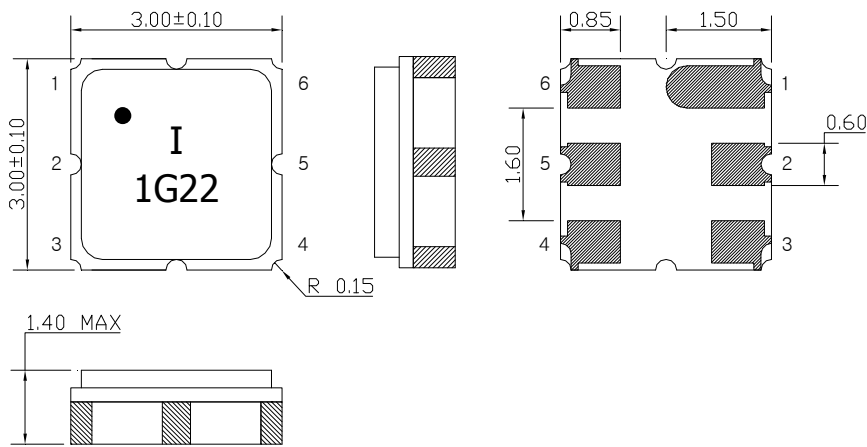


SAW Bandpass Filter F1G22

Features

- Europe Galileo applications
- Usable bandwidth of 20 MHz
- No impedance matching require for operation at 50 Ω
- Ceramic Surface Mounted Device Package (3.0 mm * 3.0 mm)
- Single-ended Operation
- RoHS Compliant

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	℃	-40	25	85
Storage Temperature Range	℃	-40	-	85
Power Handling Capability	dBm	-	-	5

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.	F1G22	
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SAW Bandpass Filter F1G22

Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	1228.0	-	MHz
Insertion Loss (In Fc +/- 10.0 MHz)	-	2.8	4.0	dB
Amplitude Ripple (In Fc +/- 10.0 MHz)	-	0.4	1.8	dBp-p
VSWR (In Fc +/- 10.0 MHz)	-	1.5	2.0	
Absolute Delay		30.0		nsec
Group Delay Variation (In Fc +/- 10.0 MHz)		5.0	10.0	nsec
Relative Attenuation				
DC ~ 1088.0 MHz	38.0	53.0	-	
1088.0 MHz ~ 1178.0 MHz	32.0	46.0	-	
1178.0 MHz ~ 1188.0 MHz	20.0	45.0	-	
1270.0 MHz ~ 1290.0 MHz	15.0	35.0	-	dB
1290.0 MHz ~ 1378.0 MHz	30.0	49.0	-	
1378.0 MHz ~ 1480.0 MHz	35.0	55.0	-	
1480.0 MHz ~ 2500.0 MHz	27.0	34.0	-	
2500.0 MHz ~ 3000.0 MHz	18.0	28.0	-	
Temperature Range (Operational)	-40	25	85	°C
Input RF Power (In Fc +/- 10.0 MHz)			5	dBm
Input/Output Impedance		50		Ohms

Notes :

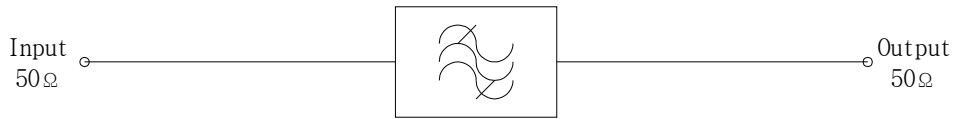
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 3) All attenuation measurements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

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SAW Bandpass Filter F1G22

Matching Schematic

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



Marking Configuration


●¹⁾
I²⁾
1G22³⁾

1) Pad Number 1 Index

2) Manufacturer name

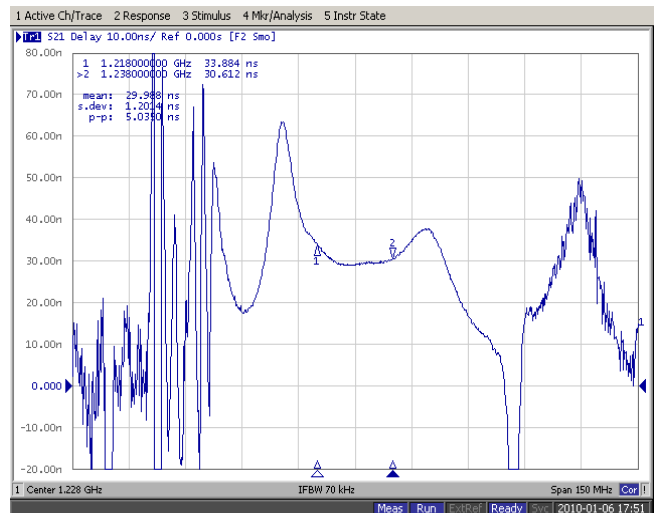
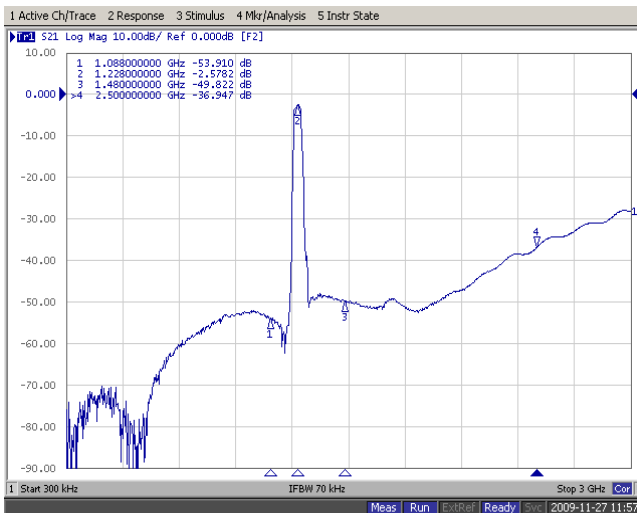
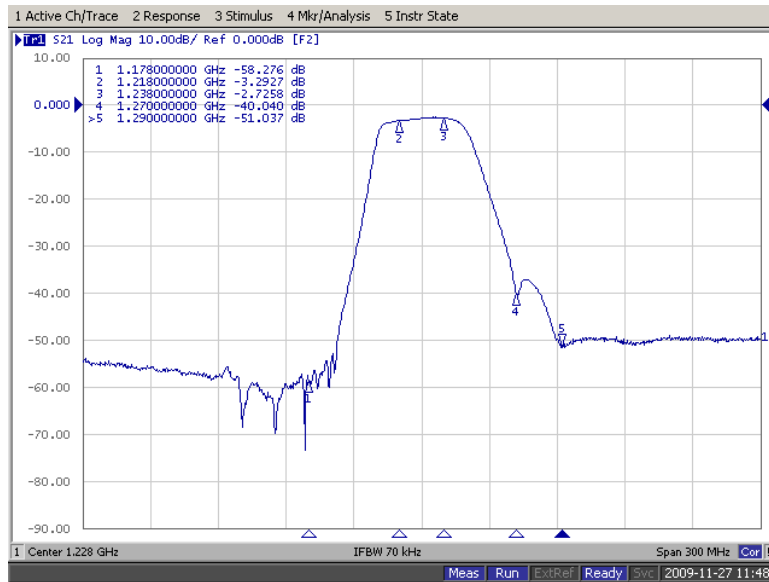
3) Marking Number

* Ink or Laser Marking available

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Typical Performance (at 25°C)



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Part No.

F1G22

Rev. Date

2014-03-19

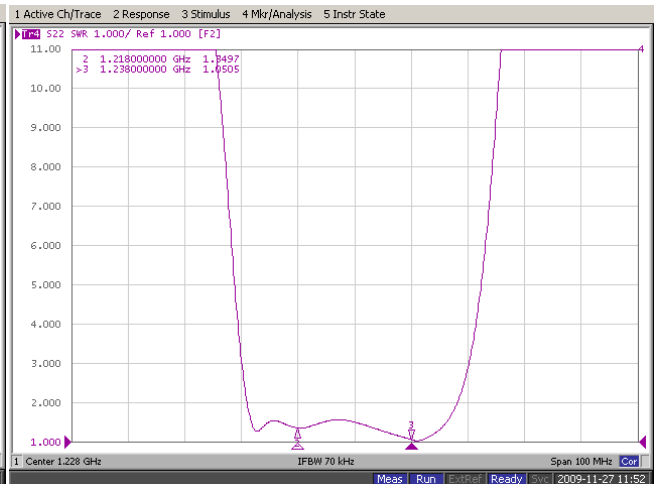
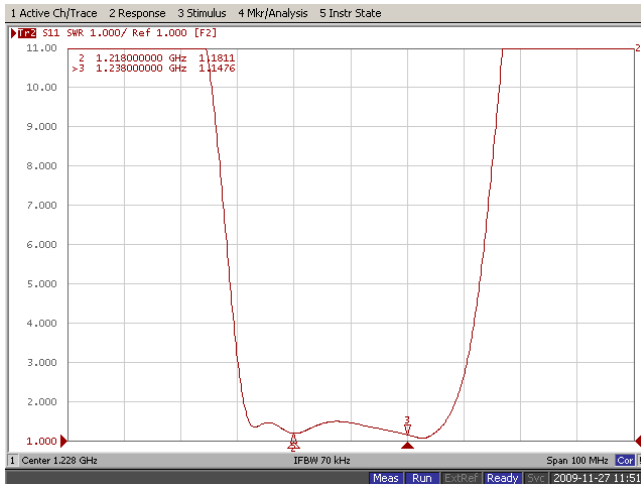
Rev.

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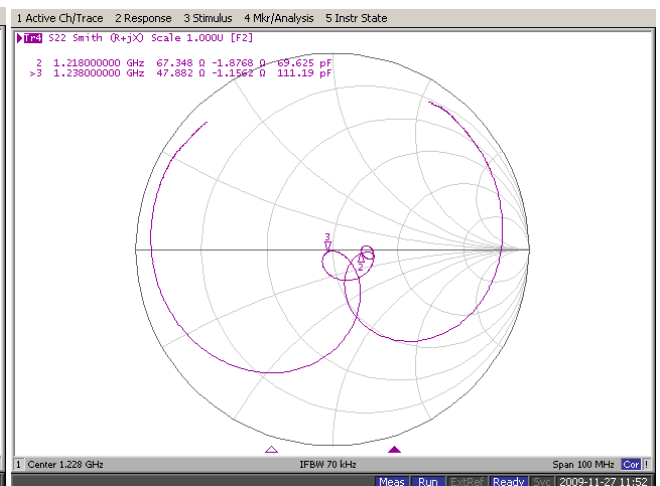
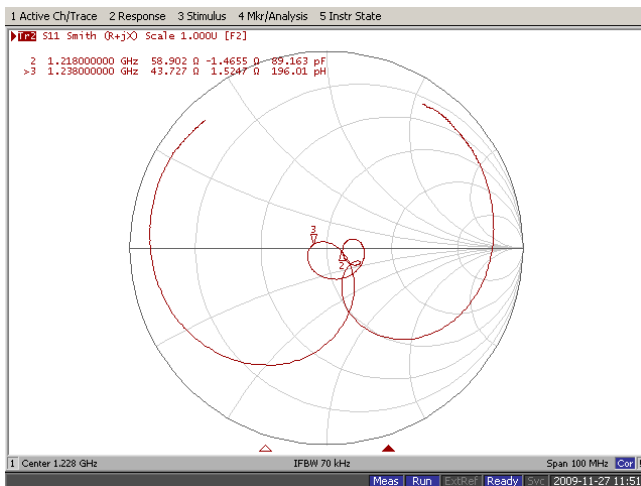
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SAW Bandpass Filter F1G22

Input / Output VSWR Charts



Input / Output Smith Charts

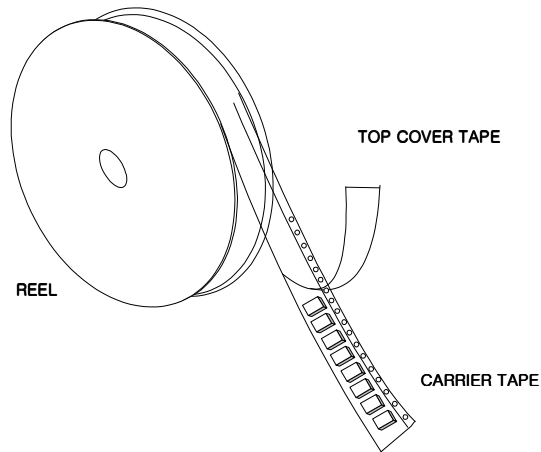


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SAW Bandpass Filter F1G22

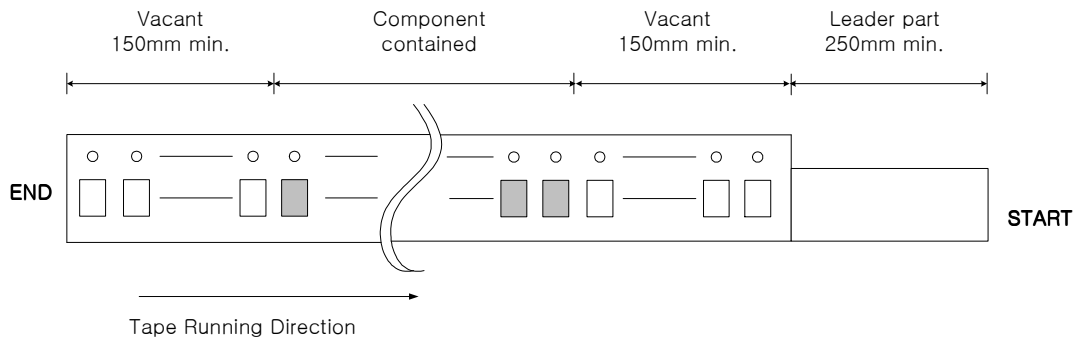
Packing Specification

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

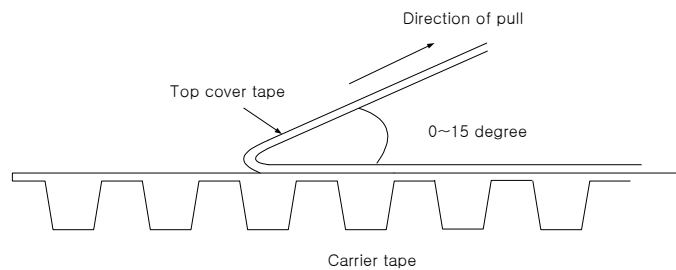



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

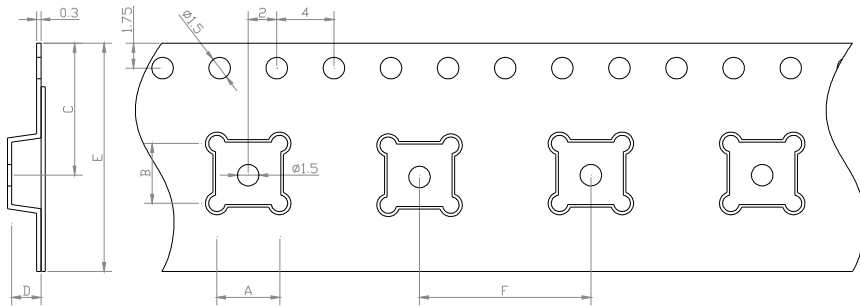
- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g



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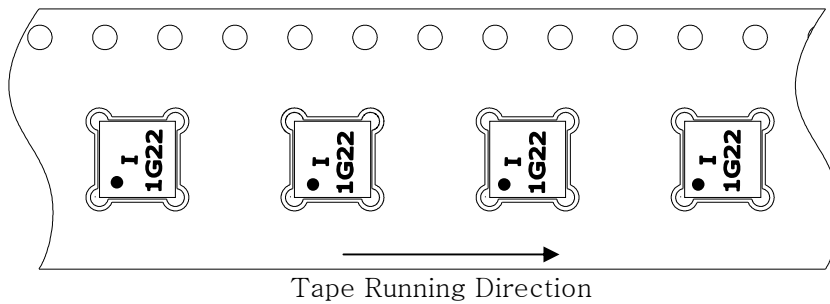
SAW Bandpass Filter F1G22

Carrier Tape Dimensions [unit : mm]

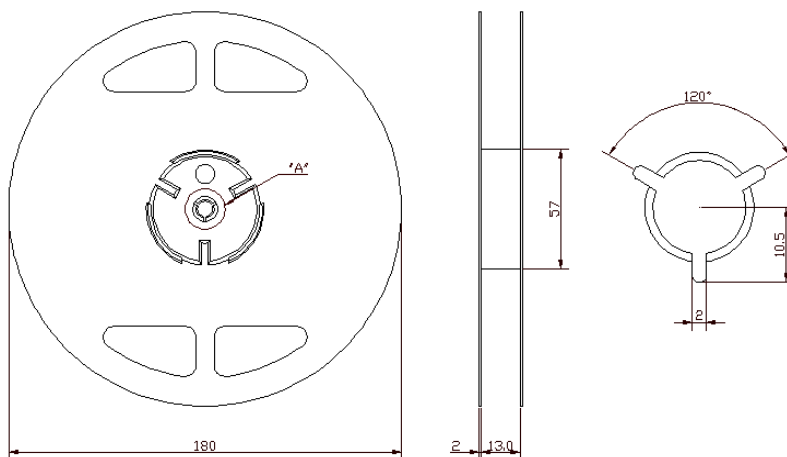



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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