

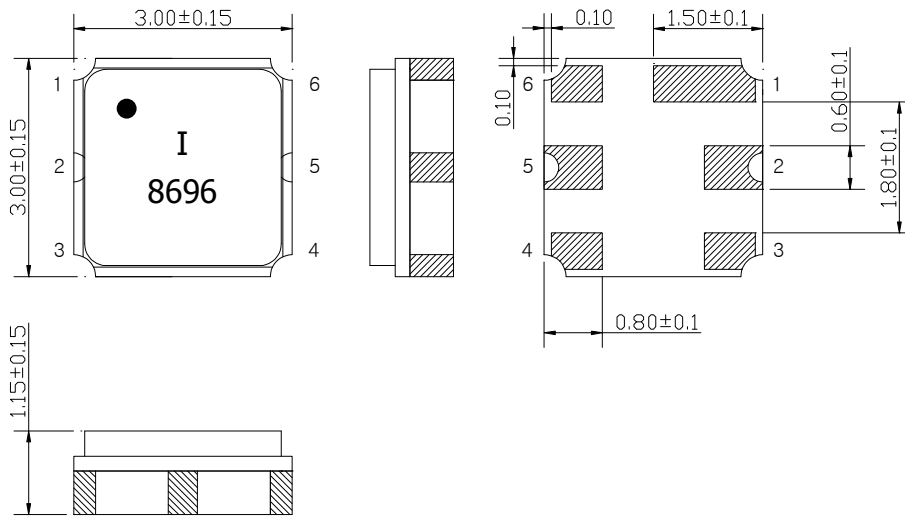
SAW Bandpass Filter F8696



Features

- RF bandpass filter
- Usable bandwidth 0.25 MHz
- Ceramic Surface Mounted Device (SMD) Package (3.0mm × 3.0mm)
- RoHS 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	
2	Input
5	Output
1, 3, 4, 6	Ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	$^{\circ}\text{C}$	-40	25	85
Storage Temperature Range	$^{\circ}\text{C}$	-40	-	85
DC Voltage	V	-	-	6
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.	F8696	
		Rev. Date	2018-05-30	
		Rev.	NRTF06-AS04	1/7

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Specifications

Fc = 869.525 MHz

		Minimum	Typical	Maximum
Center frequency (Fc)	MHz	-	869.525	-
Minimum insertion attenuation (α_{\min})	dB	-	2.7	3.5
Pass band (relative to α_{\min}) 869.40 ~ 869.65 MHz	dBc	-	0.5	1.5
Relative attenuation (relative to α_{\min}) 840.00 ~ 858.00 MHz	dB	30	35	-
858.00 ~ 867.00 MHz		22	27	-
867.00 ~ 868.20 MHz		13	16	-
871.00 ~ 872.50 MHz		10	13	-
872.50 ~ 877.50 MHz		20	25	-
877.50 ~ 895.00 MHz		30	35	-
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

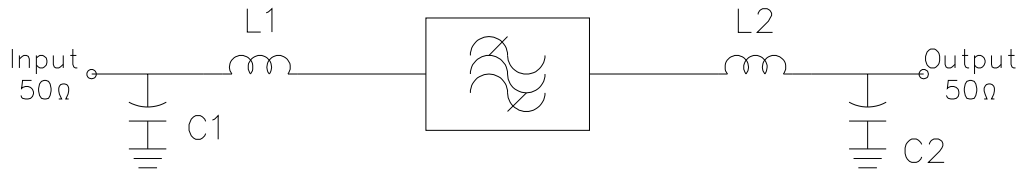
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Matching Schematic

(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⁾
8696³⁾

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

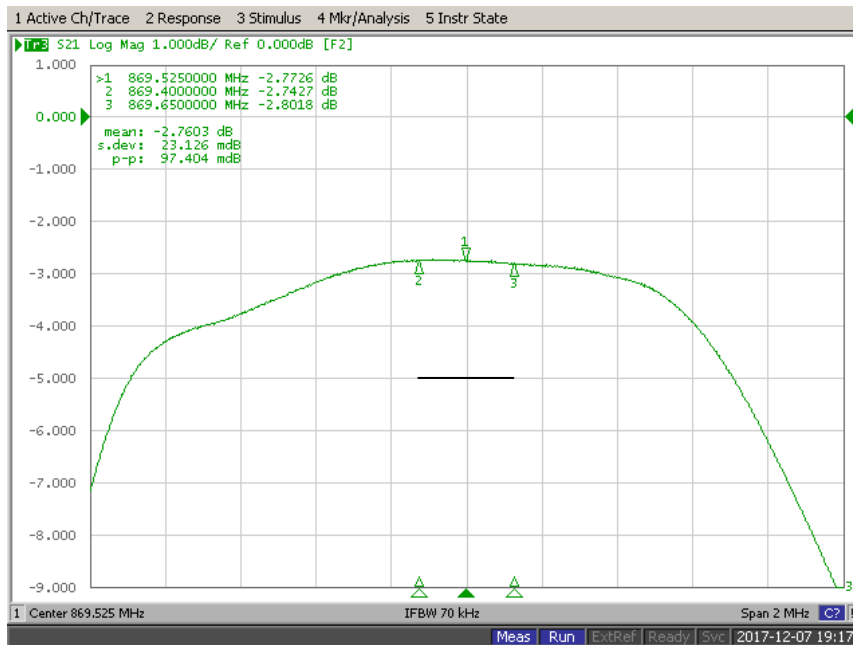
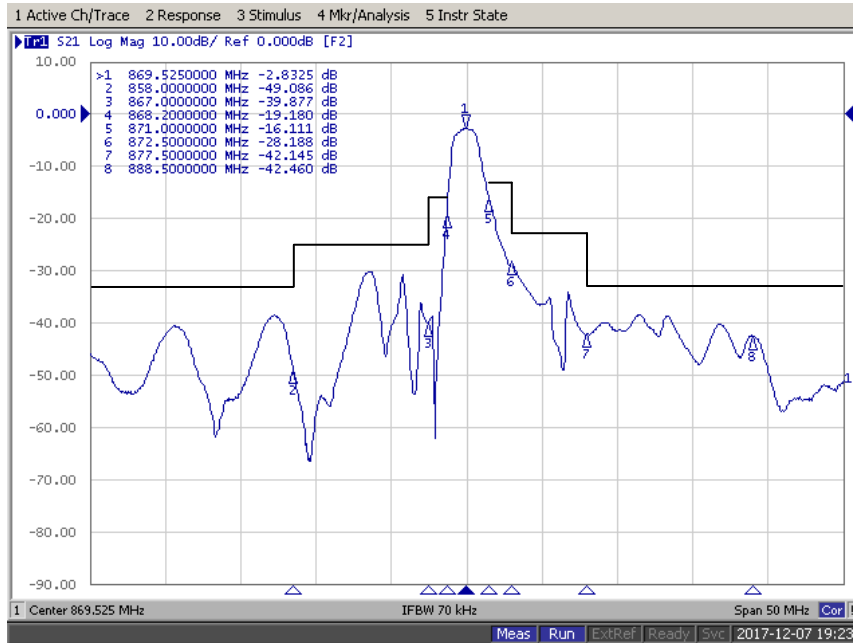
* Ink or Laser Marking available

 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F8696	
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Typical Performance (at 25°C)



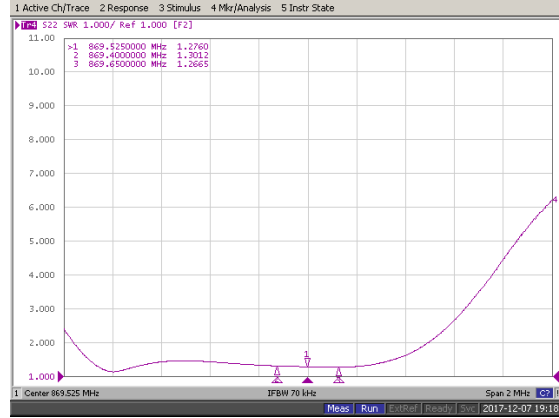
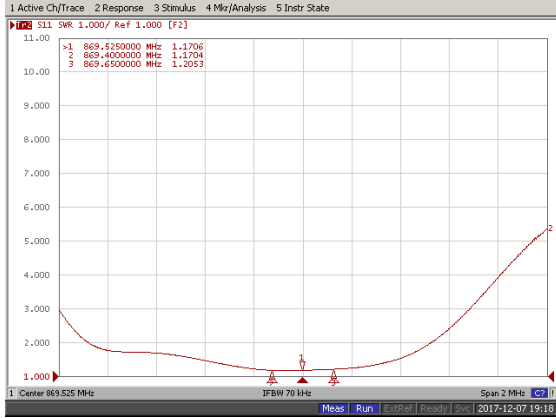
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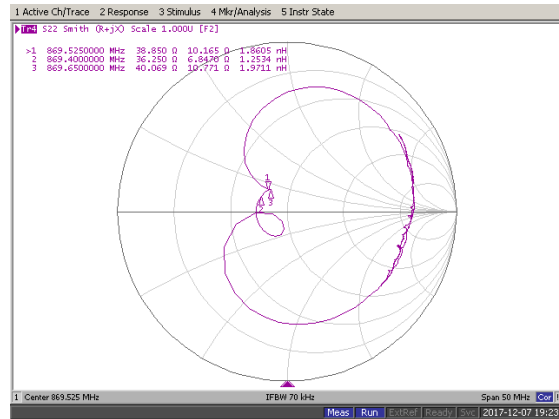
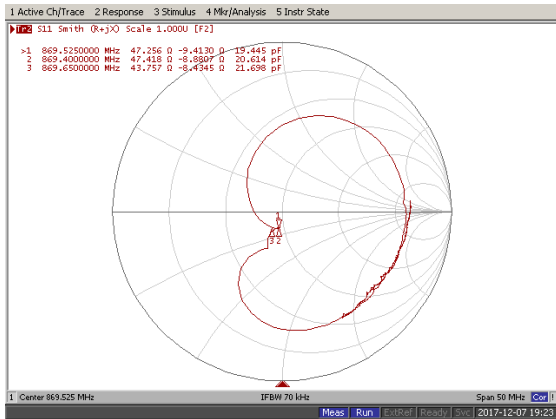
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Input / Output VSWR Charts



Input / Output Smith Charts



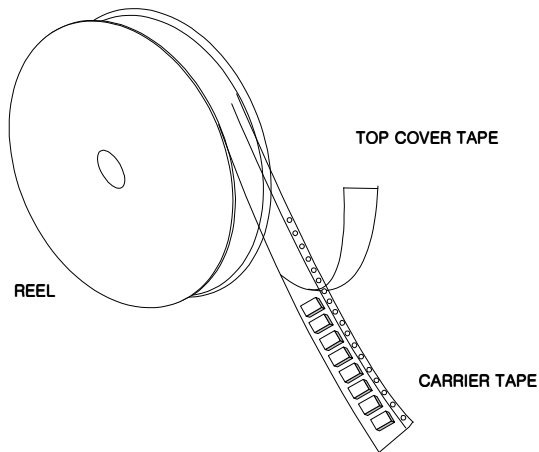
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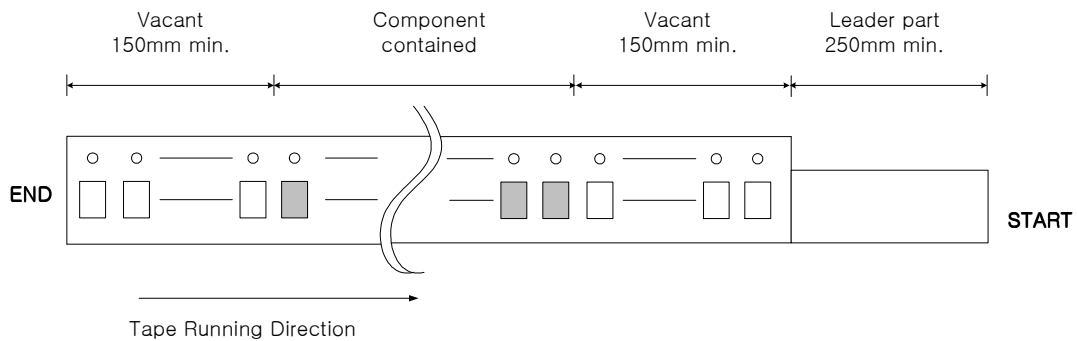
Packing Specification

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

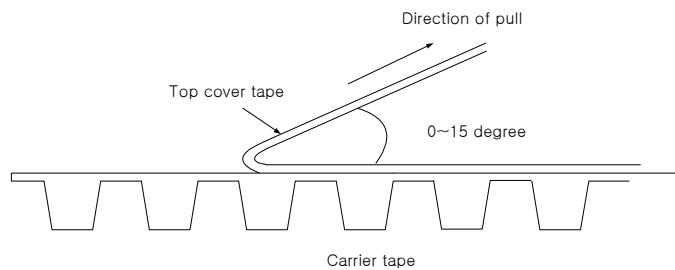


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

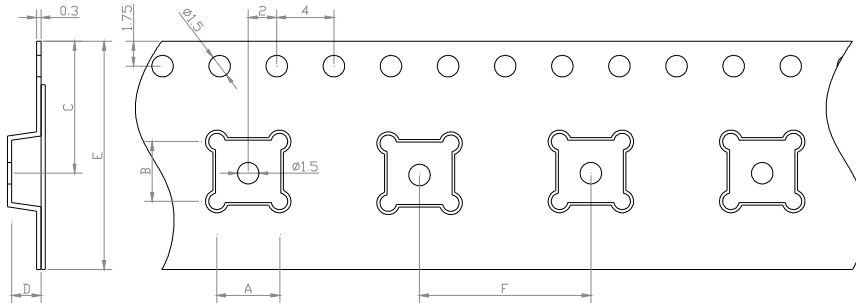


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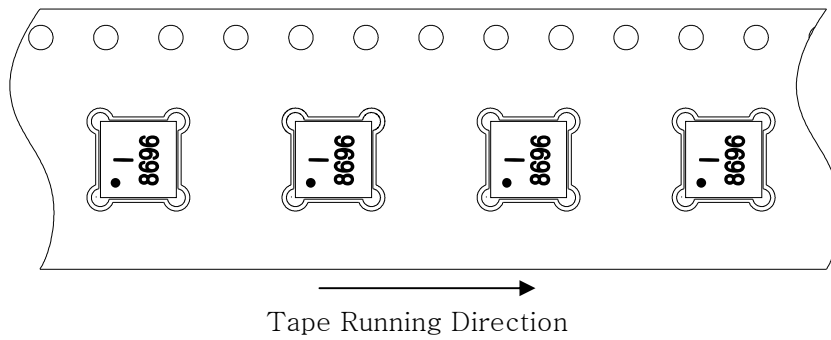


Carrier Tape Dimensions [unit : mm]

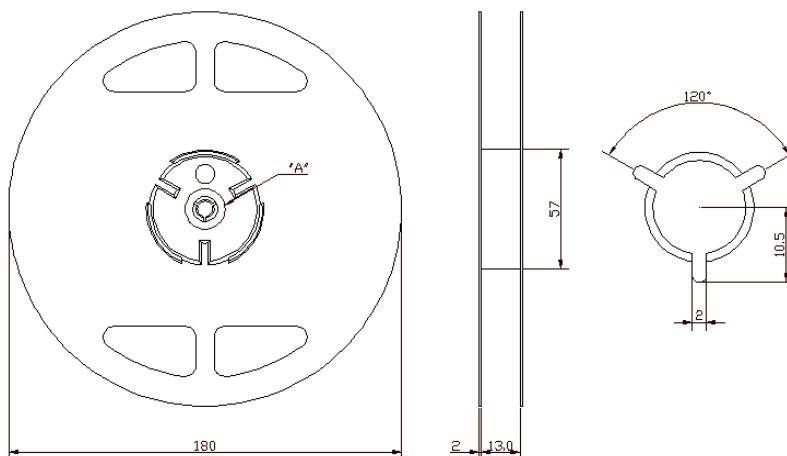


A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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