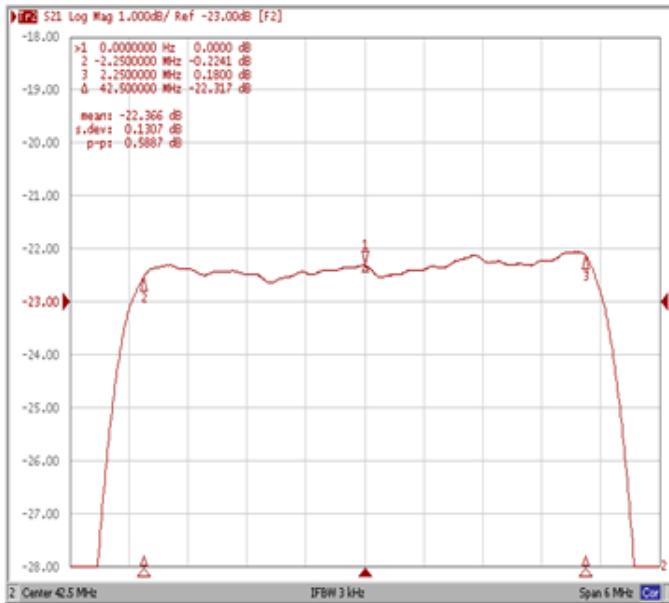


#### Wide-Band

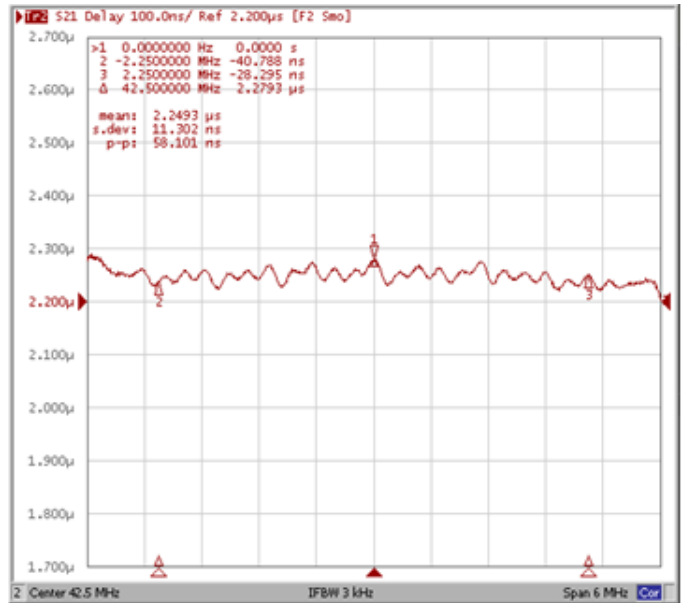


**Frequency Response**

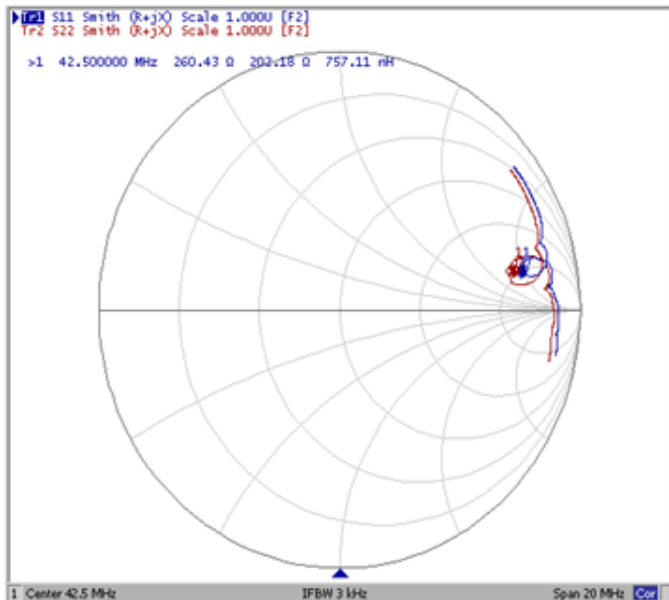
**Ripple Variation Fo±2.25MHz**



**Group Delay Variation Fo±2.25MHz**



**Smith Chart**



**VSWR**

