

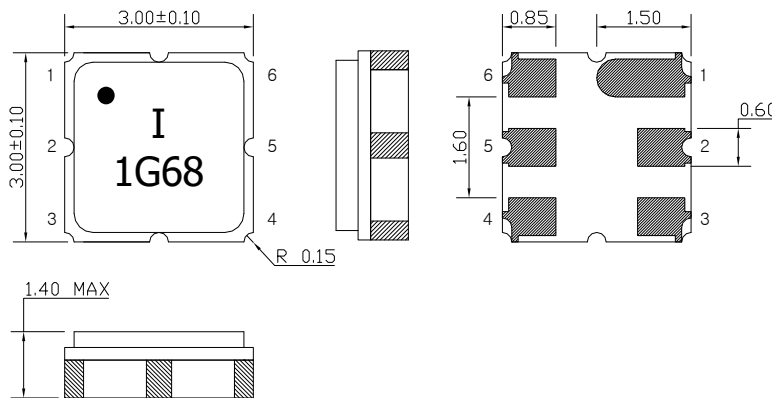
# SAW Bandpass Filter F1G68



## Features

- RF bandpass filter
- Usable bandwidth 11.5 MHz
- Ceramic Surface Mounted Device (SMD) Package (3.0mm × 3.0mm)
- RoHS/RoHS2 (2015/863/EU) Compliant
- This part is compliant with AEC-Q200

## Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> 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	Ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	110
Storage Temperature Range	°C	-40	-	125
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	1/7

# SAW Bandpass Filter F1G68




## Specifications

$F_c = 1620.75 \text{ MHz}$

		Minimum	Typical	Maximum
Center Frequency ( $F_c$ )	MHz	-	1620.75	-
Insertion Loss ( $F_c \pm 5.75 \text{ MHz}$ )	dB	-	1.6	2.8
Amplitude Ripple ( $F_c \pm 5.75 \text{ MHz}$ )	dB	-	0.3	1.8
Absolute attenuation				
1100.0 ~ 1400.0 MHz	dB	30	35	-
1400.0 ~ 1560.0 MHz		30	35	-
1680.0 ~ 1825.0 MHz		30	41	-
1825.0 ~ 1900.0 MHz		35	40	-
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

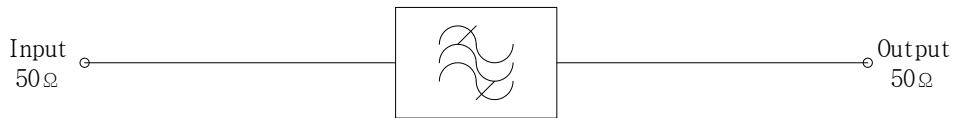
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	2/7

# SAW Bandpass Filter F1G68



## Matching Schematic

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



## Marking Configuration


- 1)
- I 2)
- 1G68 3)

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

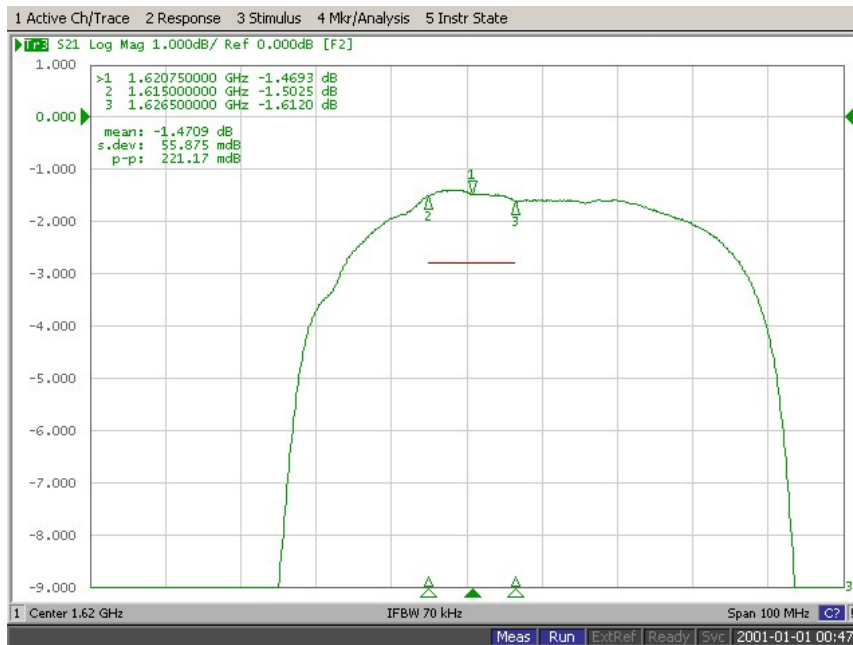
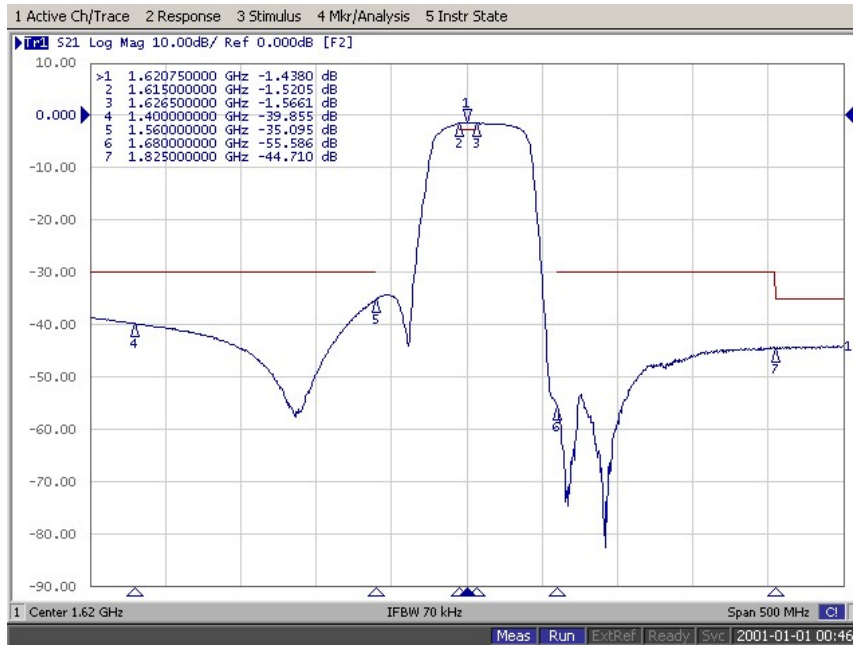
\* Ink or Laser Marking available


 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	3/7

# SAW Bandpass Filter F1G68



## Typical Performance ( at 25°C )

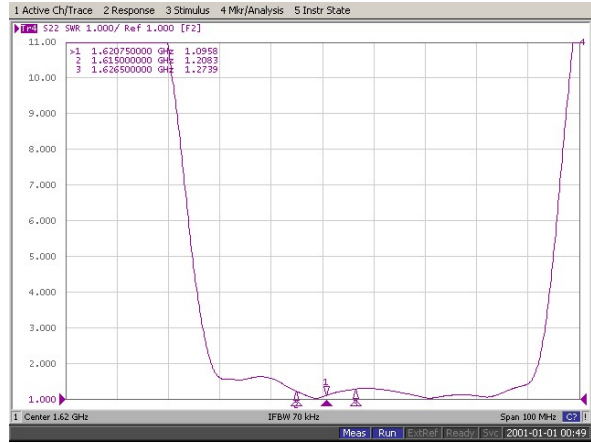
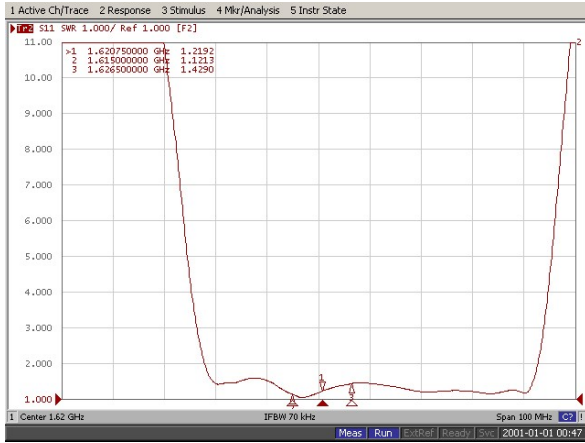


	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	4/7

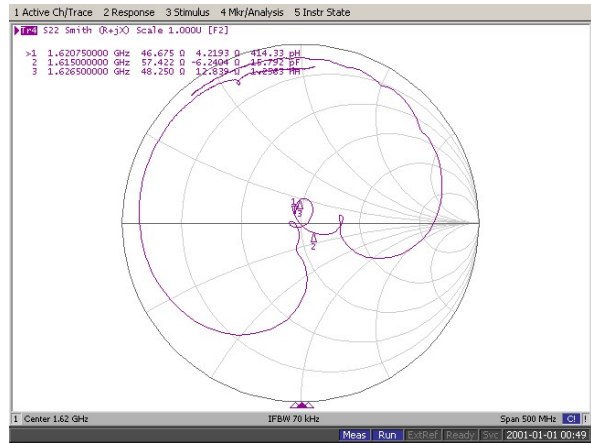
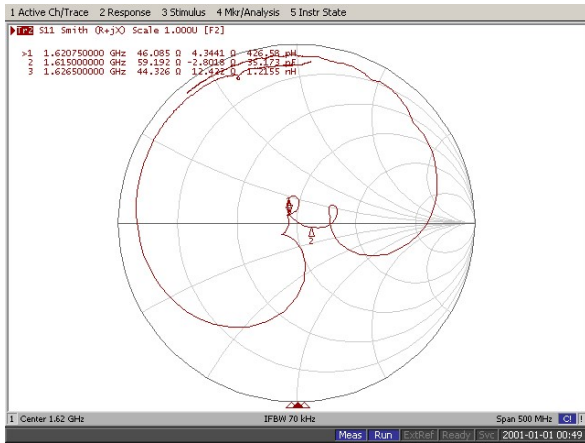
# SAW Bandpass Filter F1G68



## Input / Output VSWR Charts



## Input / Output Smith Charts



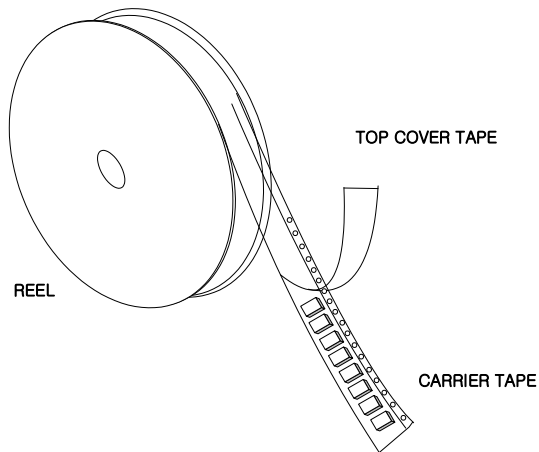
	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	5/7

# SAW Bandpass Filter F1G68



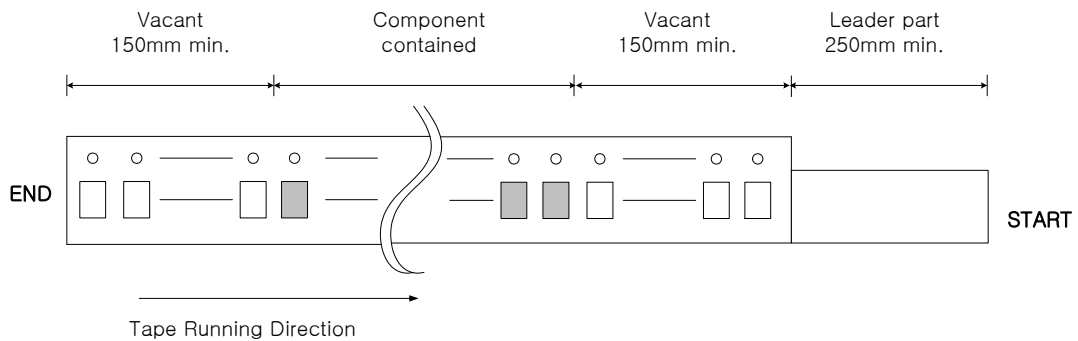
## Packing Specification

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

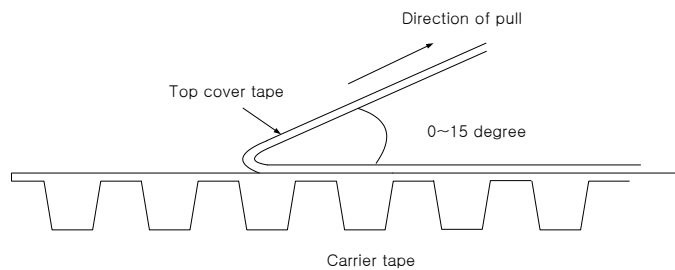



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

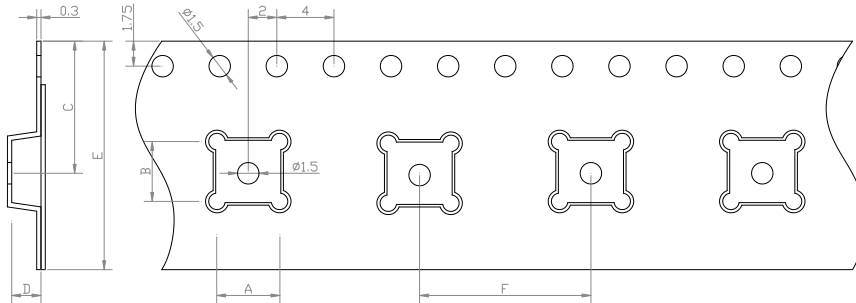


 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	6/7

# SAW Bandpass Filter F1G68

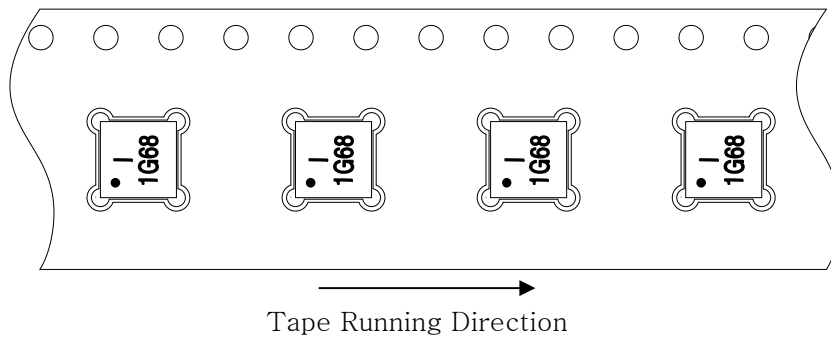


## Carrier Tape Dimensions [unit : mm]

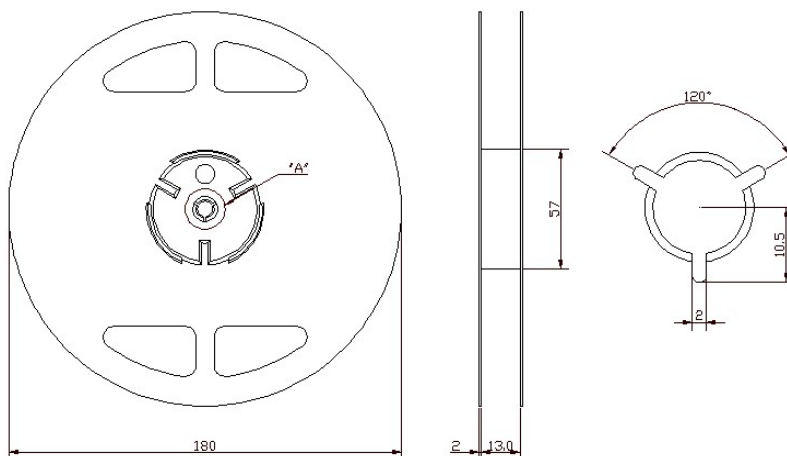


A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



	<b>ITF Co., Ltd.</b> 102-901, 22, Samjak-ro, Ojeong-gu, Bucheon-si, Gyeonggi-do, Korea, 14501	Part No.	F1G68	
		Rev. Date	2019-07-22	
		Rev.	NRUG04-AS02	7/7