

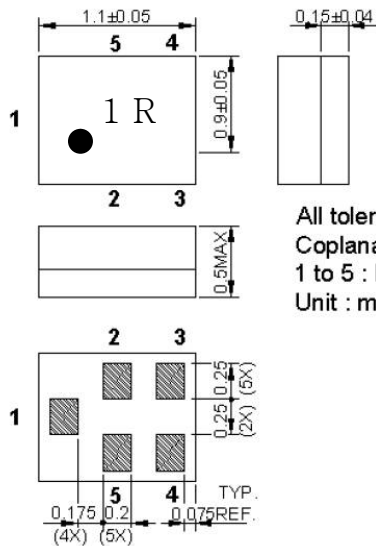
SAW Band Pass Filter F1H59



Features

- RF Band Pass Filter
- Usable Pass Band 47MHz
- 50Ω single-ended operation
- Chip Scale Package (CSP) (1.1mm × 0.9mm)
- RoHS/RoHS2 (2015/863/EU) Compliant

Package Dimensions



All tolerances are +/-0.05 mm unless otherwise specified
 Coplanarity : 0.1 mm max.
 1 to 5 : Pin No.
 Unit : mm

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 Configuration	
1	Input
4	Output
2, 3, 5	Ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	℃	-40	25	105
Storage Temperature Range	℃	-40	25	105
Power Handling Capability	dBm	-	-	20

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.	F1H59	
		Rev. Date	2020-10-20	
		Rev.	AS02	1/6

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Specifications

Fc = 1582.5 MHz

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	1582.5	-	MHz
Insertion Loss 1559~1606 MHz	-	0.6	1.4	dB
Amplitude Ripple 1559~1606 MHz	-	0.4	1.0	dB p-p
VSWR 1559~1606 MHz	-	1.3	2.0	
Group delay variation 1559~1606 MHz	-	7	11	ns
Attenuation				
100~960 MHz	25	28		
960~1500 MHz	20	27		
1500~1511 MHz	20	33		
1652~1670 MHz	10	15		
1670~2400 MHz	18	21	-	dB
2400~3200 MHz	20	27		
3200~4200 MHz	25	31		
4200~5000 MHz	30	37		
5000~6000 MHz	30	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

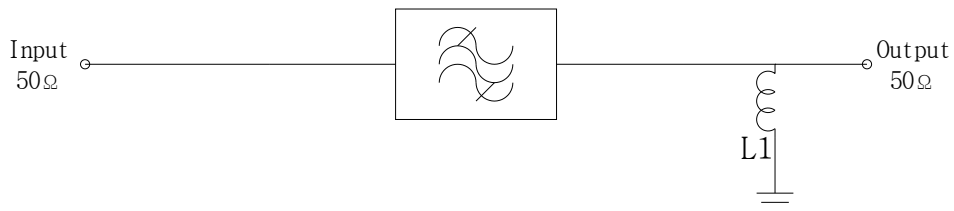
	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1H59	
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Matching Schematic

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



$$L1 = 8.2nH$$

Marking Configuration

1²⁾ R³⁾


●1)

1) Pin 1 index

2) Series Number

3) Date Code

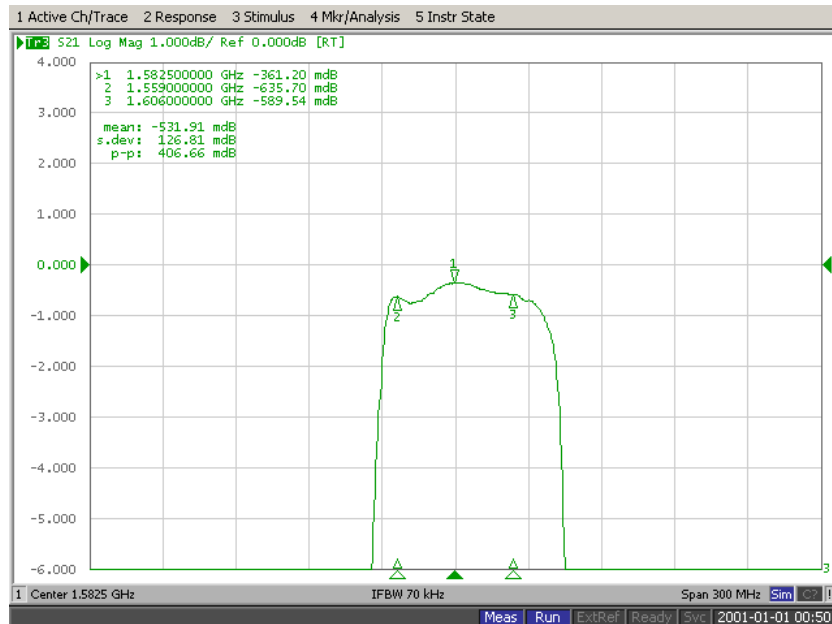
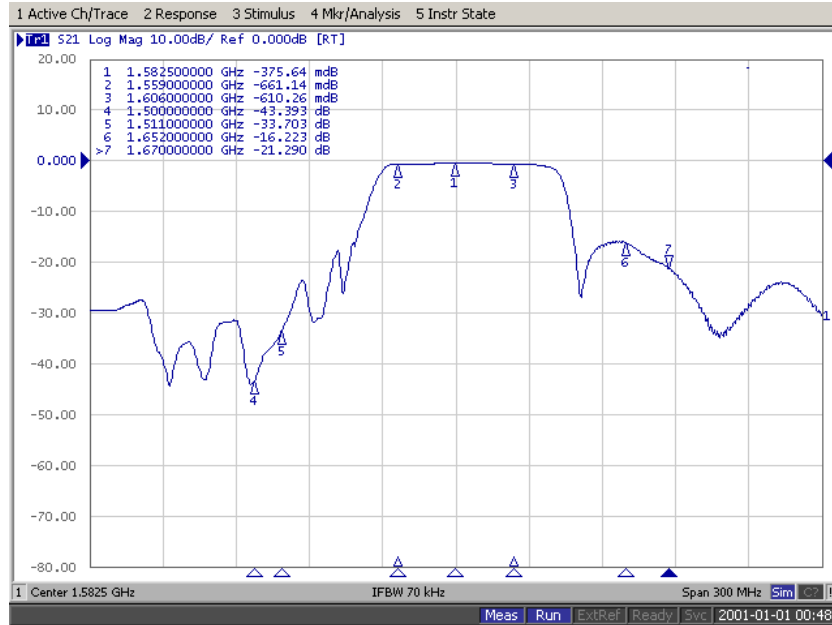
* Ink or Laser Marking available

 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1H59	
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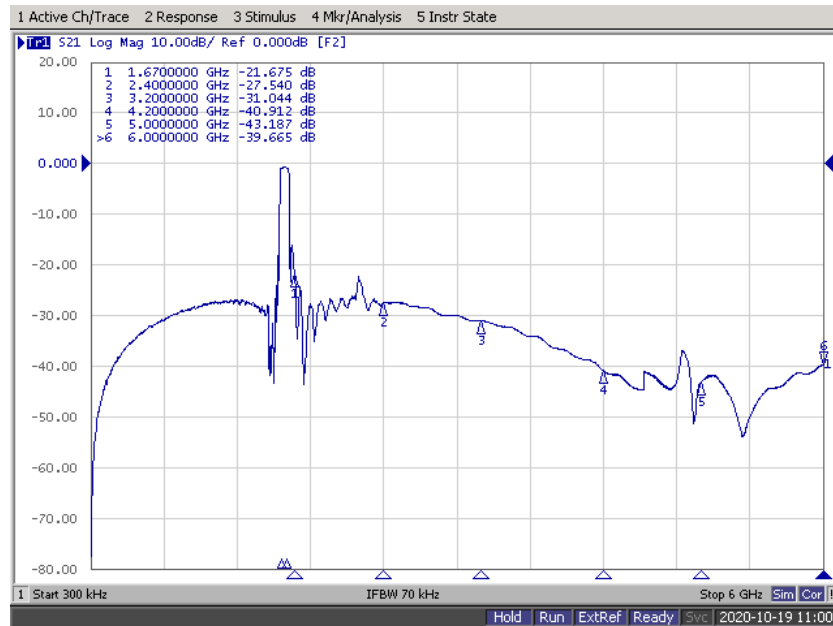


Typical Performance (at 25°C)

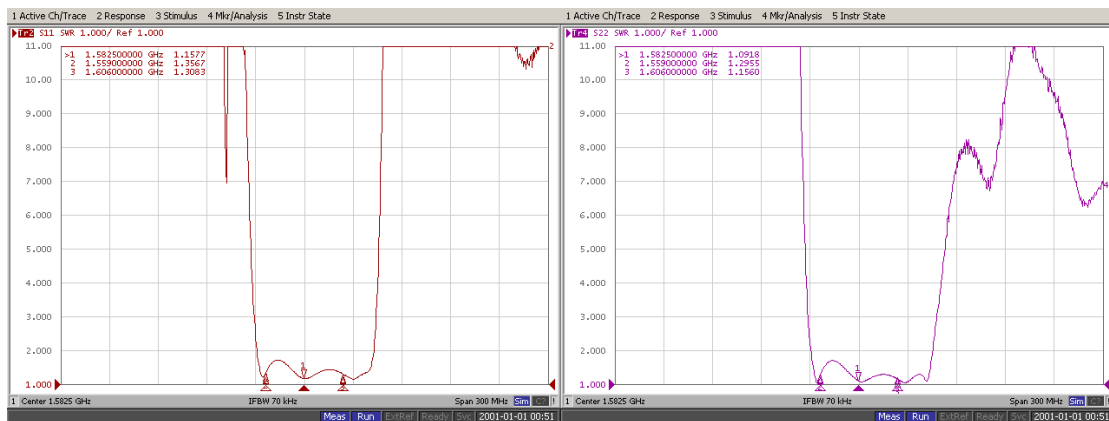



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Input / Output VSWR Charts



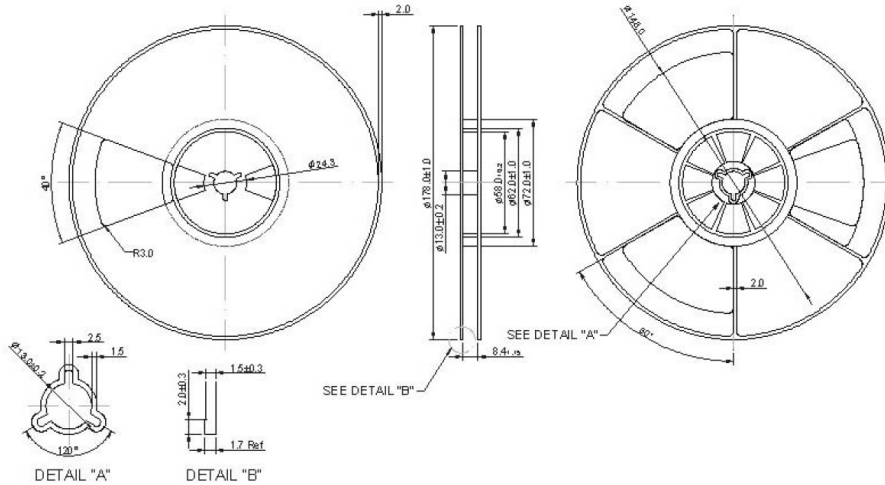
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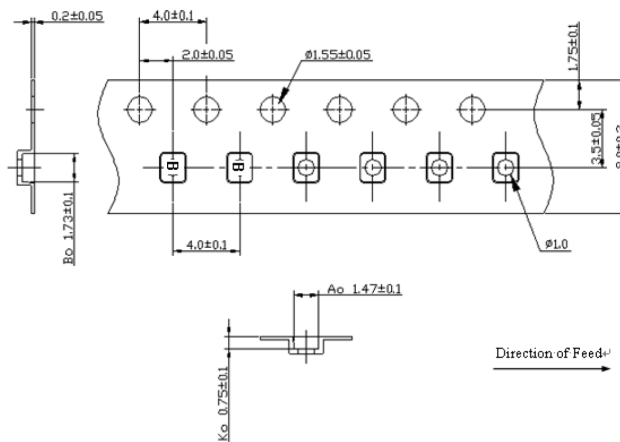
Packing Specification

1. Reeling Quantity : 3000 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

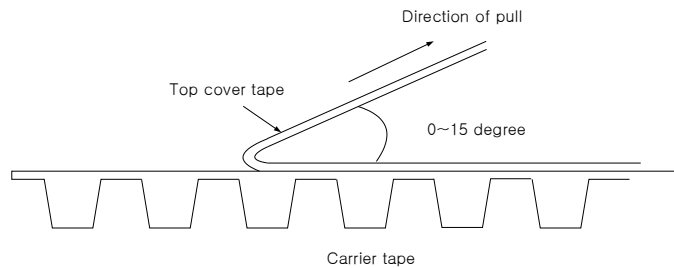


2. Tensile strength of carrier tape

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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