

SAW Bandpass Filter F1H54

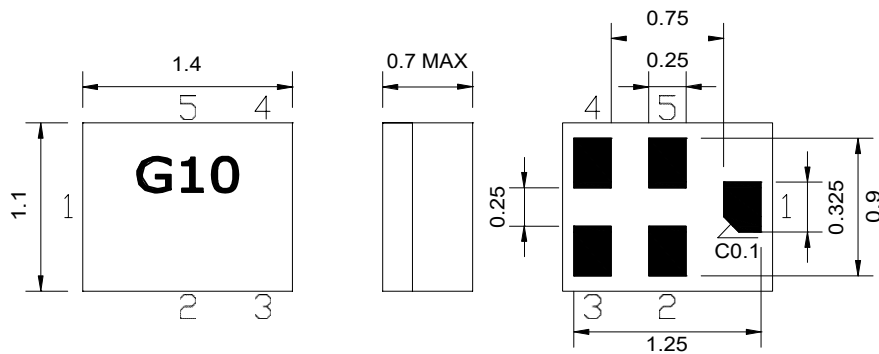
1580MHz – 46.8MHz



Features

- RF bandpass filter
- No matching 50Ω single-ended operation
- Surface Mounted Device Package (1.4 mm × 1.1 mm × 0.7mm)
- RoHS Compliant

Package Dimensions



** Dimensions shown are nominal in millimeters

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

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
Storage Temperature Range	°C	-40	25	85
Power Handling Capability	dBm	-	-	13
DC Voltage	V	-	-	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.	F1H54	
		Rev. Date	2021-09-17	
		Rev.	AS02	1/5

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Specifications (GPS + Glonass + Beidou)

Fc = 1580 MHz

	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)	-	1.8 1.3 1.8	2.1 1.6 2.1	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	-
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	-	
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		

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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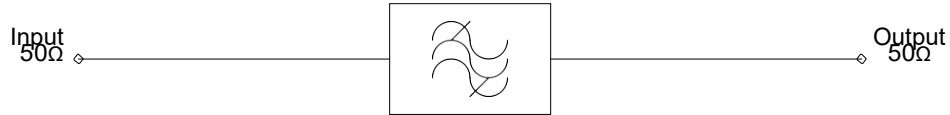
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Matching Schematic

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



Marking Configuration


G10¹⁾

** 2)

1) Series Number

2) Date Code

* Ink or Laser Marking available

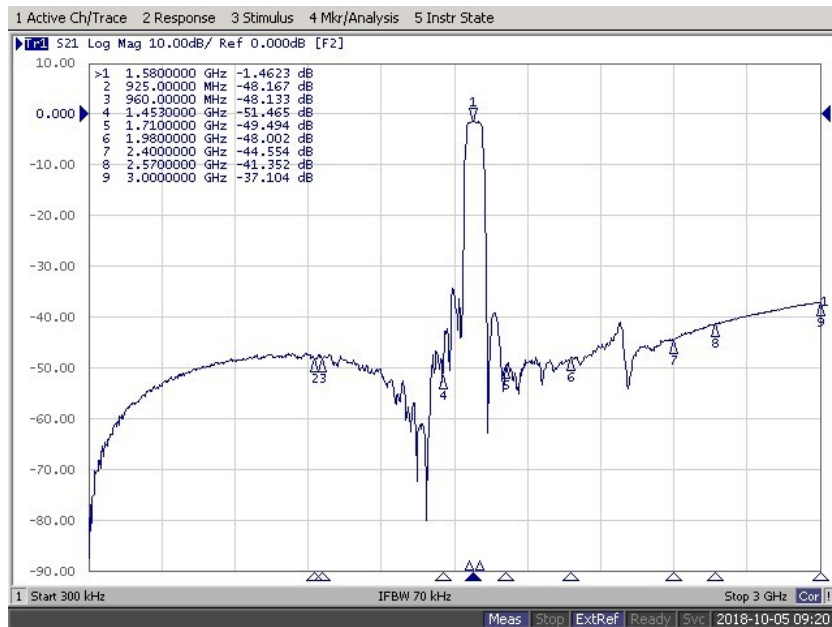
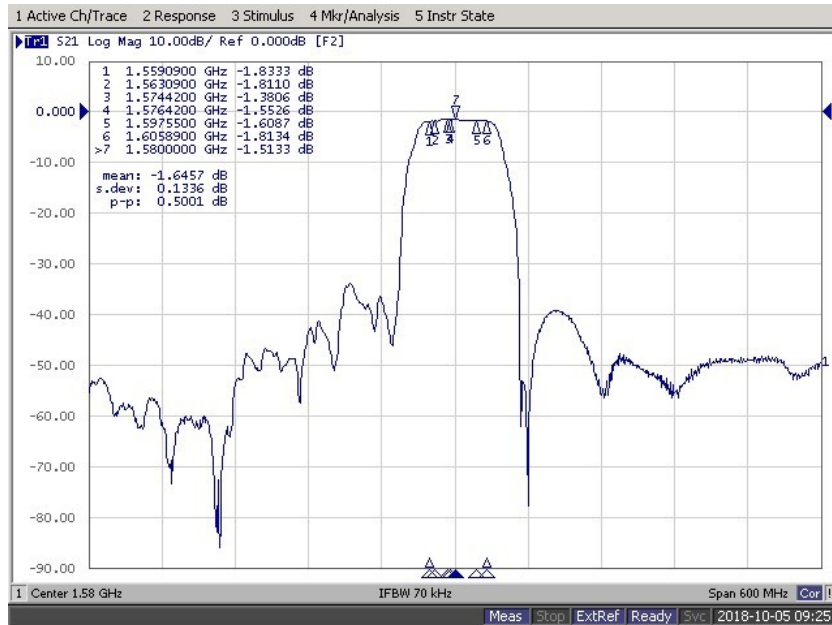
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1H54	
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Typical Performance (at 25°C)



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Rev.

AS02

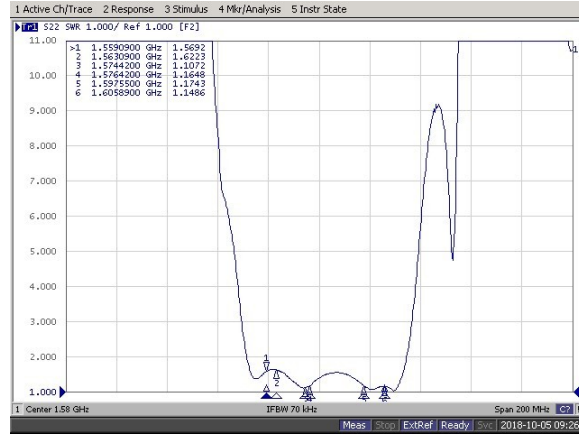
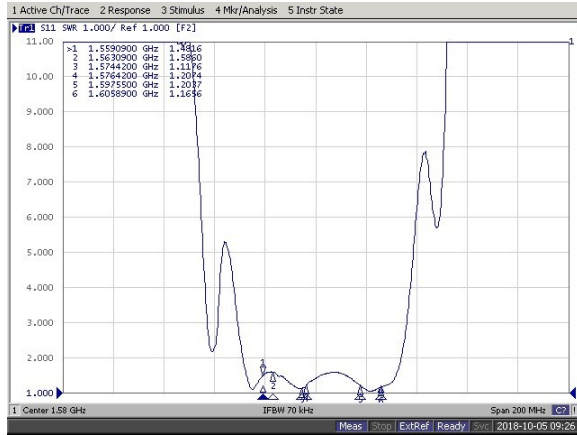
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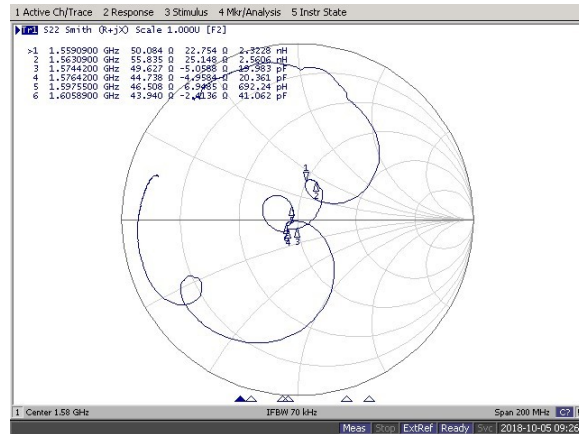
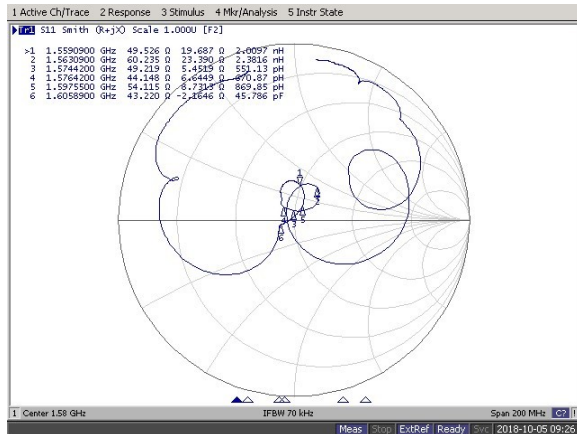
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Input / Output VSWR Charts



Input / Output Smith Charts



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