

- 135.10 MHz IF SAW Filter / 9.18 MHz Bandwidth
- Revision 0: 21 Jan. 2013

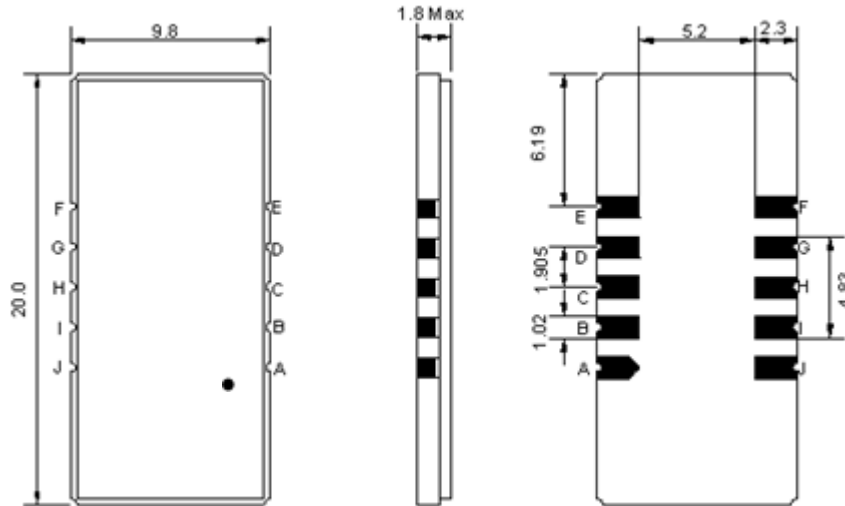
## Electrical Characteristics

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) <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	-	135.1	-
Insertion Loss at Fo	dB	-	22.0	24.5
Group Delay Variation at Fo ± 4.42 MHz	nsec	-	60	120
Absolute Delay at Fo	usec	-	3.09	-
Passband Ripple Variation at Fo ± 4.42 MHz	dB	-	0.6	1.0
Bandwidth at -1dB	MHz	9.05	9.18	-
Bandwidth at -3dB	MHz	-	9.47	-
Bandwidth at -45dB	MHz	-	10.75	10.90
Ultimate Rejection	dB	45	50	-
Temperature Coefficient	ppm/°C	-	-18	-

**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.

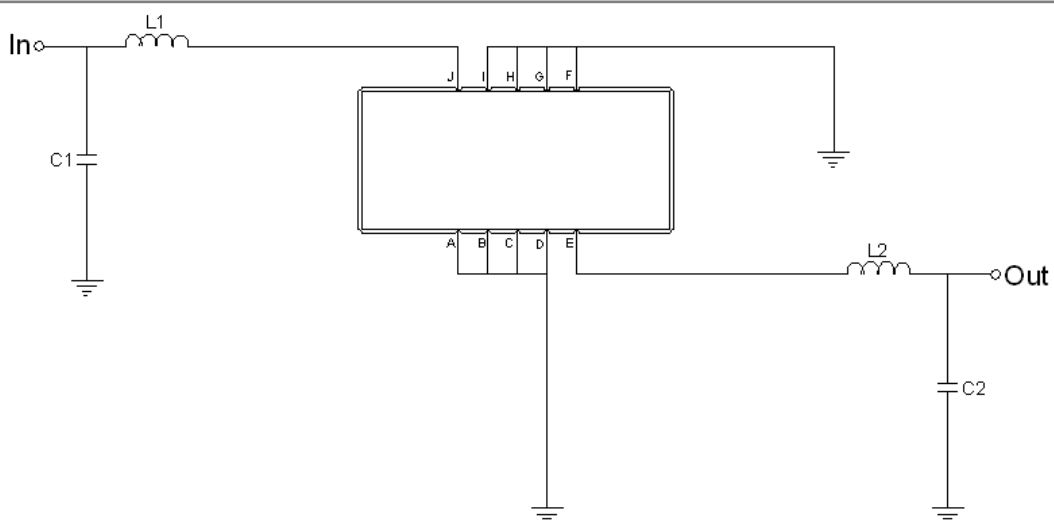
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TF-013502:** 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



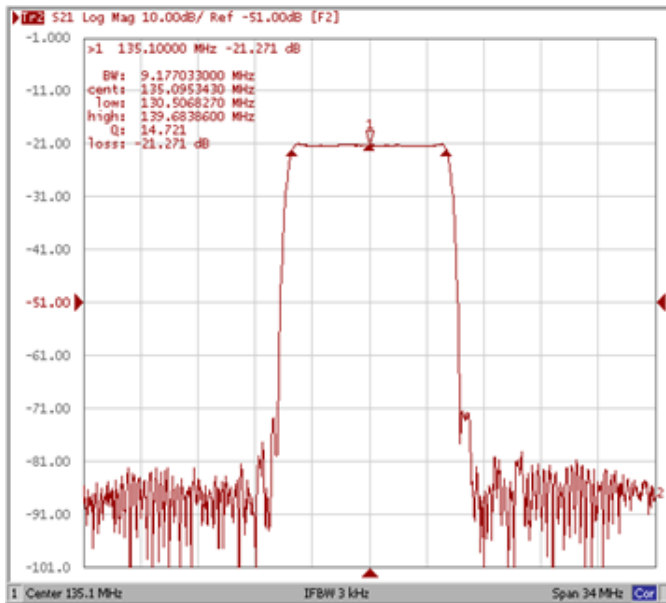
Test Fixture & Values	
Input	L1 = 47nH, C1=62pF
Output	L2 = 39nH, C2=51pF
Source/Load Impedance	50 Ω

## Frequency Characteristics

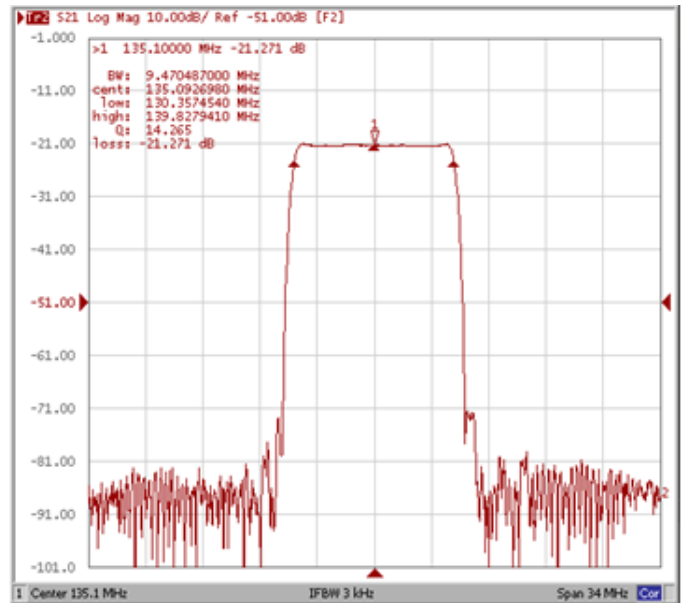
### Frequency Response

Operating Temperature: +25°C

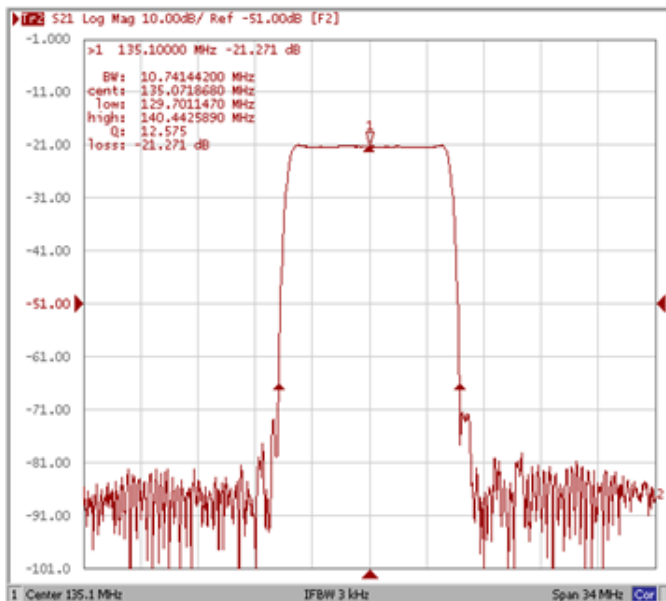
**Bandwidth at -1.0 dB**



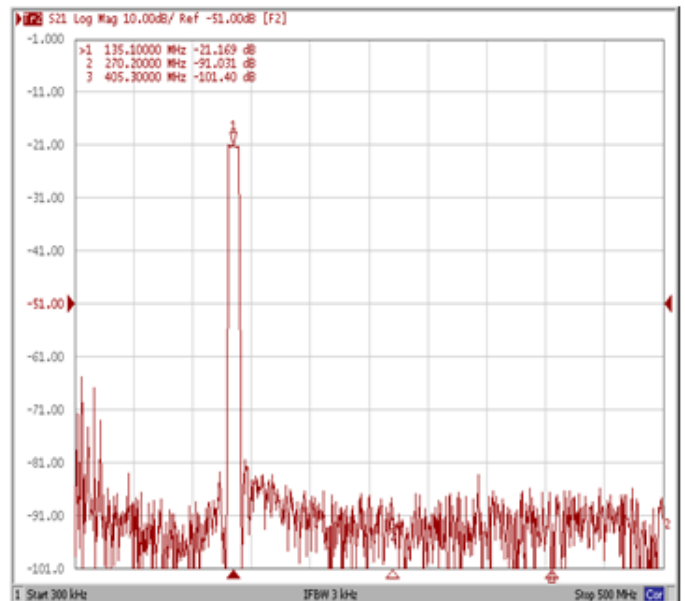
**Bandwidth at -3.0 dB**



**Bandwidth at -45.0 dB**



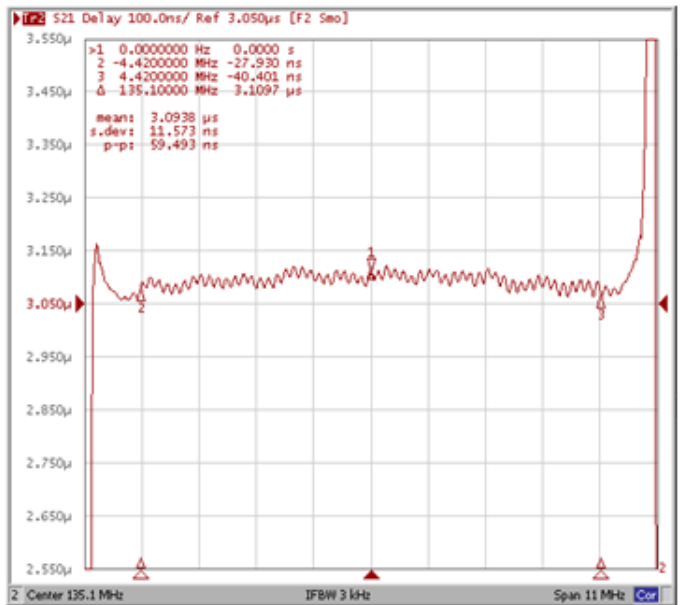
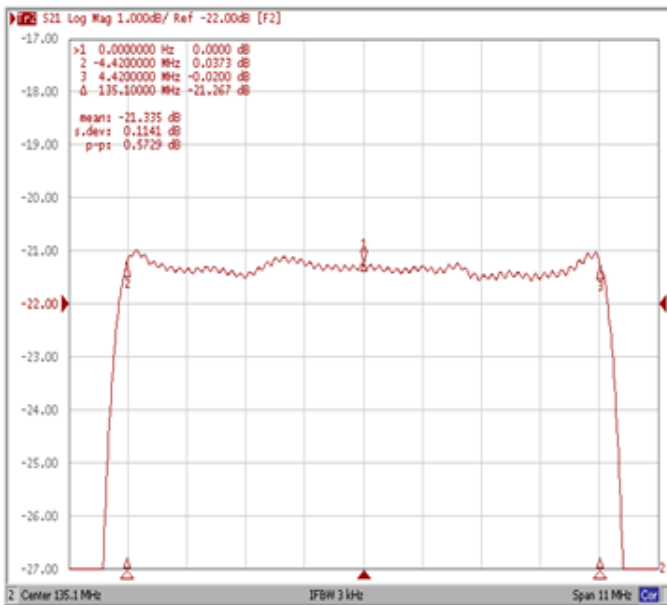
**Wide-Band**



## Frequency Response

**Ripple Variation Fo±4.42MHz**

**Group Delay Variation Fo±4.42MHz**



**Smith Chart**

**VSWR**

