

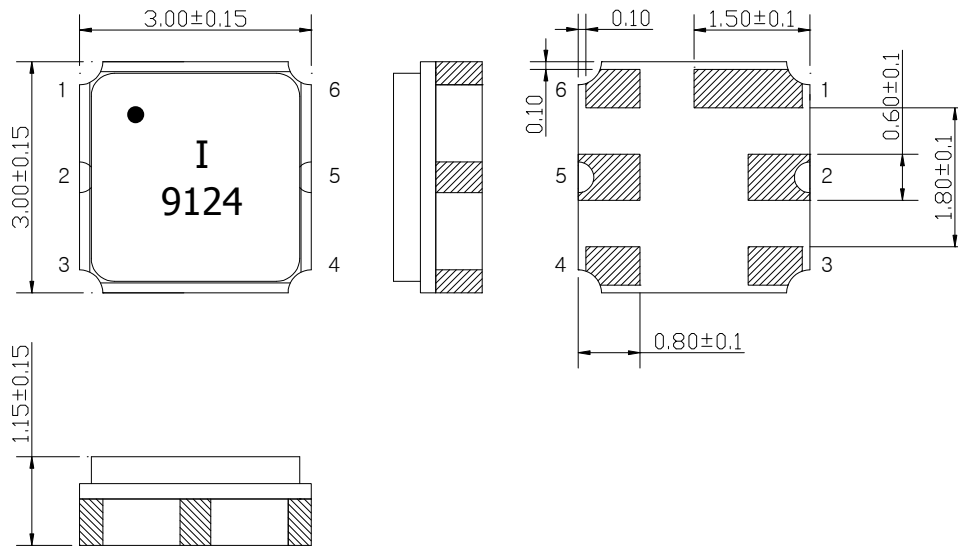
SAW Bandpass Filter 912MHz



Features

- RF bandpass filter for RFID
- Usable bandwidth 7MHz (908.0MHz ~ 915.0 MHz)
- No matching single-ended operation
- Ceramic Surface Mounted Device Package (3.0 mm × 3.0 mm)

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 Configurations	
2	Input
5	Output
1, 3, 4, 6	Case ground

Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	25	85
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	30

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.	F9124	
		Rev. Date	2008-08-11	
		Rev.	NR6004-AS02	1/7

SAW Bandpass Filter 912MHz




Preliminary Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	912.0	-	MHz
Insertion Loss (908.0 ~ 915.0MHz)	-	2.0	3.0	dB
Amplitude Ripple (908.0 ~ 915.0MHz)	-	0.2	0.8	dB
VSWR (908.0 ~ 915.0MHz)	-	1.5	2.0	
Relative Attenuation				
0.3 MHz ~ 863.0 MHz	-	45	-	dB
863.0 MHz ~ 894.0 MHz	30	40	-	
942.0 MHz ~ 962.0 MHz	30	35	-	
962.0 MHz ~ 3000 MHz	-	40	-	
Temperature Range (Operational)	-30	25	85	°C
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

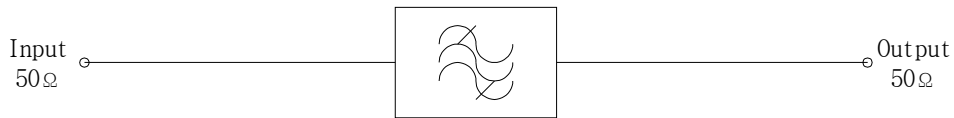
	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F9124	
		Rev. Date	2008-08-11	
		Rev.	NR6004-AS02	2/7

SAW Bandpass Filter 912MHz



Matching Schematic


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



Marking Configuration

●¹⁾
I²⁾
9124³⁾

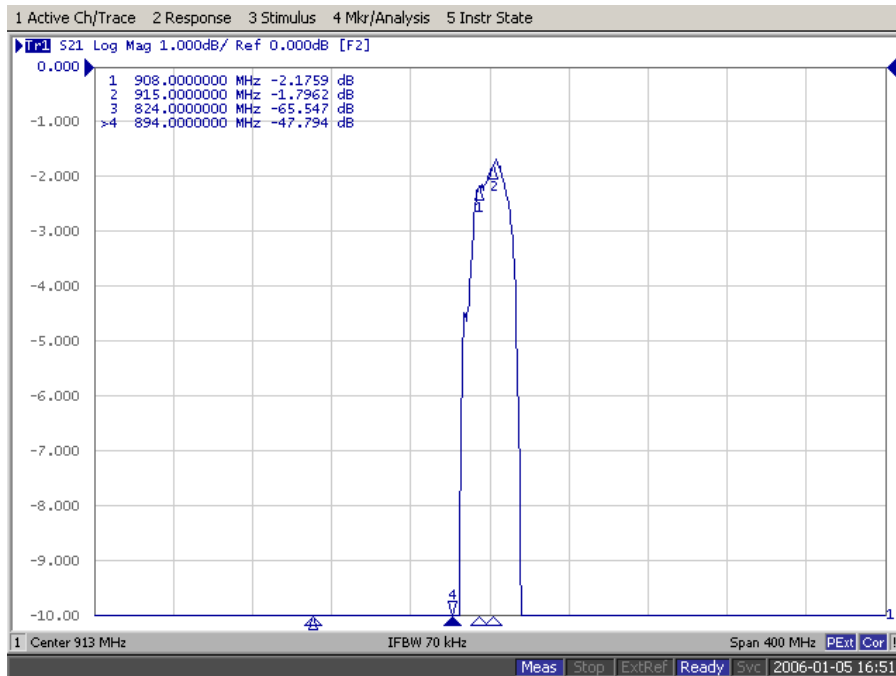
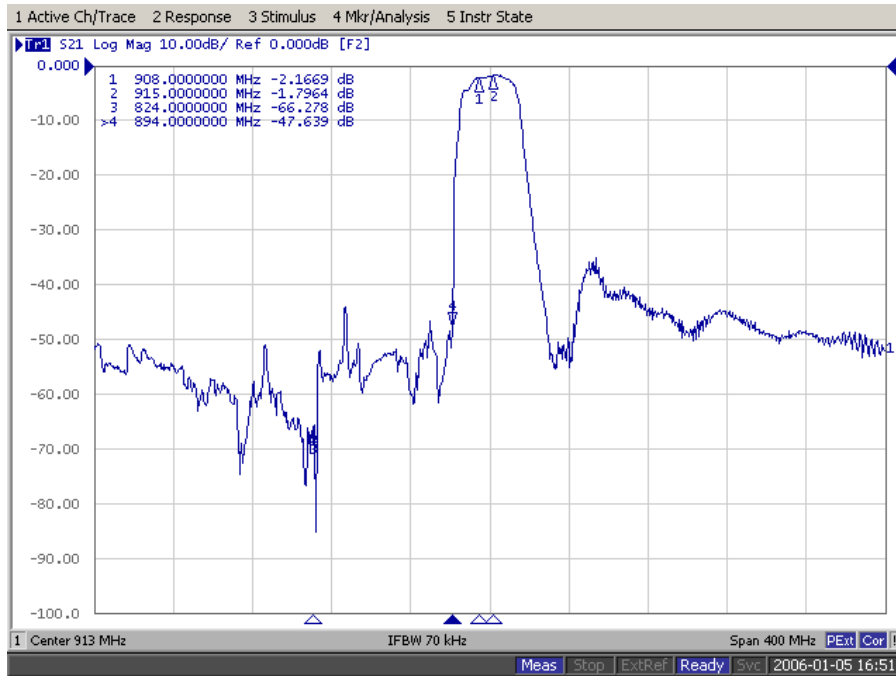
- 1) Pad Number 1 Index
- 2) Manufacturer name
- 3) Marking Number

 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F9124	
		Rev. Date	2008-08-11	
		Rev.	NR6004-AS02	3/7

SAW Bandpass Filter 912MHz



Typical Performance (at 25°C)



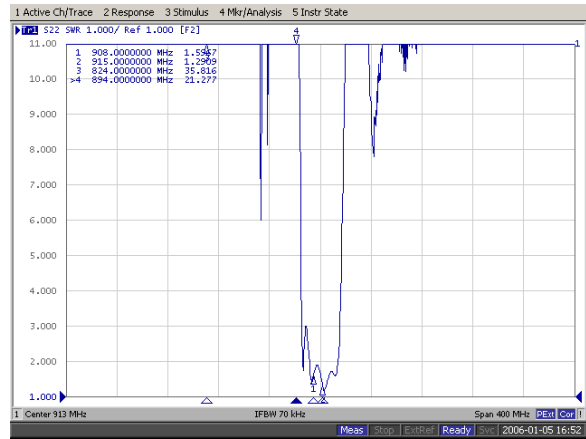
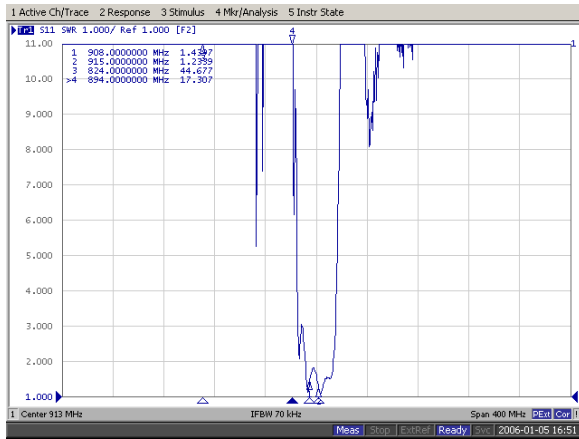
ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.	F9124	
Rev. Date	2008-08-11	
Rev.	NR6004-AS02	4/7

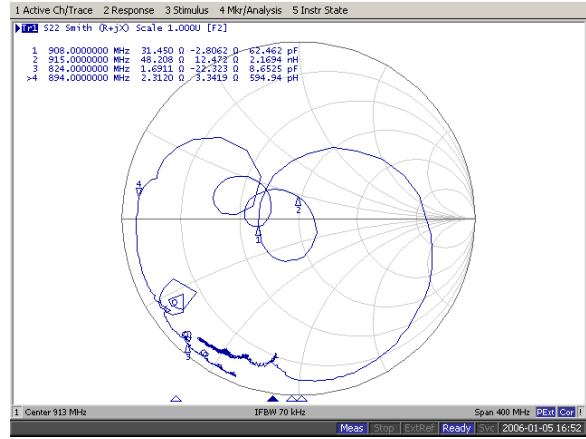
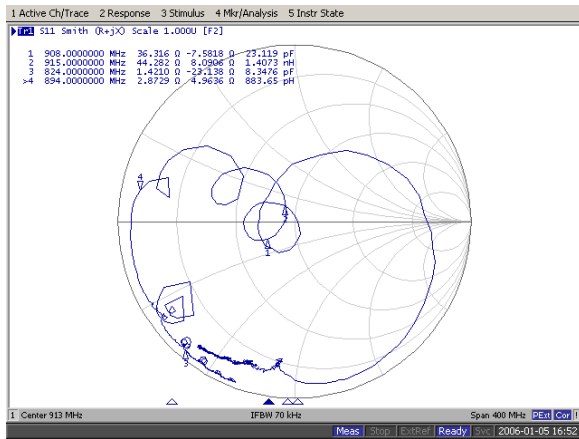
SAW Bandpass Filter 912MHz



Input / Output VSWR Charts



Input / Output Smith Charts



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

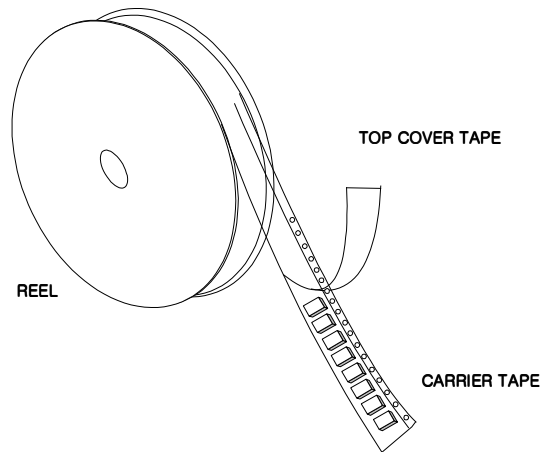
Part No.	F9124	
Rev. Date	2008-08-11	
Rev.	NR6004-AS02	5/7

SAW Bandpass Filter 912MHz



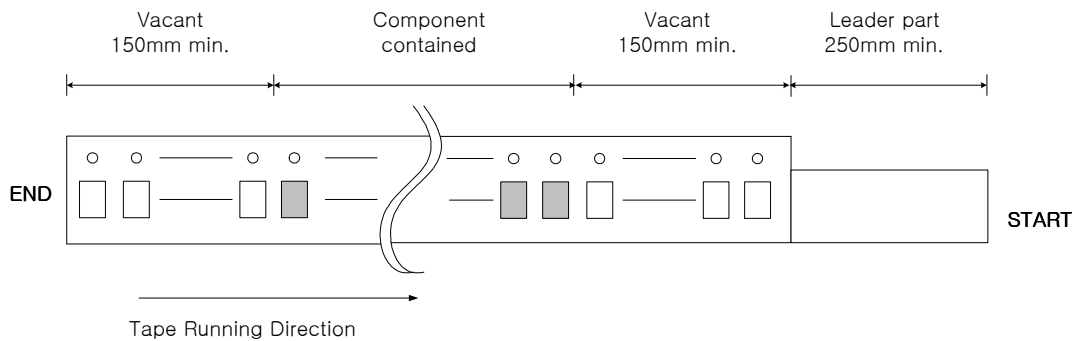
Packing Specification

1. Reeling Quantity : 3000 pcs / 13" reel (or 1000 pcs / 7" 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

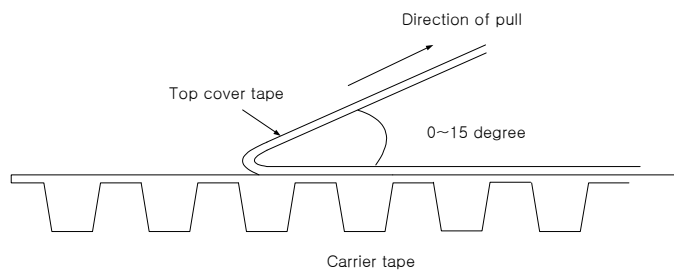


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

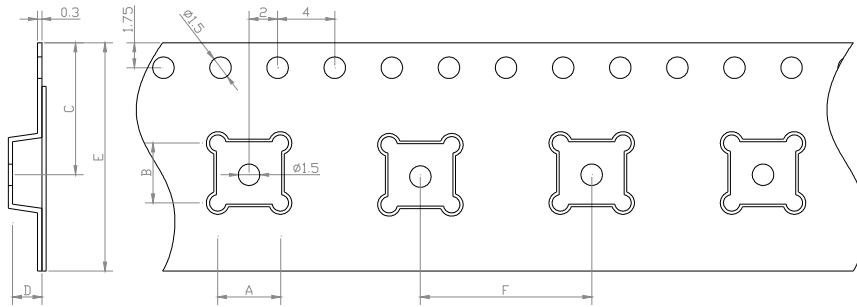


	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F9124	
		Rev. Date	2008-08-11	
		Rev.	NR6004-AS02	6/7

SAW Bandpass Filter 912MHz

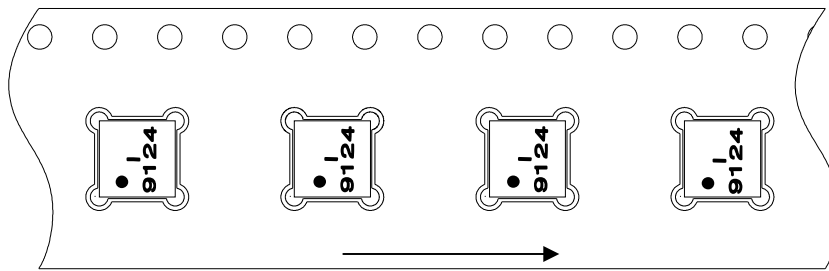


Carrier Tape Dimensions [unit : mm]



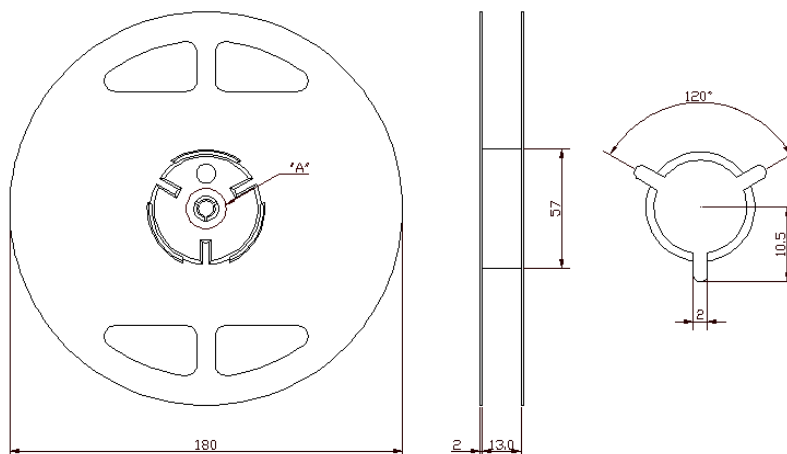
A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Tape Running Direction

Reel Dimensions [unit : mm]



	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F9124	
		Rev. Date	2008-08-11	
		Rev.	NR6004-AS02	7/7