

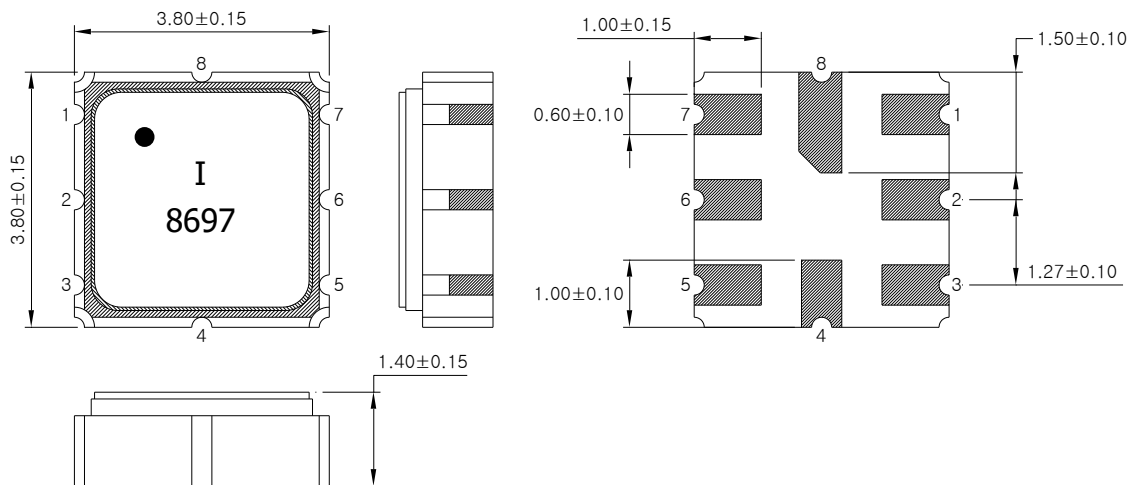
SAW Bandpass Filter F8697



Features

- RF bandpass filter
- Usable bandwidth 0.7 MHz
- Ceramic Surface Mounted Device (SMD) Package (3.8mm × 3.8mm)
- RoHS/RoHS2 Compliant

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al_2O_3 Ceramic

Lid : Kovar, Ni Plated

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

Pin Configuration	
1	Input
5	Output
2, 3, 4, 6, 7, 8	Ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	$^{\circ}\text{C}$	-35	25	105
Storage Temperature Range	$^{\circ}\text{C}$	-35	-	105
Power Handling Capability	dBm	-	-	-

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.	F8697	
		Rev. Date	2019-12-04	
		Rev.	NRUE01-AS02	1/7

SAW Bandpass Filter F8697




Specifications

Fc = 869.2625 MHz

		Minimum	Typical	Maximum
Center frequency (Fc)	MHz	-	869.2625	-
Minimum insertion attenuation (α_{\min})	dB	-	3.0	4.5
Pass band (relative to α_{\min}) 868.8725 ~ 869.6525 MHz	dBc	-	0.5	1.0
Relative attenuation (relative to α_{\min})				
842.00 ~ 864.00 MHz	dB	22	30	-
864.00 ~ 866.00 MHz		17	27	-
871.26 ~ 872.07 MHz		7	20	-
872.07 ~ 879.00 MHz		17	30	-
879.00 ~ 909.00 MHz		27	32	-
Input/Output impedance	Ohm	-	50	-

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

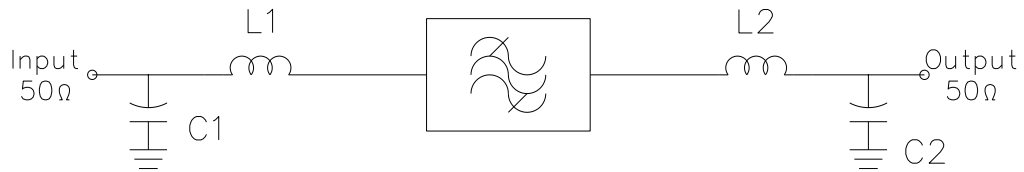
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F8697	
		Rev. Date	2019-12-04	
		Rev.	NRUE01-AS02	2/7

SAW Bandpass Filter F8697



Matching Schematic

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



$$L1 = L2 = 15\text{nH}, \quad C1 = C2 = 4.3\text{pF}$$

Marking Configuration


●¹⁾
I²⁾
8697³⁾

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

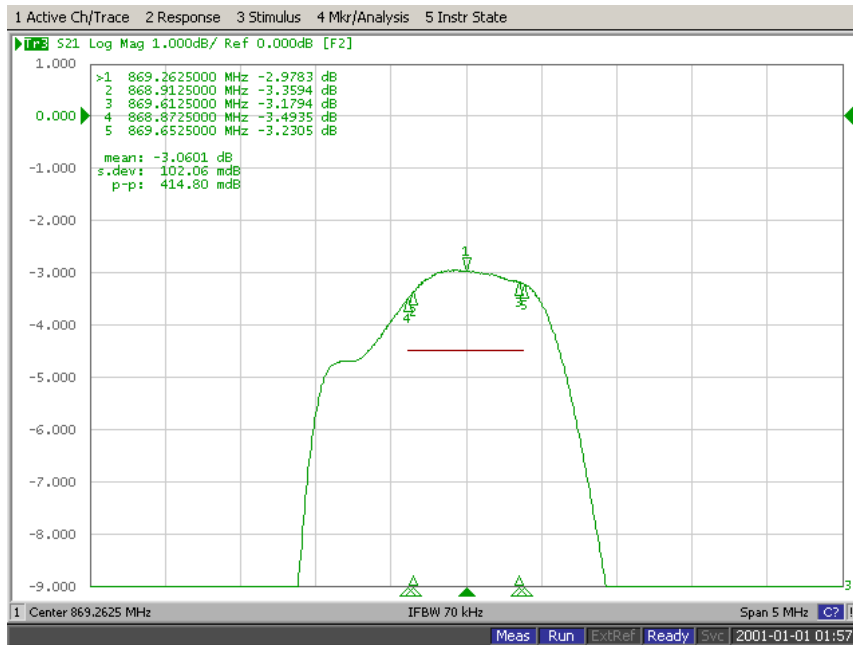
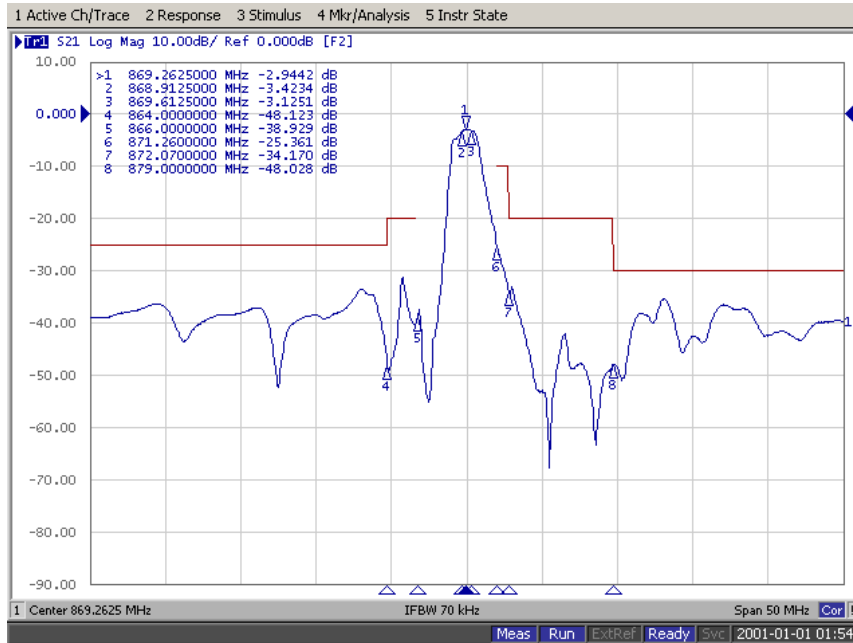
* Ink or Laser Marking available

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F8697	
		Rev. Date	2019-12-04	
		Rev.	NRUE01-AS02	3/7

SAW Bandpass Filter F8697



Typical Performance (at 25°C)



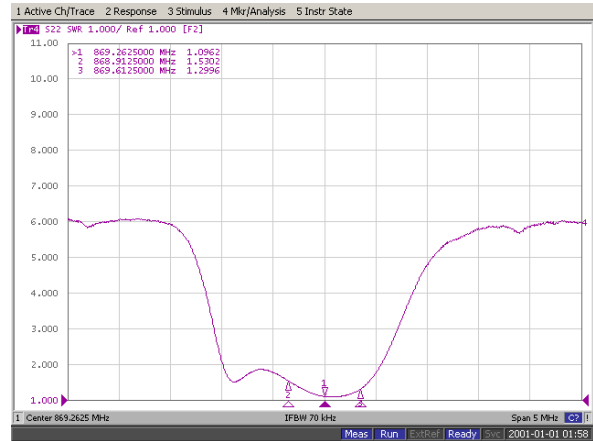
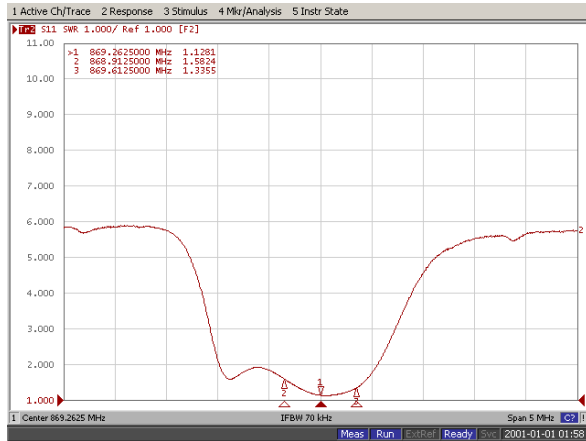
ITF Co., Ltd.
102-901, Bucheon Technopark 364,
Samjeong-Dong, Ojeong-Gu, Bucheon-City,
Gyeonggi-Do, Korea 421-809

Part No.	F8697	
Rev. Date	2019-12-04	
Rev.	NRUE01-AS02	4/7

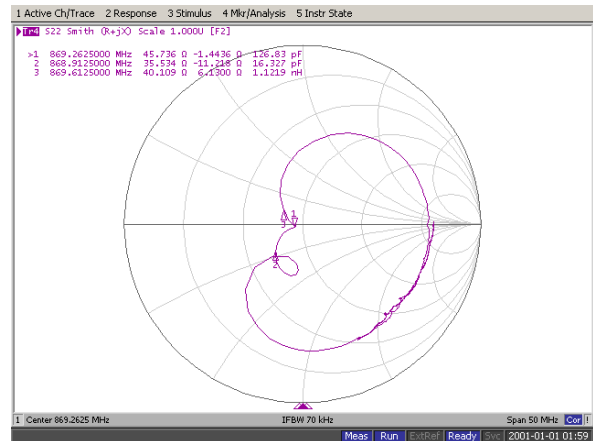
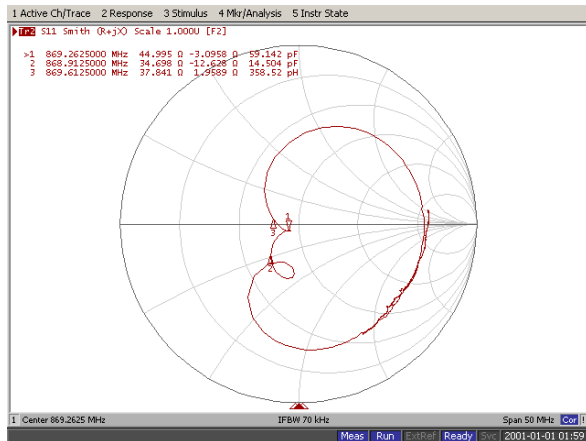
SAW Bandpass Filter F8697



Input / Output VSWR Charts



Input / Output Smith Charts



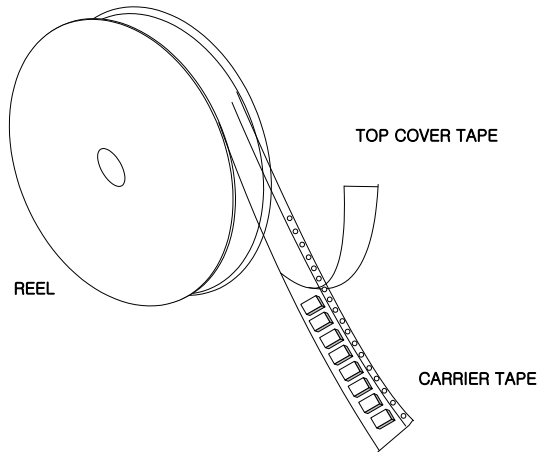
	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F8697	
		Rev. Date	2019-12-04	
		Rev.	NRUE01-AS02	5/7

SAW Bandpass Filter F8697



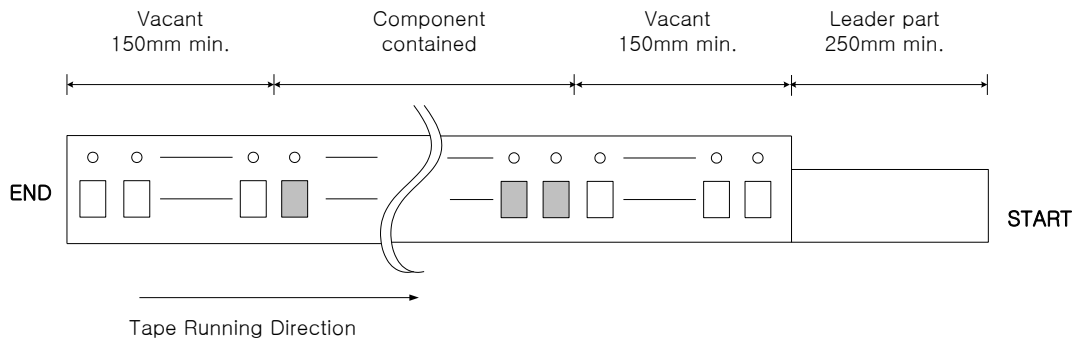
Packing Specification

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

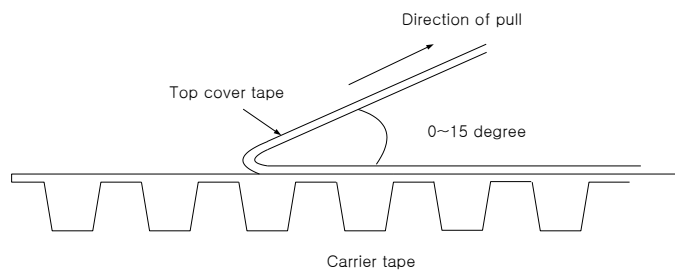


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

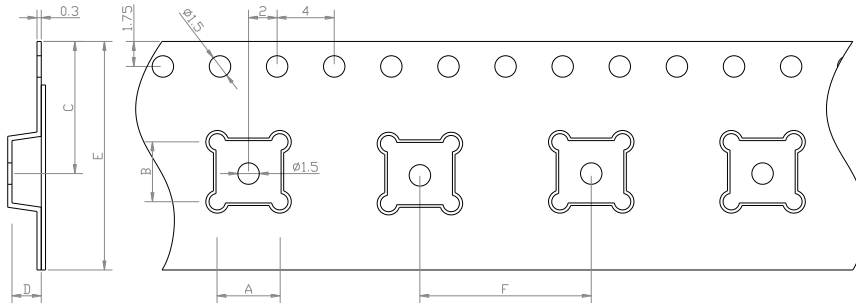


	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F8697	
		Rev. Date	2019-12-04	
		Rev.	NRUE01-AS02	6/7

SAW Bandpass Filter F8697

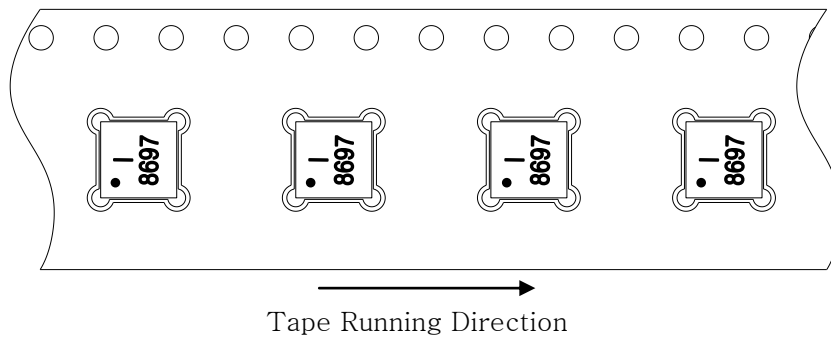


Carrier Tape Dimensions [unit : mm]

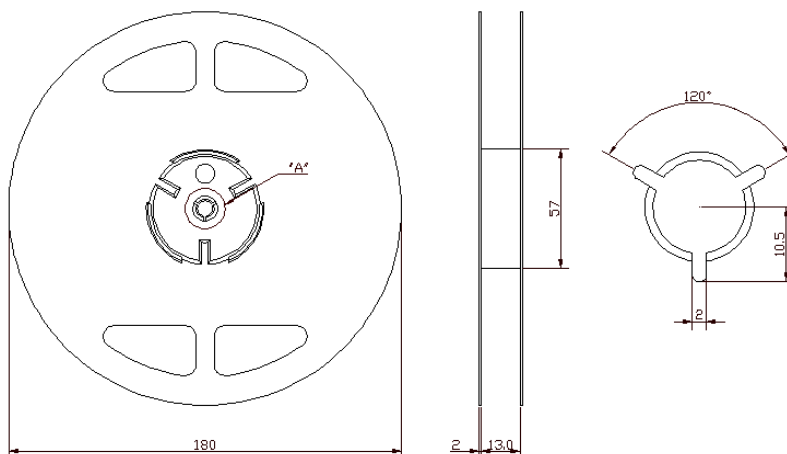



A	4.30 ± 0.1
B	4.30 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F8697	
		Rev. Date	2019-12-04	
		Rev.	NRUE01-AS02	7/7