

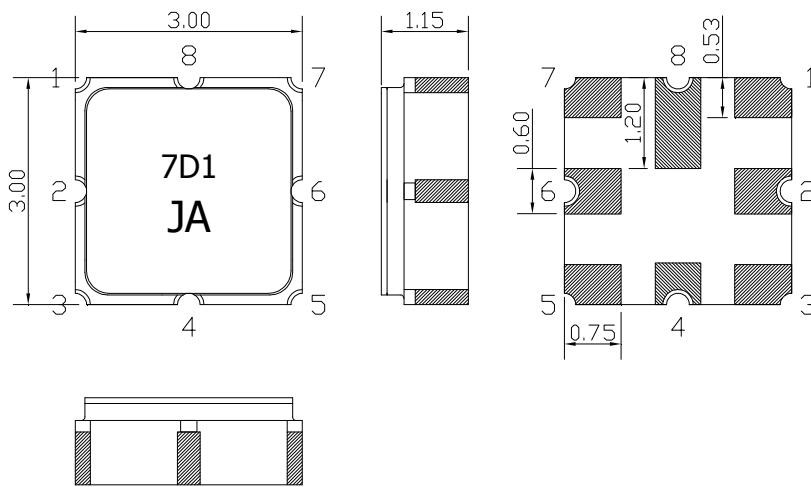
# SAW Bandpass Filter FG228



## Features

- Cable Tuner application IF bandpass filter
- Usable bandwidth 8MHz
- No matching 200Ω balanced-balanced operation
- Ceramic Surface Mounted Device (SMD) Package ( 3.0mm × 3.0mm × 1.15mm )

## 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

1, 2	Balanced input
5, 6	Balanced output
3, 4, 7, 8	Ground

## Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	25	70
Storage Temperature Range	°C	-30	-	85
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

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		Rev. Date	2007-02-28	
		Rev.	AS01	1/7

# SAW Bandpass Filter FG228



## Preliminary Specifications

Fc = 1220.0 MHz


Terminating source impedance : 200Ω balanced

Terminating load impedance : 200Ω balanced

		Minimum	Typical	Maximum
Center Frequency ( Fc )	MHz	-	1220.0	-
Insertion Loss (Fc +/- 4.0 MHz)	dB	-	3.0	4.3
Amplitude Ripple (Fc +/- 4.0 MHz)	dB	-	1.0	1.5
Relative Attenuation 1120.0 MHz ~ 1170.0 MHz 1270.0 MHz ~ 1320.0 MHz	dB	35 35	40 40	-
Input, Output VSWR		2.5	2.0	-

### Notes :

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 4 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

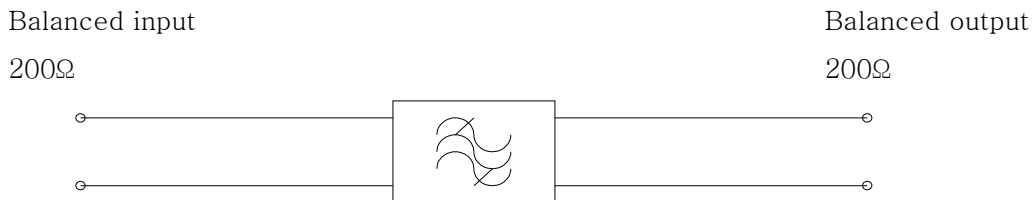
 Integrated Technology Future	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	FG228	
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# SAW Bandpass Filter FG228



## Matching Schematic

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



## Marking Configuration

7D1 <sup>1)</sup>

JA <sup>2)</sup>

1) Lot Number ( Year Month Date )

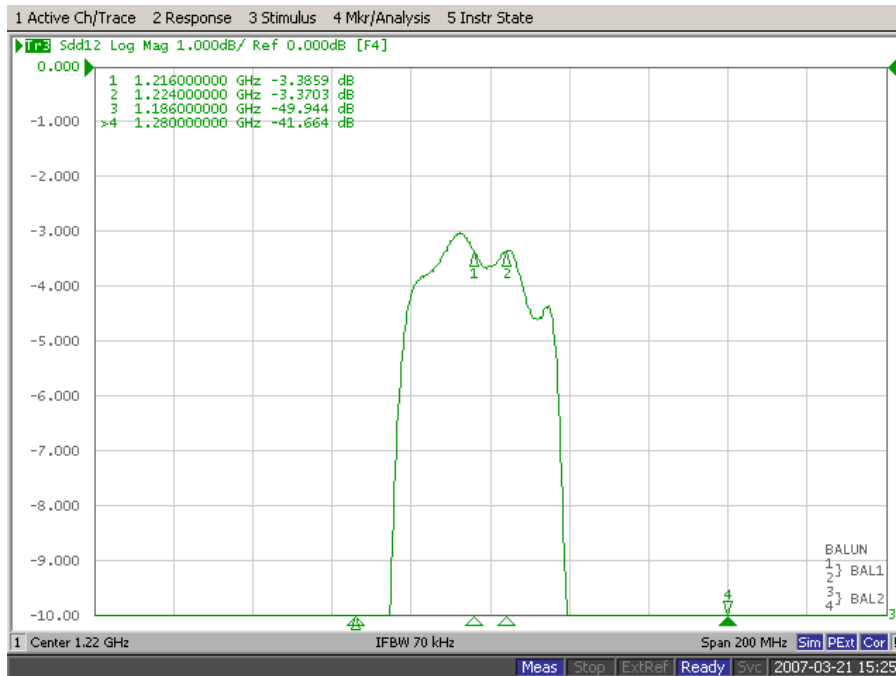
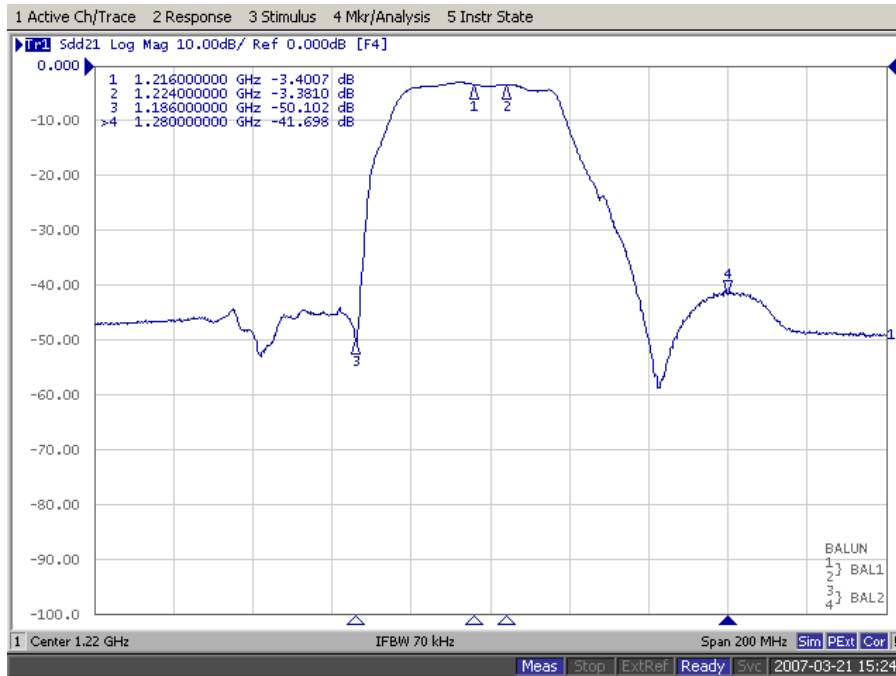
2) Part Number Marking

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## Typical Performance ( at 25°C )

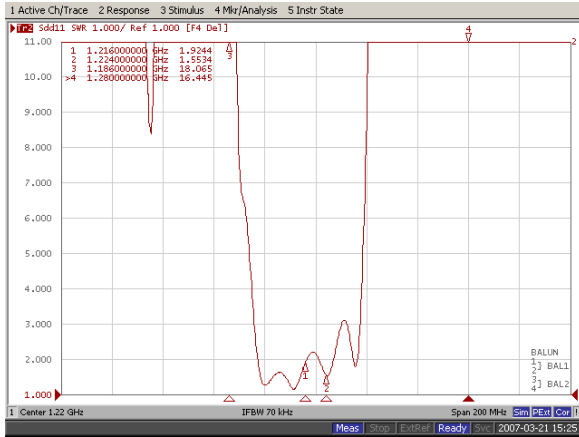


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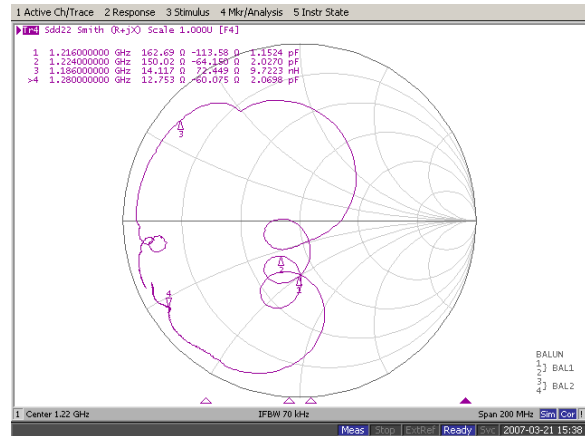
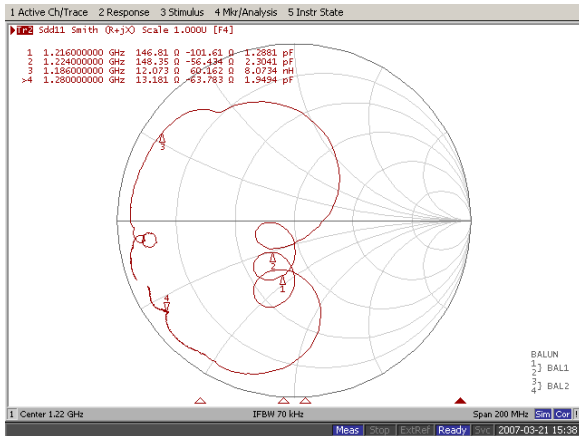
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## Input / Output VSWR Charts



## Input / Output Smith Charts



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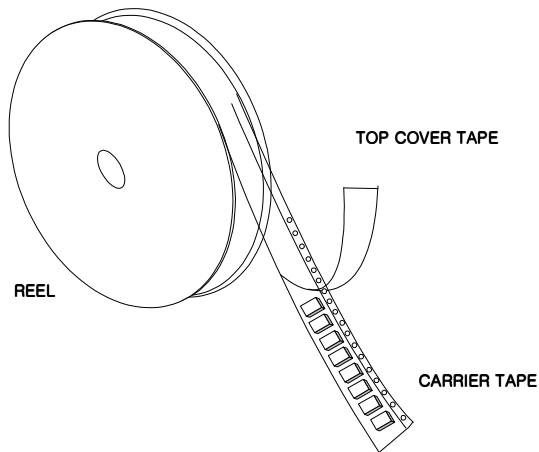
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# SAW Bandpass Filter FG228



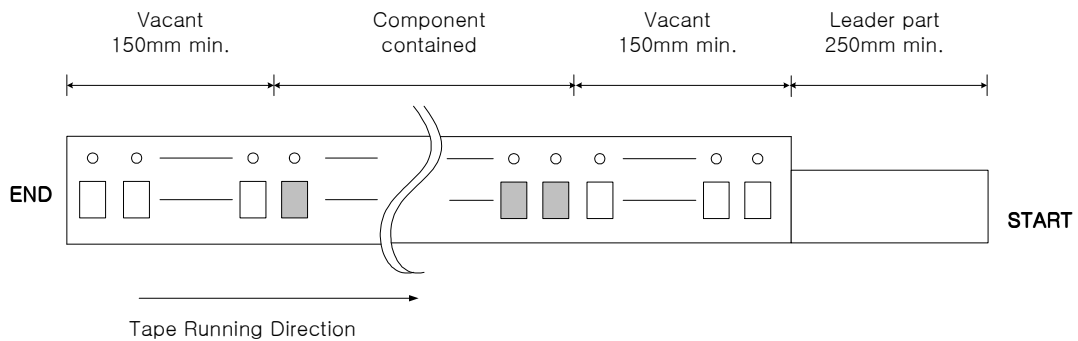
## Packing Specification

1. Reeling Quantity : 2000 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

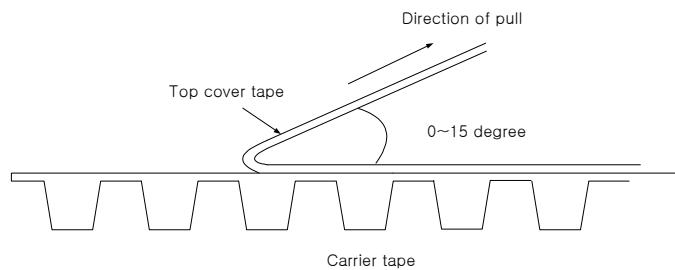


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

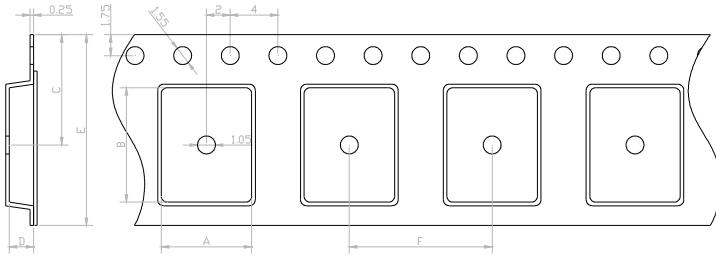


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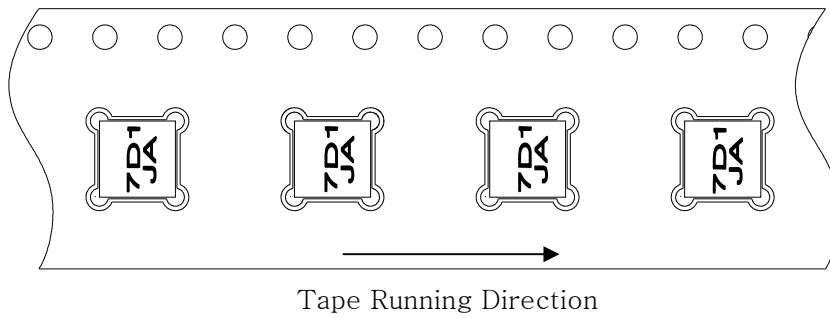


## Carrier Tape Dimensions [unit : mm]

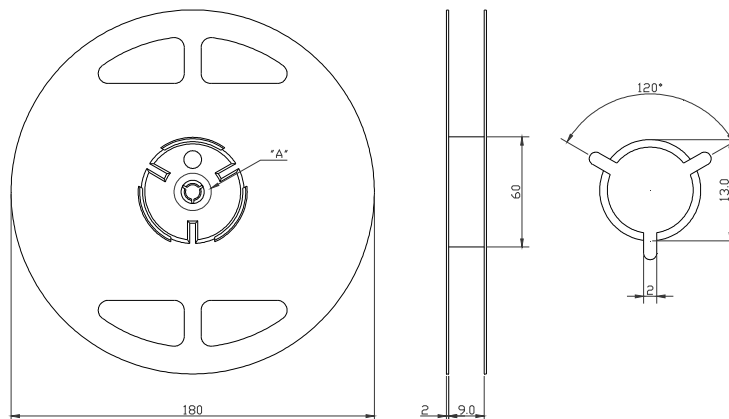


A	3.30 ± 0.1
B	3.35 ± 0.1
C	5.25 ± 0.1
D	1.45 ± 0.1
E	8.00 ± 0.1
F	4.00 ± 0.1

## Part Direction



## Reel Dimensions [unit : mm]



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