

- 140.0 MHz IF SAW Filter / 77.30 MHz Bandwidth
- Revision 0: 15 Oct. 2009

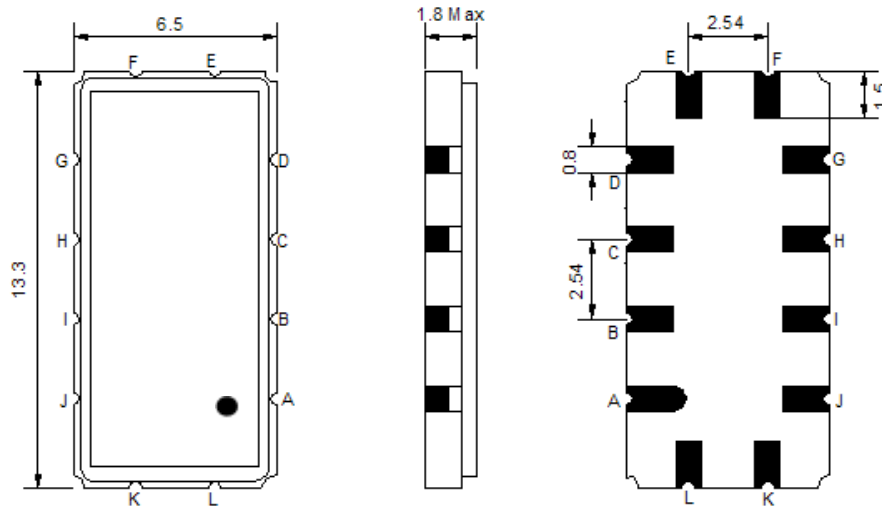
## Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-40	-	80
Storage Temperature Range	°C	-45	-	105
Maximum DC Voltage	V	-	-	5
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	V			
Length x Width	mm <sup>2</sup>	-	13.3 x 6.5	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	139.75	140.00	140.25
Insertion Loss at Fo	dB	-	22.5	25.0
Group Delay Variation at Fo±35.0MHz	nsec	-	14	40
Absolute Delay at Fo	usec	-	0.78	-
Passband Ripple at Fo±35.0MHz	dB	-	0.45	1.00
Bandwidth at -2dB	MHz	75.00	77.30	-
Bandwidth at -3dB	MHz	76.00	77.90	-
Bandwidth at -35dB	MHz	-	84.30	85.00
Ultimate Rejection				
@Fo ± 40MHz	dB	-	7.4	-
@Fo ± 50MHz	dB	40	53	-
Material Temperature coefficient	KHz/°C	-	-13.16	-
ESD Class	-	1A		

**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.

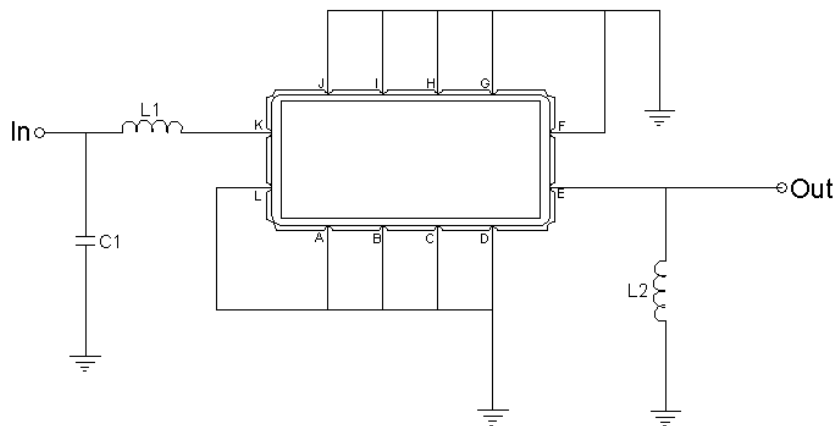
## Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL14077A:** 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



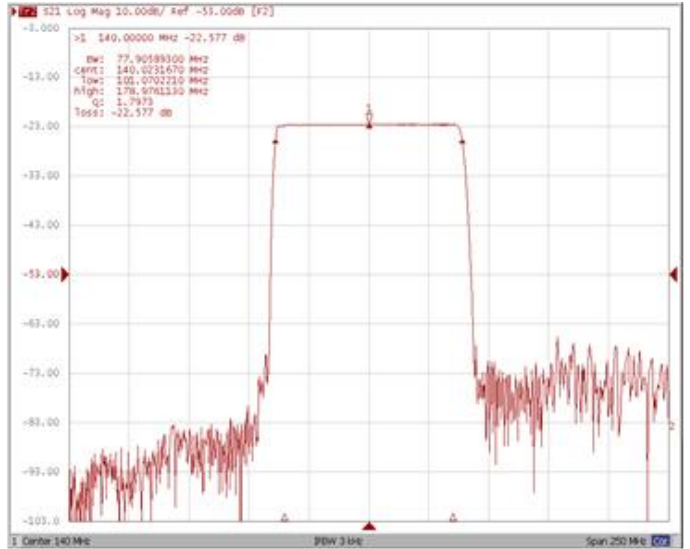
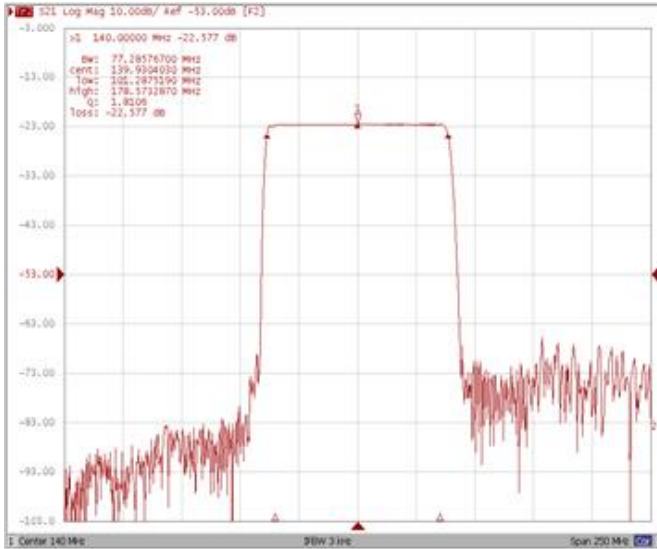
Test Fixture & Values	
Input	L1=27 nH, C1=24 pF
Output	L2=39 nH
Source/Load Impedance	50 $\Omega$

## Frequency Characteristics

**Frequency Response**

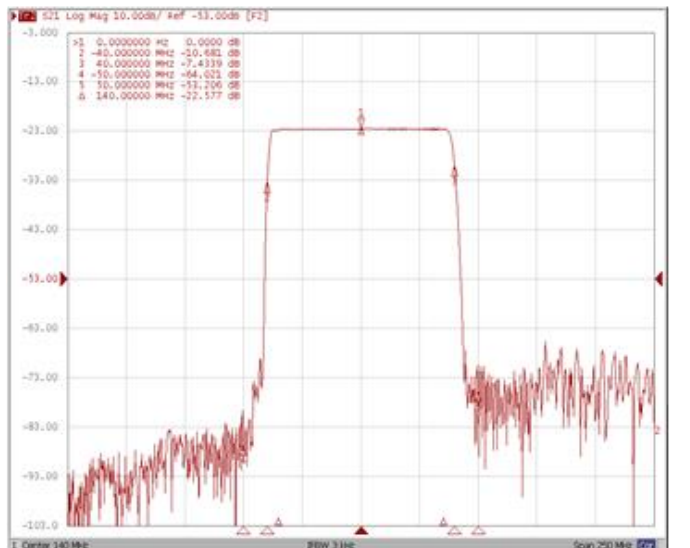
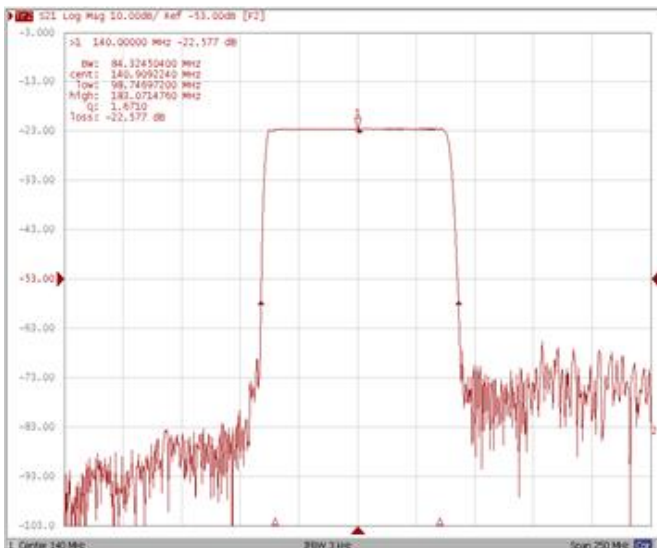
**Bandwidth at -2.0 dB**

**Bandwidth at -3.0 dB**



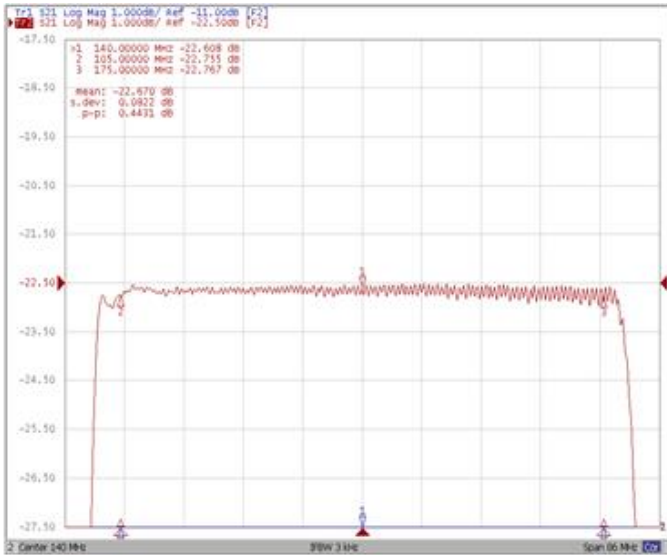
**Bandwidth at -35.0 dB**

**Relative Attenuation at  $F_o \pm 40.0\text{MHz}$  ,  $\pm 50.0\text{MHz}$**

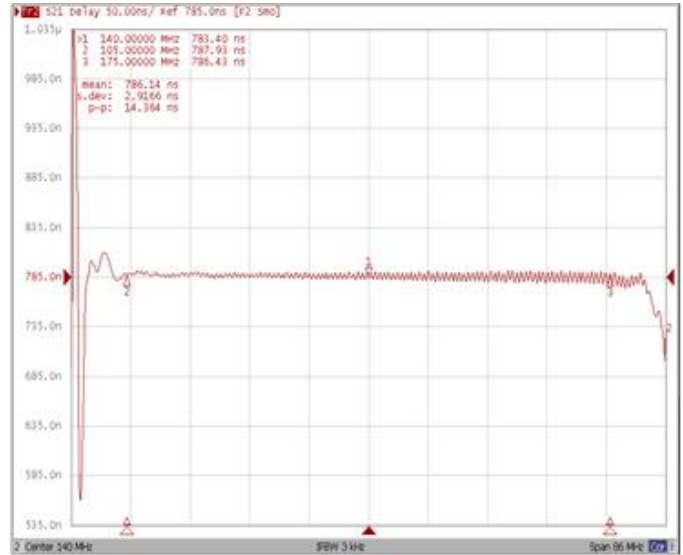


**Frequency Response**

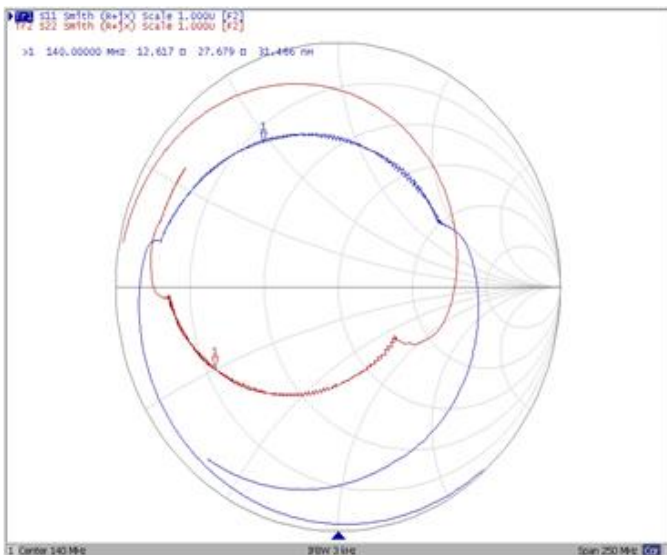
**Ripple Variation Fo±35.0MHz**



**Group Delay Variation Fo±35.0MHz**



**Smith Chart**



**VSWR**

