

- 38.00 MHz IF SAW Filter / 2.45 MHz Bandwidth
- Revision 0: Jul. 2015

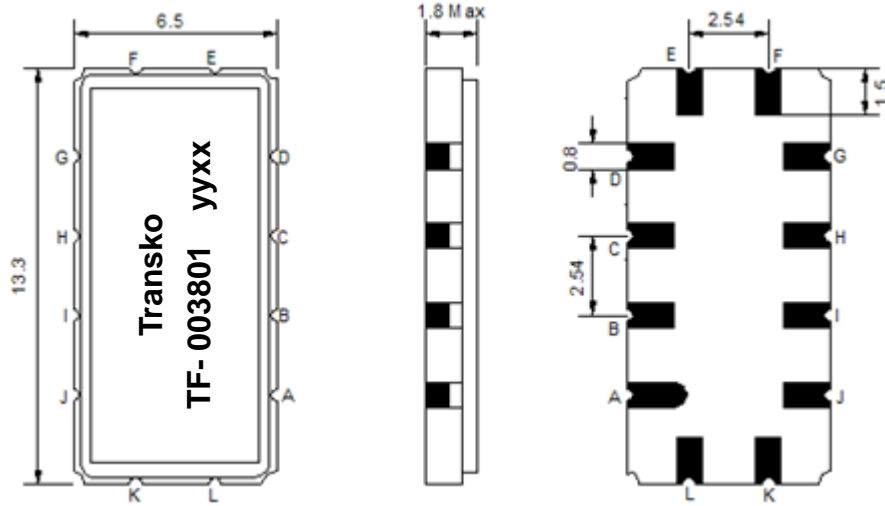
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	15
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 @ 25°C	MAXIMUM
Center Frequency (Fo)	MHz	37.90	38.00	38.10
Insertion Loss at Fo	dB	-	17.5	20.0
Group Delay Variation at Fo ±0.9 MHz	ns	-	50	100
Absolute Delay at Fo	us	-	1.80	1.90
Amplitude Ripple at Fo ±0.9 MHz	dB _{p-p}	-	0.3	0.9
Bandwidth at -1dB	MHz	2.3	2.45	-
Bandwidth at -3dB	MHz	2.7	2.95	-
Bandwidth at -40dB	MHz	-	4.65	4.8
Relative Attenuation				
Ultimate Rejection Level	dB	40	43	-
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.

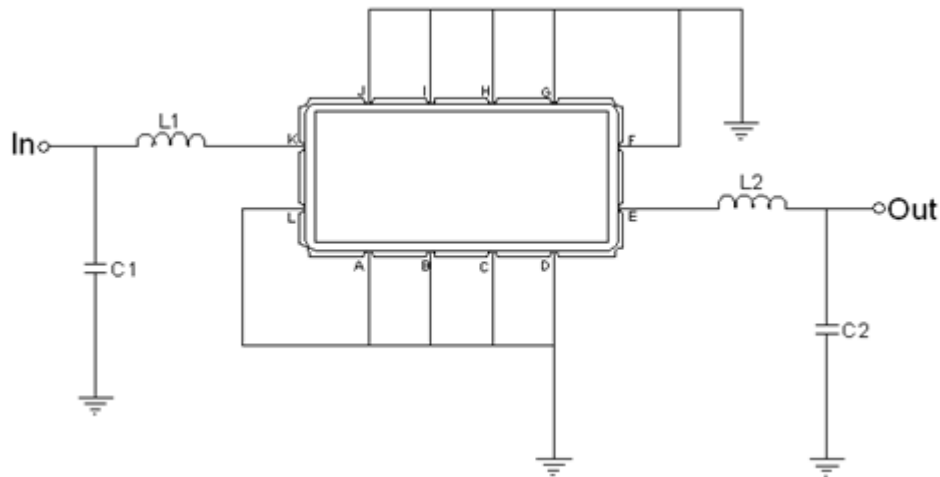
Package Dimensions



- ① Transko : Brand
- ② TF-003801 : Model Name
- ③ yy : Date Code (Year)
- ④ xx : Date Code (Week)

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

Testing Environment



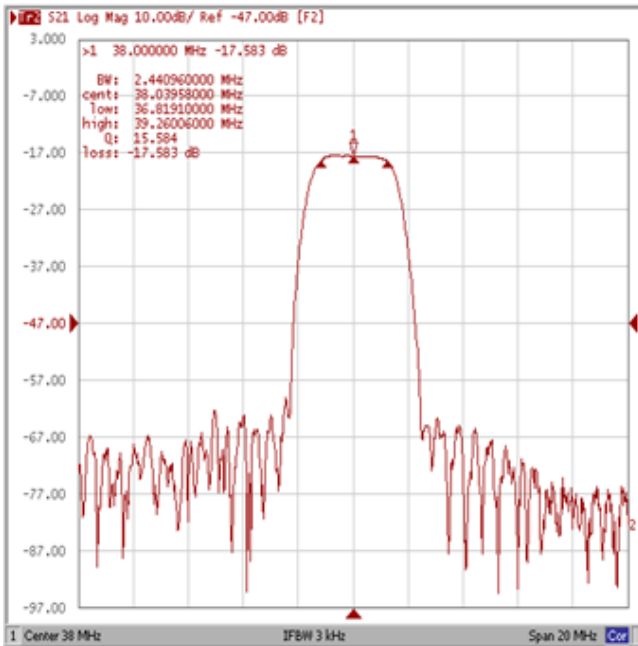
Test Fixture & Values	
Input	L1 = 470 nH , C1 = 91 pF
Output	L2 = 470 nH , C1 = 91 pF
Source/Load Impedance	50Ω

Frequency Characteristics

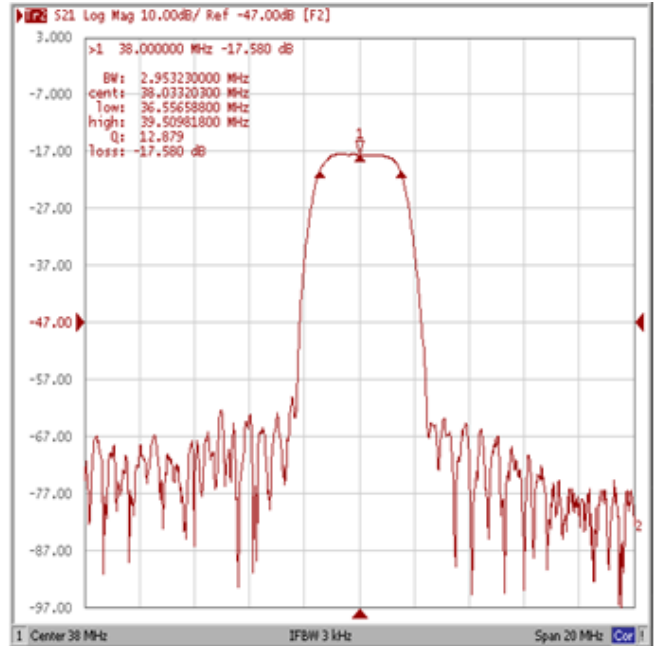
Operating Temperature: +25°C

Frequency Response

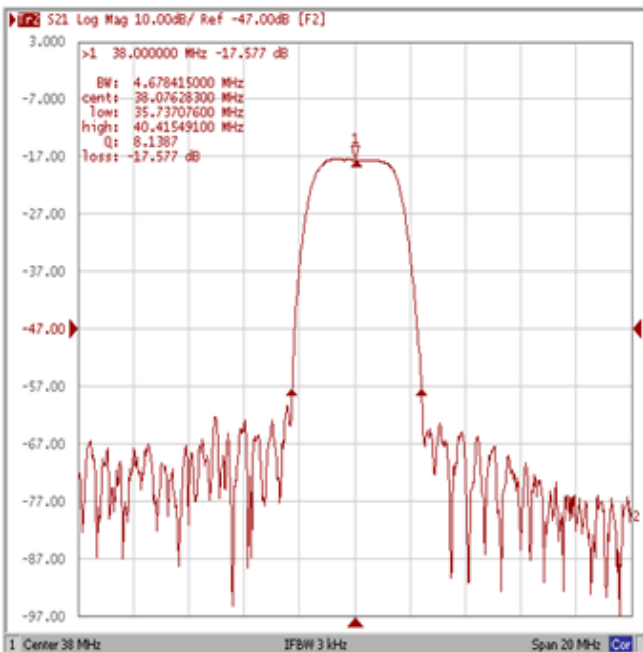
Bandwidth at -1.0 dB



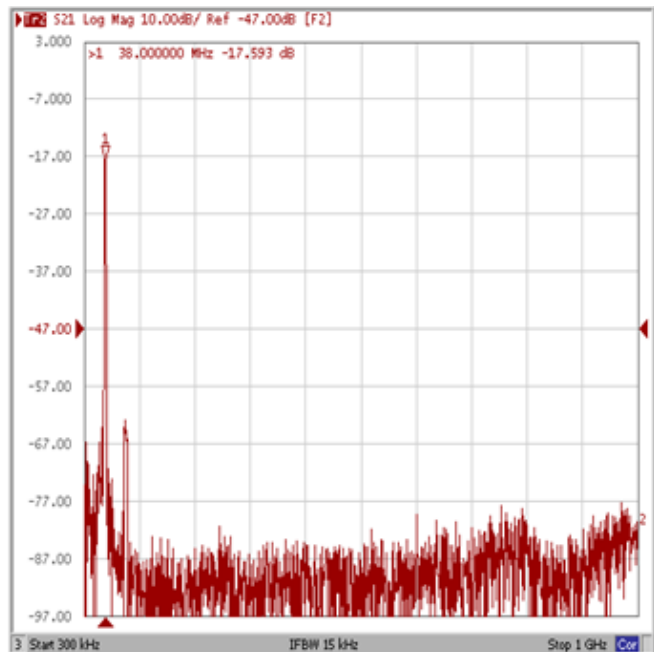
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

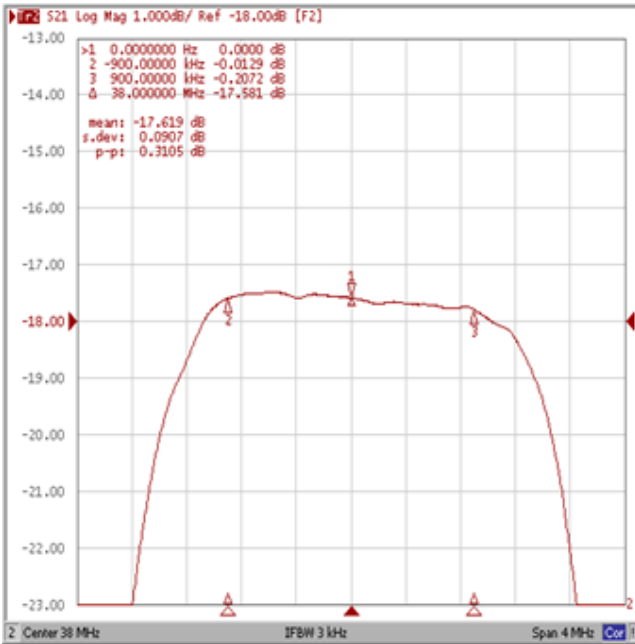


Wide-Band

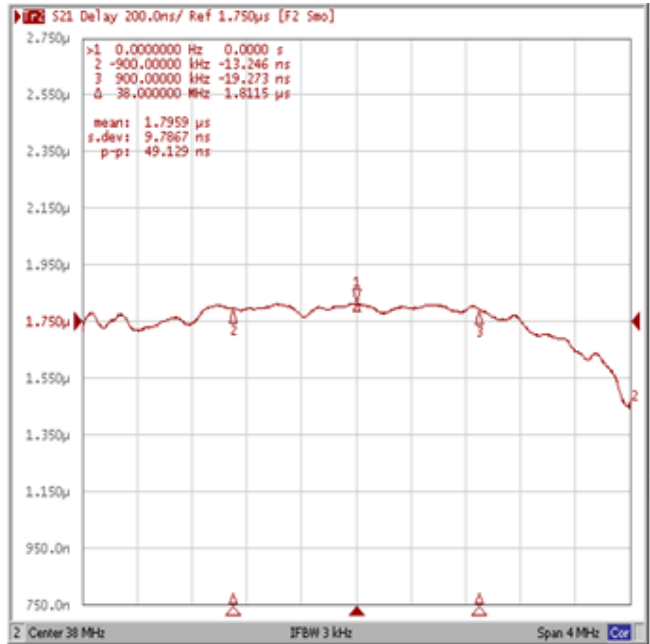


Frequency Response

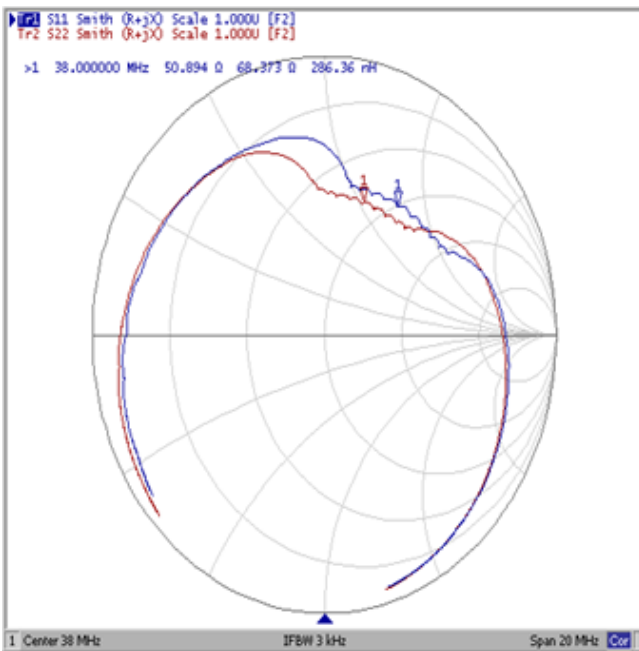
Ripple Variation Fo ± 0.9 MHz



Group Delay Variation Fo ± 0.9 MHz



Smith Chart



VSWR

