

SAW Bandpass Filter F1H55

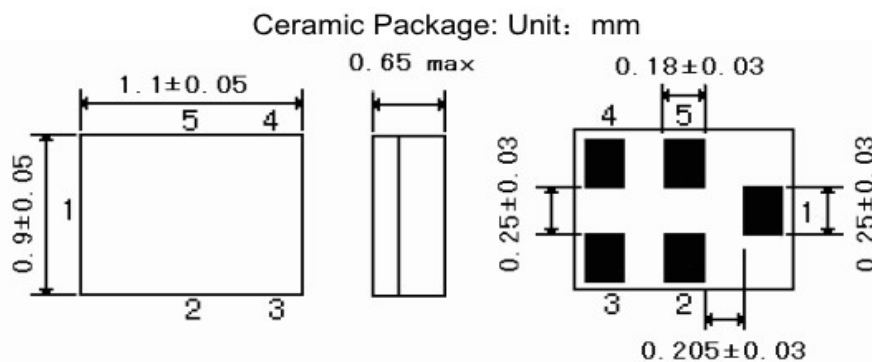
1580MHz – 46.8MHz



Features

- SAW filter for Beidou & GPS & GLONASS.
- High stability and reliability with good performance and no adjustment.
- No matching 50Ω single-ended operation
- Narrow and sharp pass band characteristics. RoHS compatible.
- Low insertion loss and deep stop band attenuation for interference.
- Package size 1.1mm*0.9mm*0.65mm.
- This part is compliant with AEC-Q200

Package Dimensions



Pin Configuration	
1	Input
4	Output
2, 3, 5	Ground

Maximum Ratings

Rating		Value	Unit
DC Voltage (between any Terminals)	V DC	10	V
RF Power (in BW)	P	13	dBm
Operating Temperature Range	TA	-40 ~ +110	°C
Storage Temperature Range	Tstg	-45 ~ +125	°C
ESD Voltage (HB)	VESD	150	V
Moisture Sensitivity Levels	MSL	2A	

** 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.	F1H55	
		Rev. Date	2021-09-16	
		Rev.	AS03	1/6

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Specifications (GPS + Glonass + Beidou)

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	1580	-	MHz
Insertion Loss (1559.09 ~ 1563.09 MHz) (1574.42 ~ 1576.42 MHz) (1597.55 ~ 1605.89 MHz)	-	1.2 1.0 1.3	2.0 1.6 2.0	dB
Ripple (1559.09 ~ 1563.09 MHz) (1574.42 ~ 1576.42 MHz) (1597.55 ~ 1605.89 MHz)	-	0.2 0.2 0.3	0.5 0.4 0.6	-
Group Delay Ripple (1559.09 ~ 1563.09 MHz) (1574.42 ~ 1576.42 MHz) (1597.55 ~ 1605.89 MHz)	- - -	2 2 2	7 7 8	nsec
VSWR (1559.09 ~ 1563.09 MHz) (1574.42 ~ 1576.42 MHz) (1597.55 ~ 1605.89 MHz)	-	1.6 1.2 1.3	1.9 1.6 1.8	-
Attenuation				
DC ~ 925 MHz	45	50	-	dB
925 ~ 960 MHz	43	50	-	
1427 ~ 1453 MHz	41	47	-	
1453 ~ 1470 MHz	40	45	-	
1470 ~ 1530 MHz	30	35	-	
1535 ~ 1541 MHz	7	13	-	
1626 ~ 1630 MHz	10	17	-	
1635 ~ 1700MHz	33	37	-	
1710 ~ 1785 MHz	45	50	-	
1850 ~ 1910 MHz	43	48	-	
1920 ~ 1980 MHz	42	48	-	
2110 ~ 2170 MHz	40	45	-	
2300 ~ 2400 MHz	40	44	-	
2400 ~ 2500 MHz	39	43	-	
2500 ~ 2570 MHz	38	42	-	
2600 ~ 3000 MHz	33	39	-	
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

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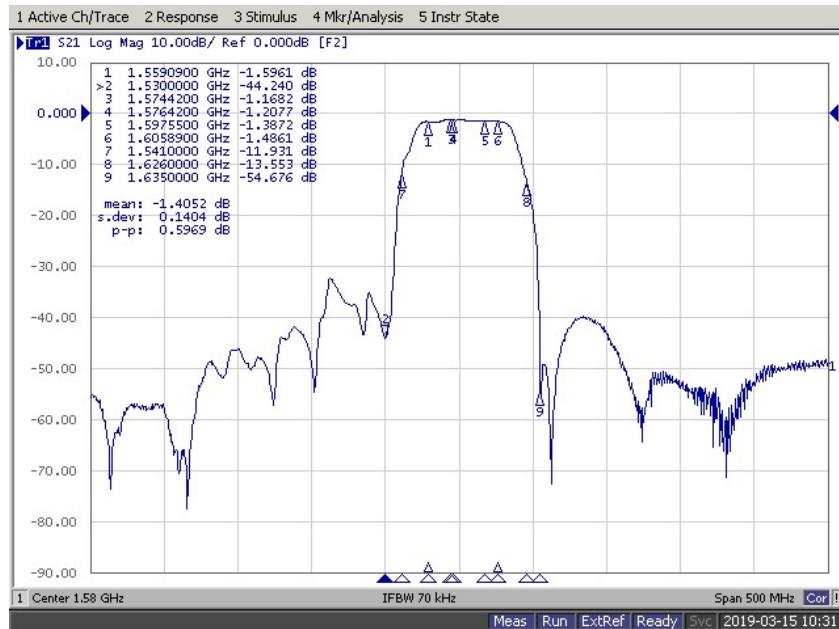
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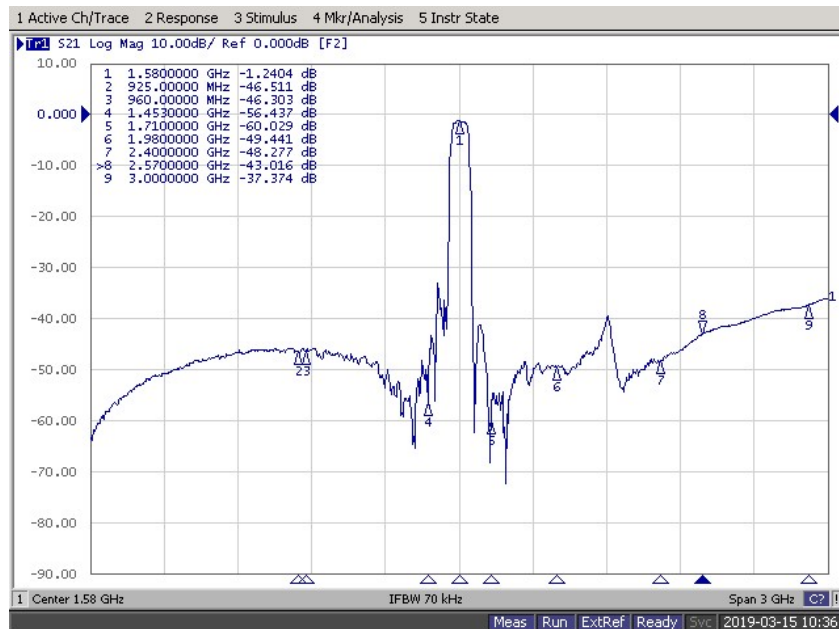



Typical Performance (at 25°C)

- Pass band & Ripple



- Wideband Attenuation



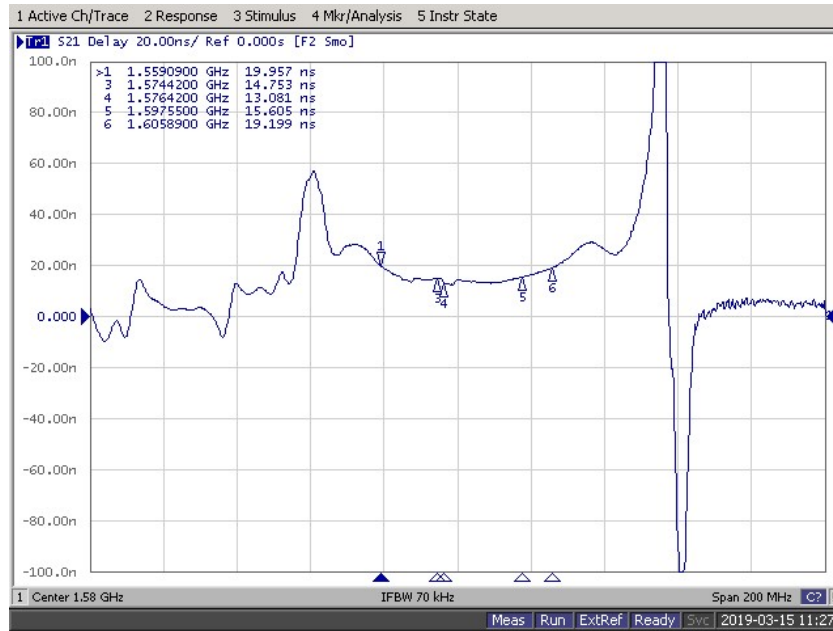
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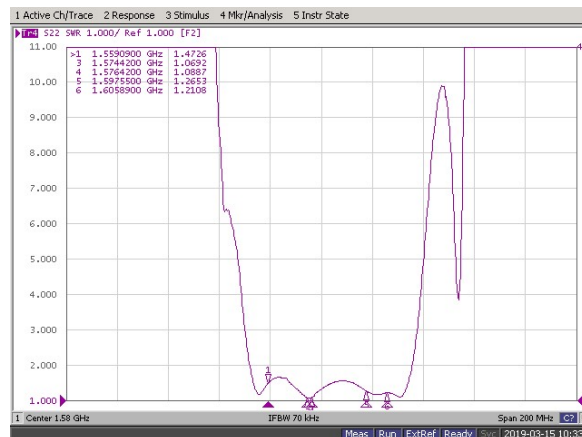
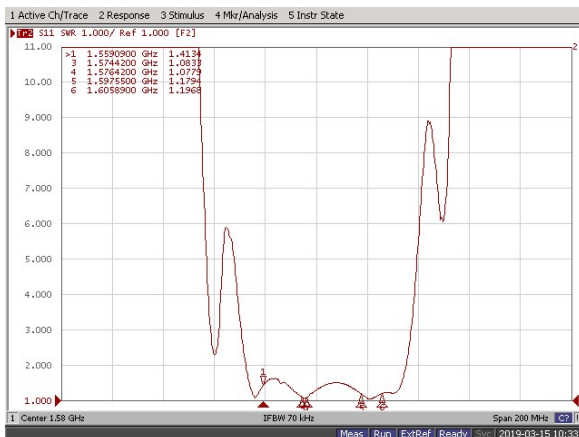
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- Group Delay Ripple



- Input / Output VSWR



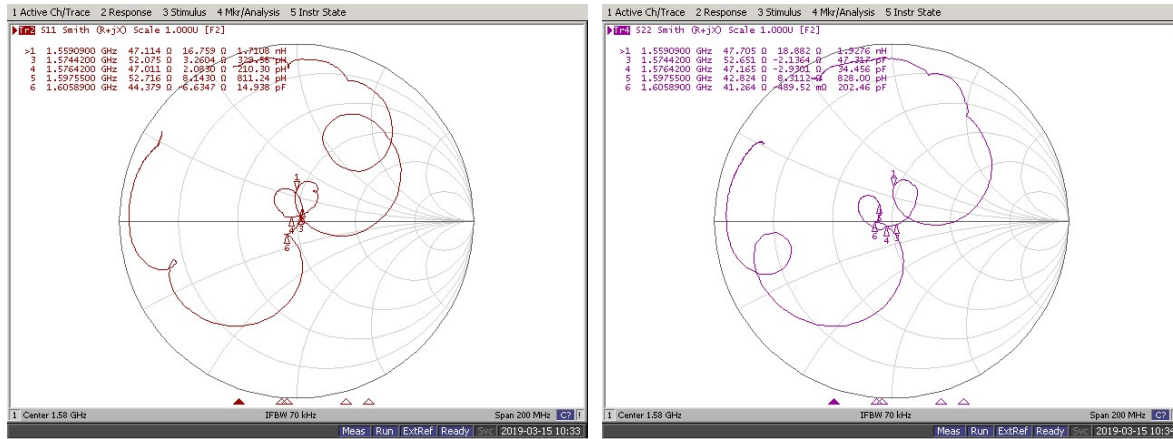
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- Input / Output Smith Charts



Marking Configuration

* Laser Marking

H3 ¹⁾

o²⁾ ** ³⁾

1) H3: Model Name

2) o: Dot marking, indicates input 1

3) **: Month Code (The code shown below varies in a 4-year-cycle)

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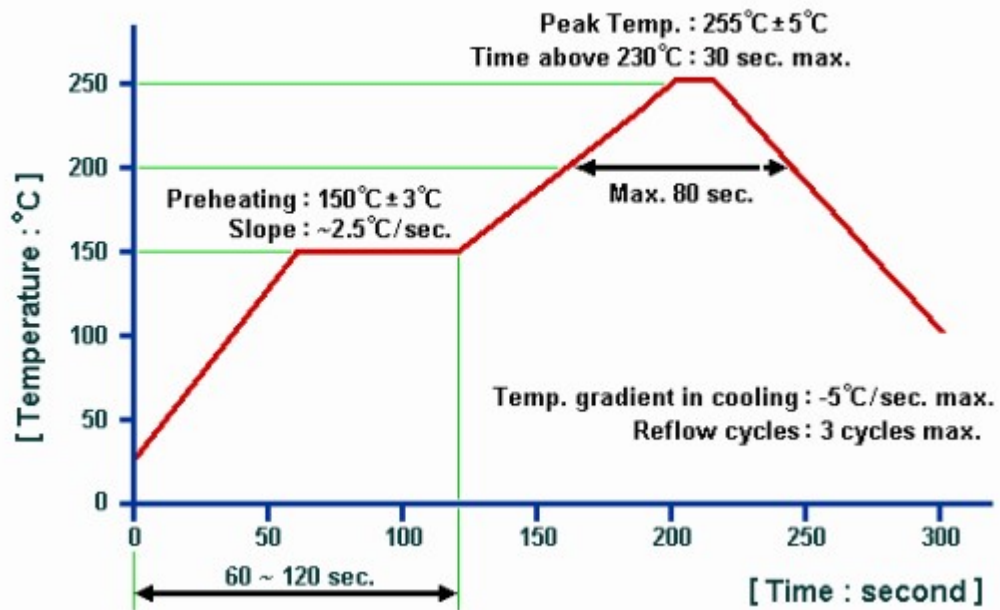
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Reflow Condition

Recommended Soldering Profile



 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1H55	
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