

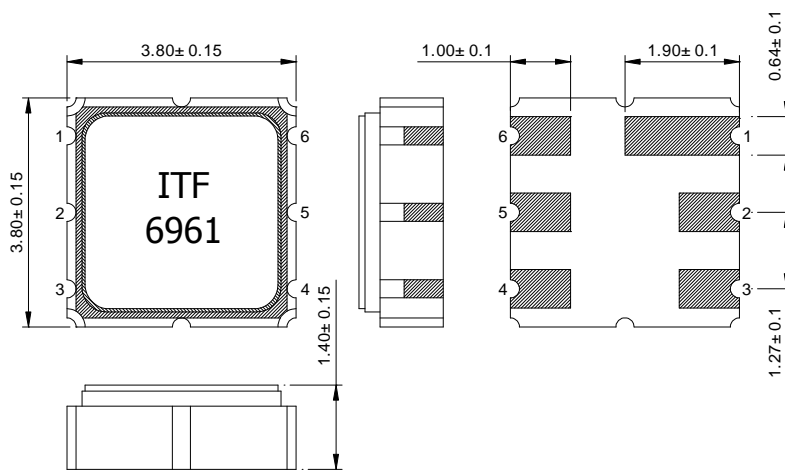
SAW Bandpass Filter F6961



Features

- RF bandpass filter
- High attenuation
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package
- RoHS Compliant

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um
Ni Plating

Pin Configuration	
2	Input
5	Output
1, 3, 4, 6	Case ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
Storage Temperature Range	°C	-40	25	85
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F6961	
		Rev. Date	2012-09-27	
		Rev.	NSNI03-AS01	1/8

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Specifications

Fc = 696 MHz

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	696	-	MHz
Insertion Loss (694 ~ 698 MHz)	-	2.5	4.0	dB
Amplitude Ripple (694 ~ 698 MHz)	-	0.5	1.0	dBp-p
Absolute Group Delay (Fc)	-	100	-	nsec
Group Delay Variation (694 ~ 698 MHz)	-	50	-	nsec
VSWR (694 ~ 698 MHz)	-	1.5	2.0	
Relative Attenuation				
0.3 ~ 672 MHz	40	50	-	dB
715 ~ 1100 MHz	40	50	-	
1100 ~ 1500 MHz	35	45	-	
1500 ~ 2500 MHz	30	40	-	
Input/Output Impedance		50		Ohms

Notes :

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 3) All attenuation measurements are measured relative to insertion loss

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Matching Schematic

(Actual matching values may vary due to PCB layout and parasitics)



Marking Configuration

ITF¹⁾
6961²⁾

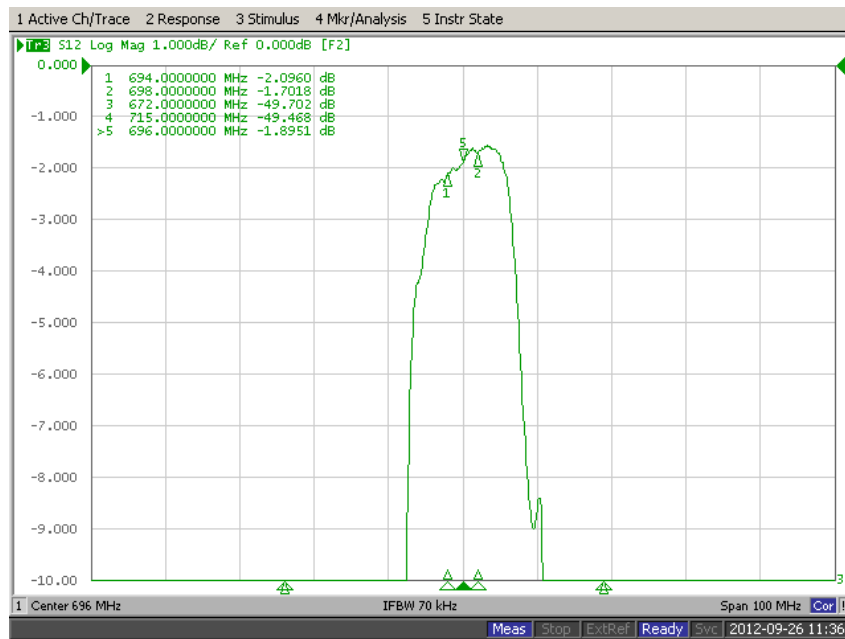
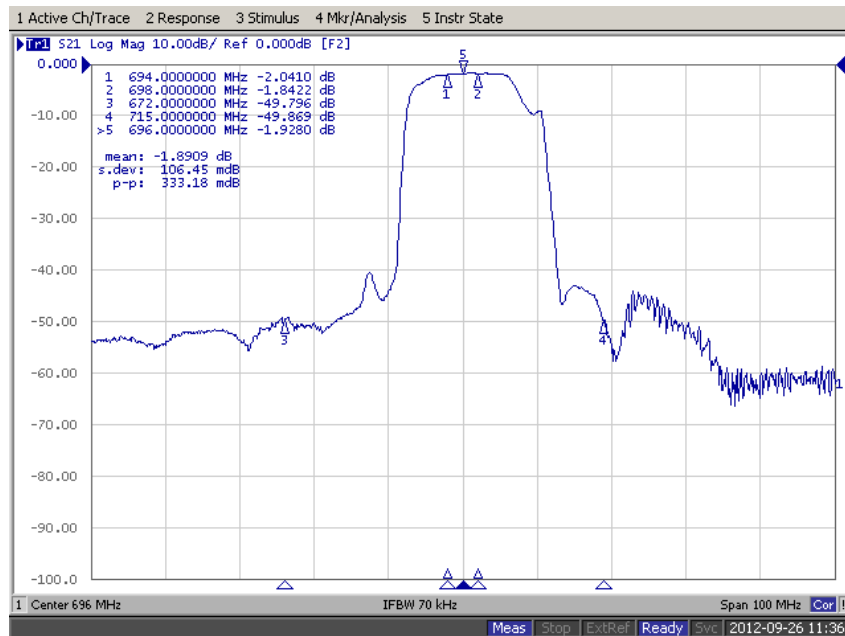
- 1) Manufacturer name
- 2) Marking Number

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Typical Performance (at 25°C)

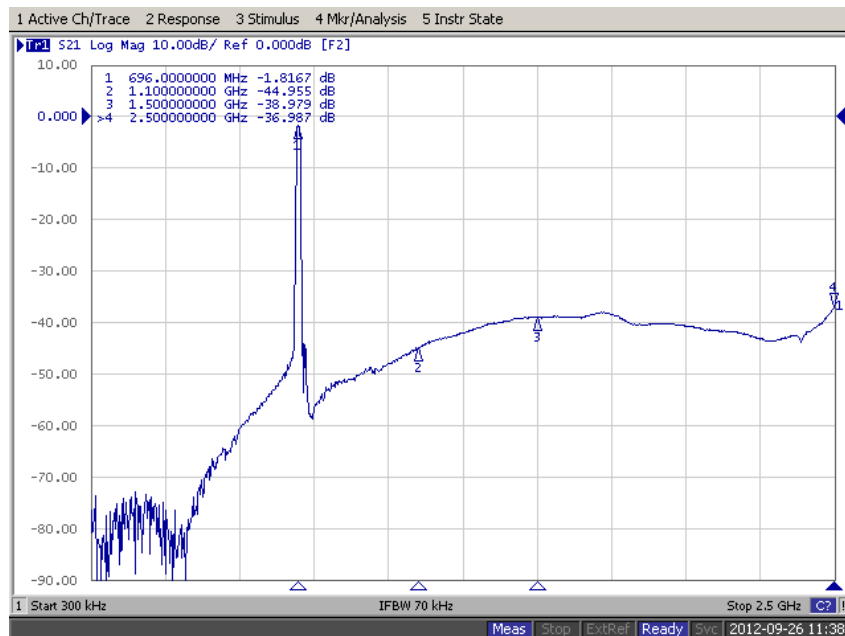
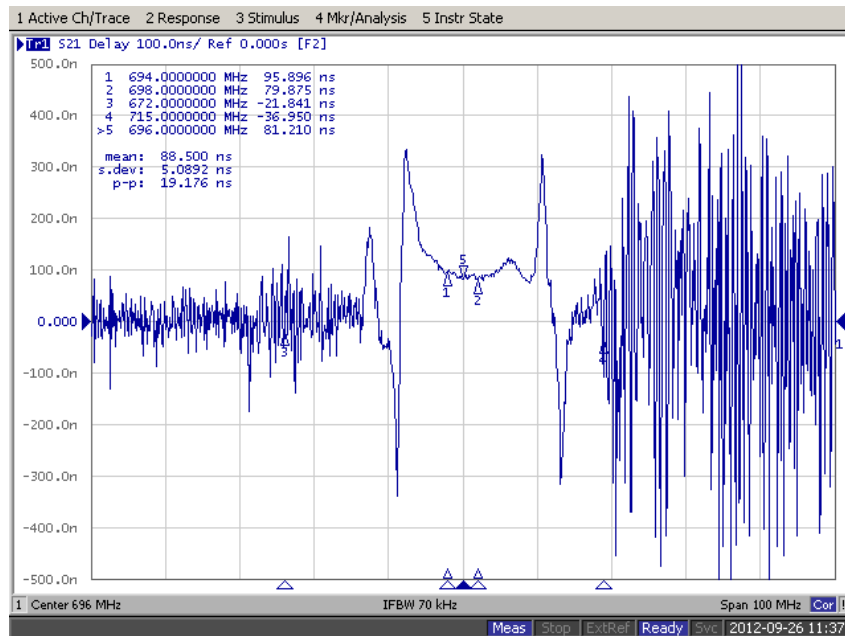


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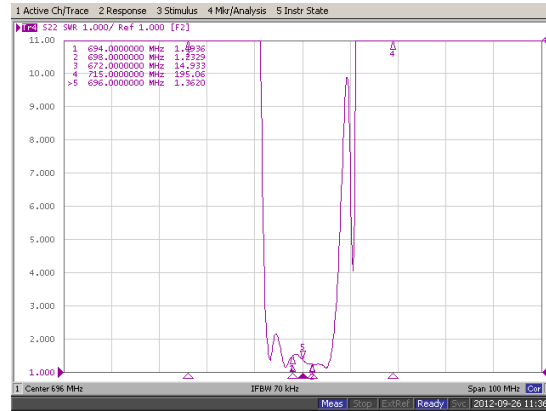
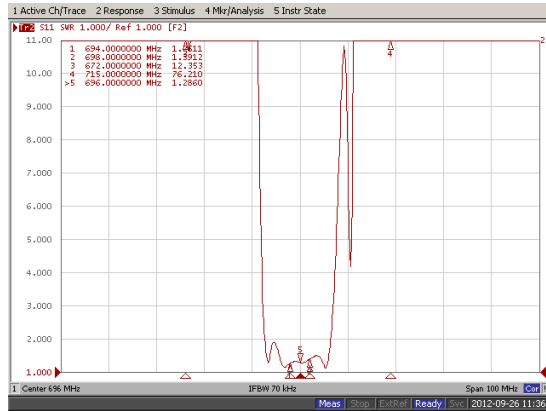


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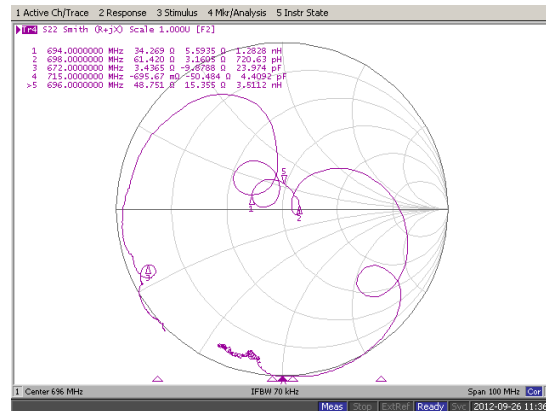
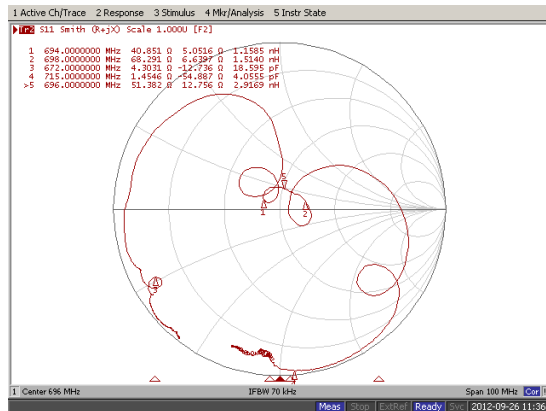
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Input / Output VSWR Charts



Input / Output Smith Charts



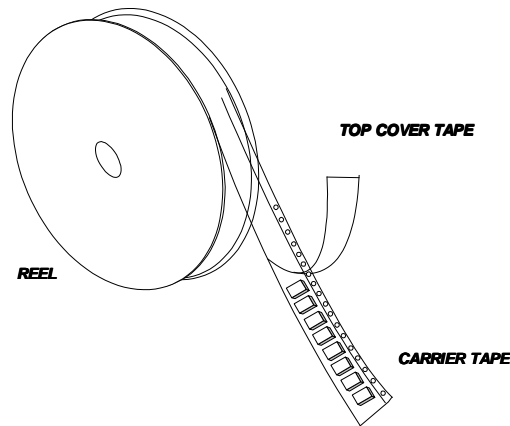
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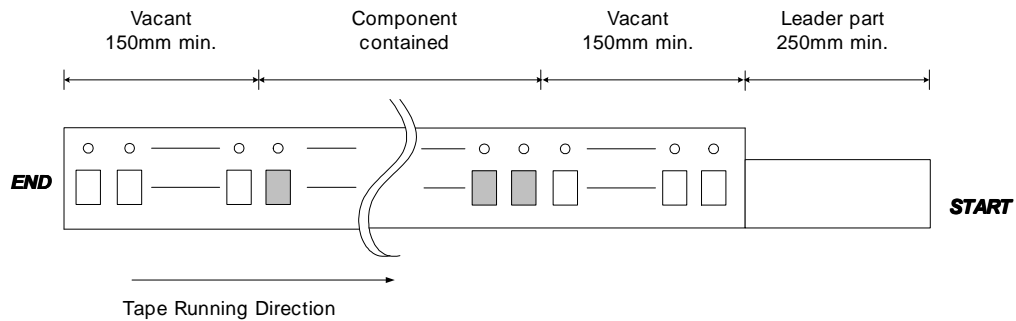
Packing Specification

1. Reeling Quantity : 1000 pcs / reel
2. Taping Structure : The tape shall be wound around the reel in the direction shown below.



Tape Specification

1. Leader part and vacant position specification

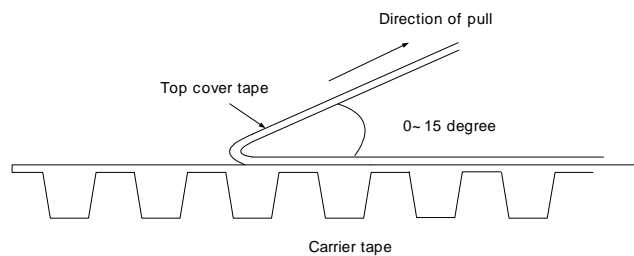


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g

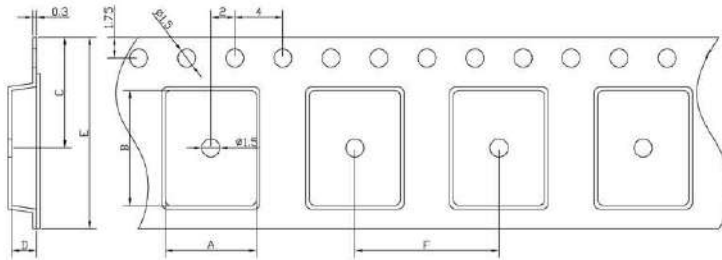


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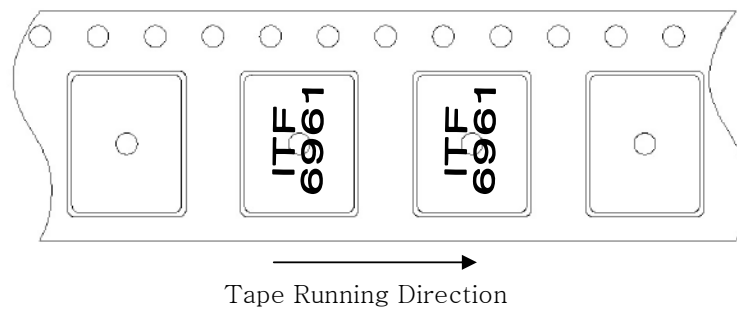


Carrier Tape Dimensions [unit : mm]

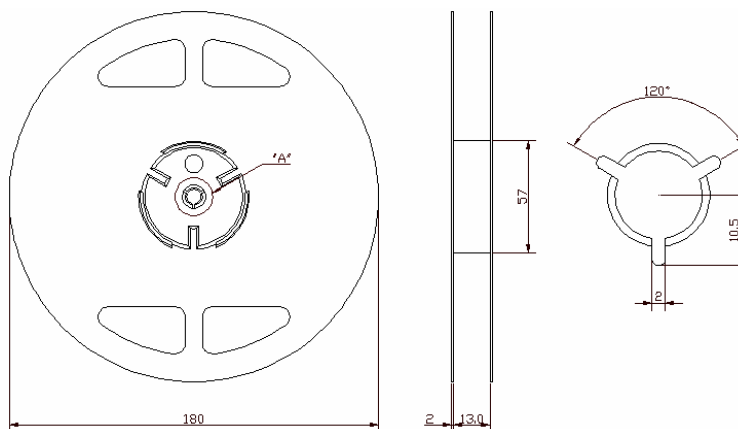


A	4.30 ± 0.1
B	4.30 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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