

- 140.0 MHz IF SAW Filter / 20.80 MHz Bandwidth
- Revision 0: 08 Jul. 2008

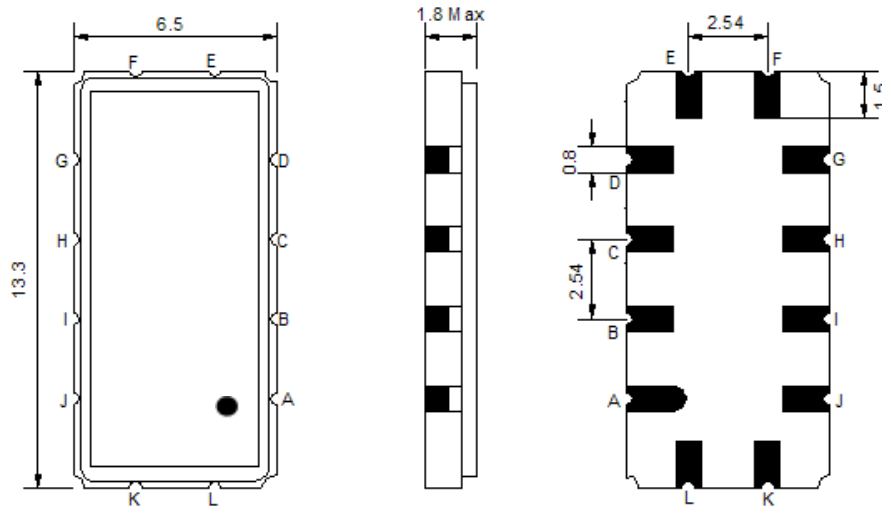
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating 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	V			
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	139.80	140.00	140.20
Insertion Loss at Fo	dB	-	11.0	12.5
Group Delay Variation	nsec	-	40	80
Absolute Delay at Fo	usec	-	0.88	-
Passband Ripple Variation	dB	-	0.60	1.0
Bandwidth at -1dB	MHz	20.60	20.80	-
Bandwidth at -3dB	MHz	-	21.75	-
Bandwidth at -35dB	MHz	-	25.50	-
Bandwidth at -40dB	MHz	-	26.05	26.60
Ultimate Rejection	dB	-	50	-
Temperature Coefficient	ppm/°C	-	-86	-

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.

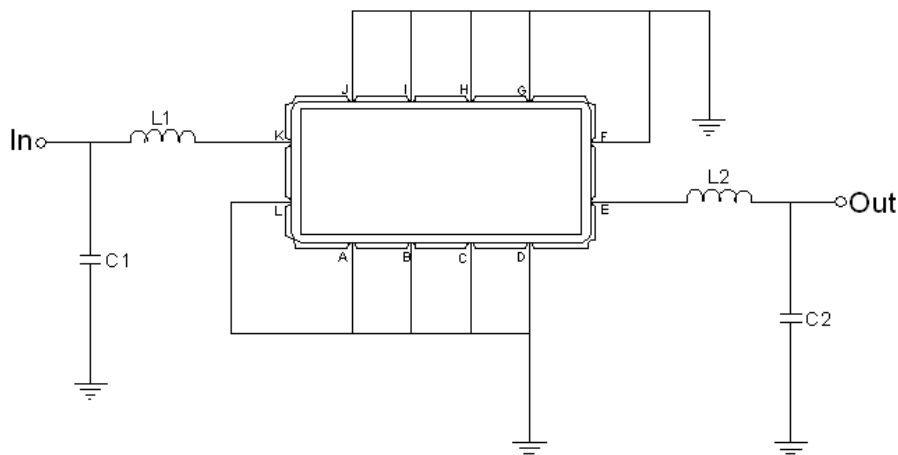
Package Dimensions



- ① **TRANSKO:** Brand
- ② **TL14020A:** 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

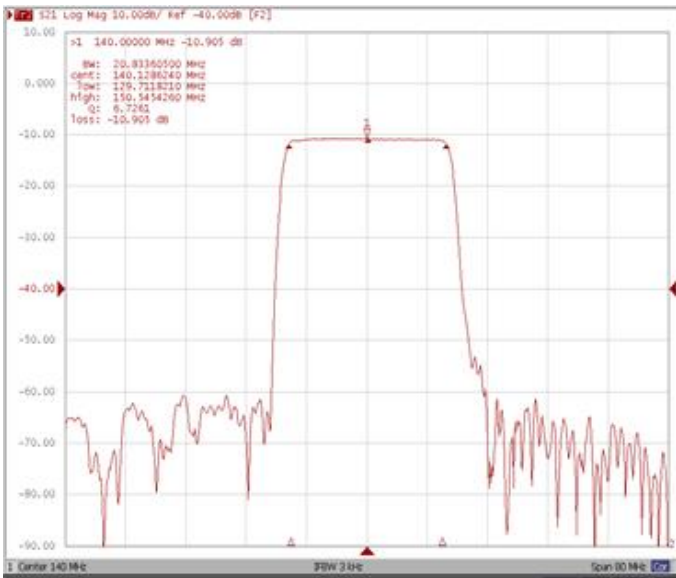


Test Fixture & Values	
Input	L1 = 68 nH , C1 = 27 pF
Output	L2 = 68 nH , C2 = 27 pF
Source/Load Impedance	50 Ω

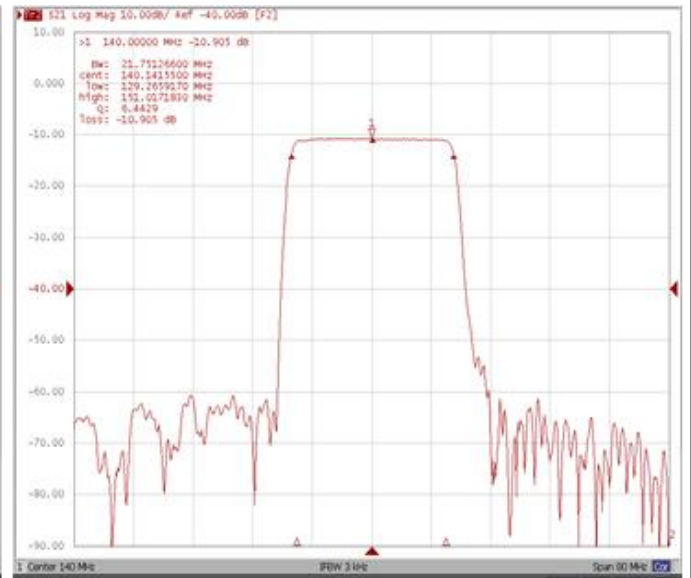
Frequency Characteristics

Frequency Response

Bandwidth at -1.0 dB



Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

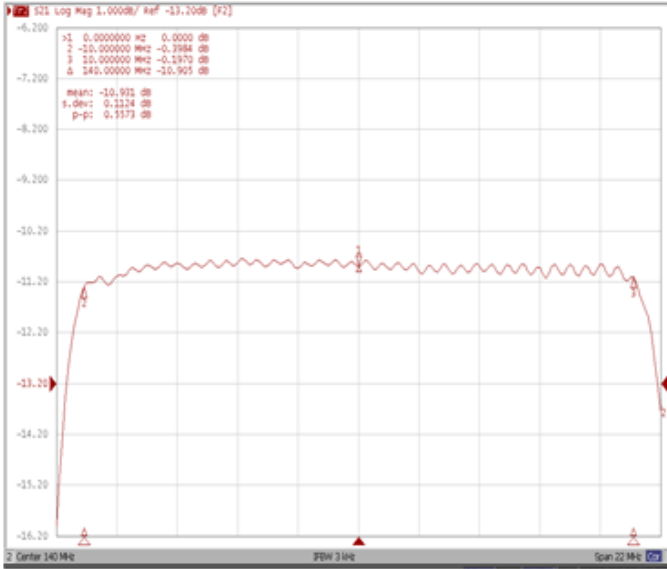


Attenuation Fo±20.0MHz

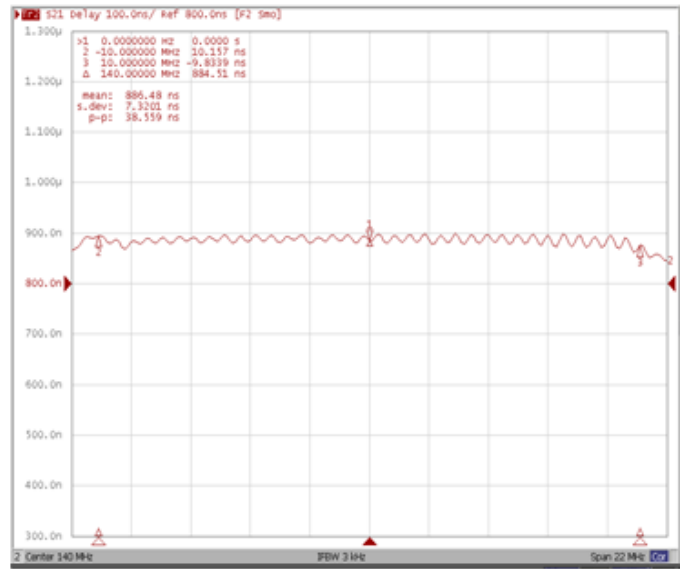


Frequency Response

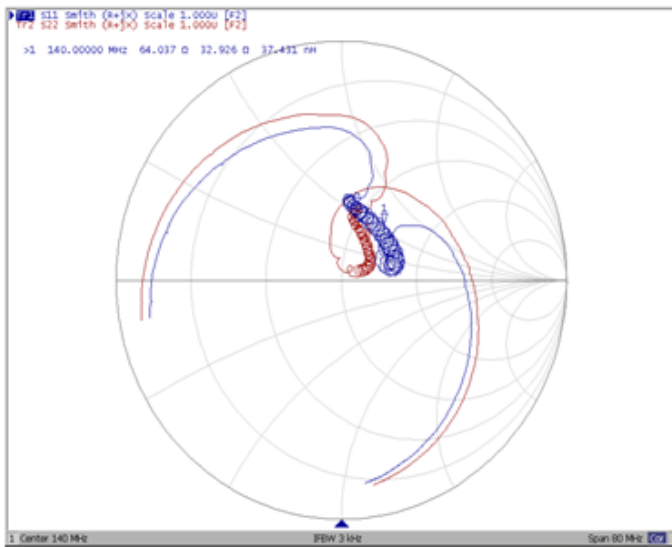
Ripple Variation Fo±10.0MHz



Group Delay Variation Fo±10.0MHz



Smith Chart



SWR

