

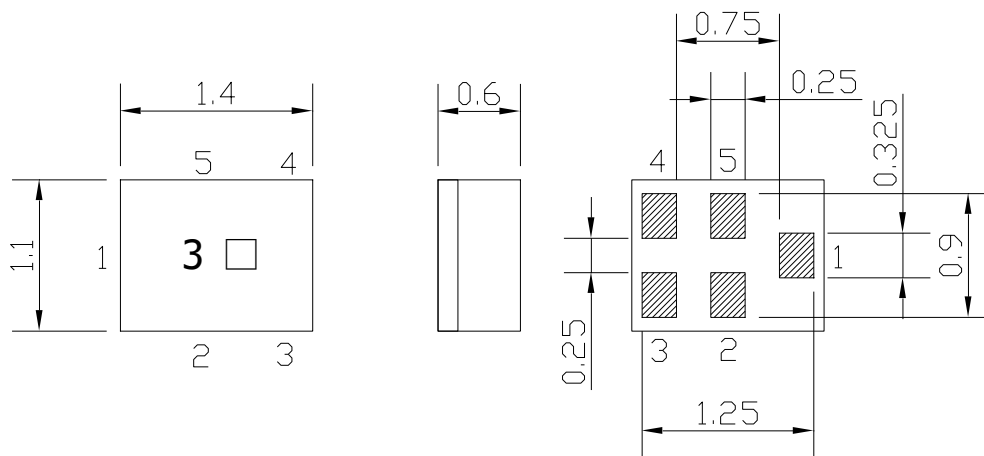
SAW Bandpass Filter F9156



Features

- RF bandpass filter
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device Package (1.4 mm × 1.1 mm)
- RoHS/RoHS2 (2015/863/EU) Compliant
- This part is compliant with AEC-Q200
- Moisture Sensitivity Level 3a (MSL3a)

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

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	85
Storage Temperature Range	℃	-40	25	85
Power Handling Capability	dBm	-	-	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.	F9156	
		Rev. Date	2020-07-24	
		Rev.	AS06	1/6

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Specifications

Fc = 915 MHz

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	915	-	MHz
Insertion Loss (Fc ± 13MHz)	-	1.9	2.5	dB
Amplitude Ripple (Fc ± 13MHz)	-	0.8	1.5	dB p-p
VSWR (Fc ± 13MHz)	-	1.6	2.0	
Group Delay Variation (Fc ± 13MHz)	-	11	50	nsec
Absolute Attenuation				
10 ~ 800 MHz	45	46	-	dB
800 ~ 845 MHz	40	44	-	
845 ~ 880 MHz	35	38	-	
947 ~ 970 MHz	13	28	-	
970 ~ 1020 MHz	33	47	-	
1020 ~ 1200 MHz	35	43	-	
1200 ~ 3000 MHz	28	34	-	
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

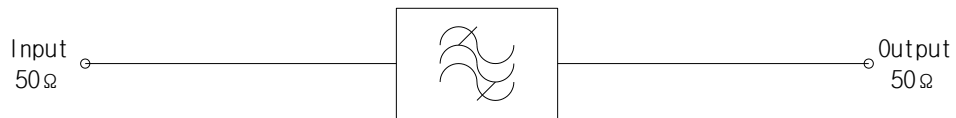
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F9156	
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Matching Schematic

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




Marking Configuration

3 ¹⁾ □ ²⁾

1) Part number

2) Year/Month Code

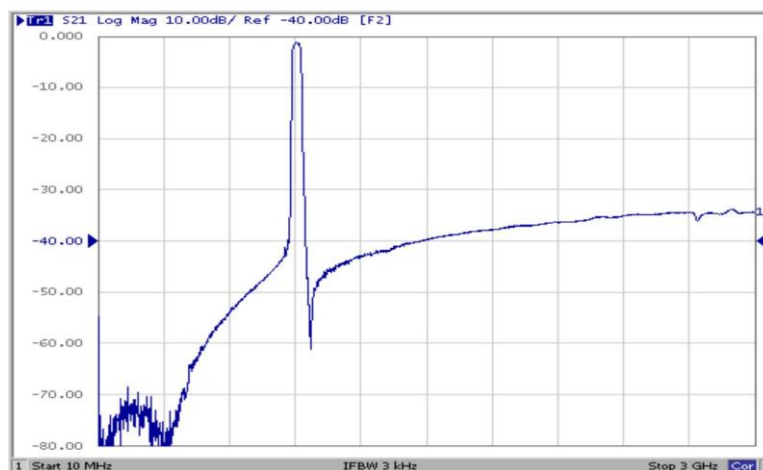
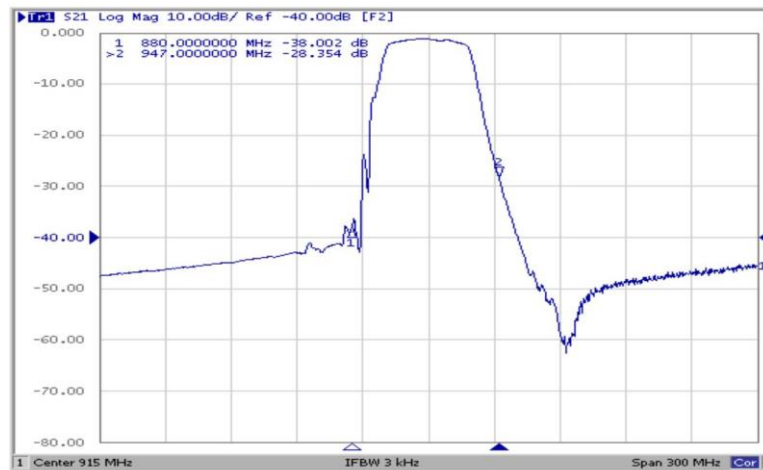
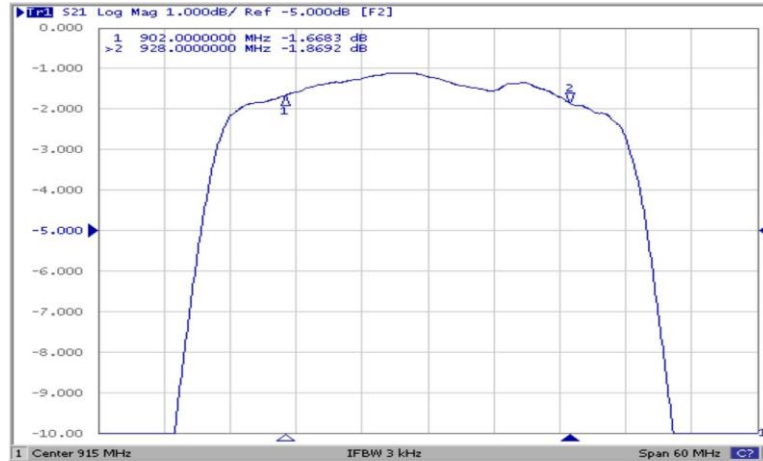
* Ink or Laser Marking available


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Typical Performance (at 25°C)

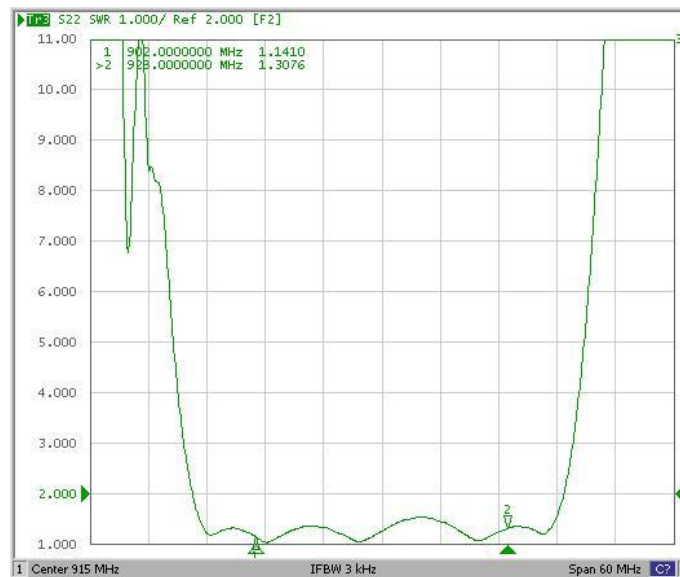
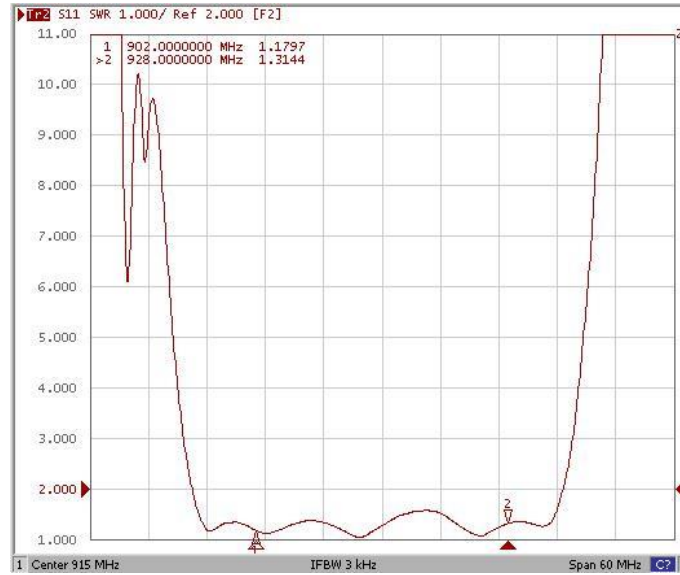



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Input / Output VSWR Charts



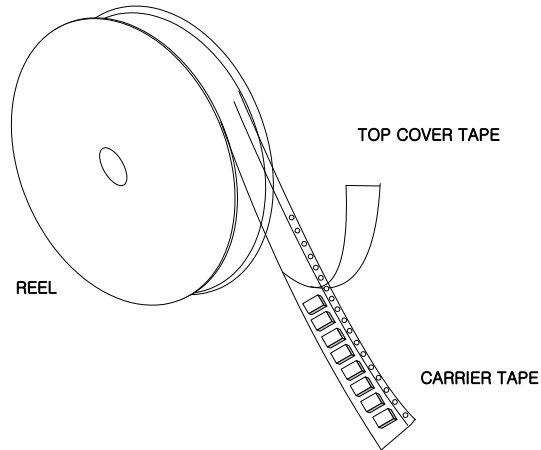
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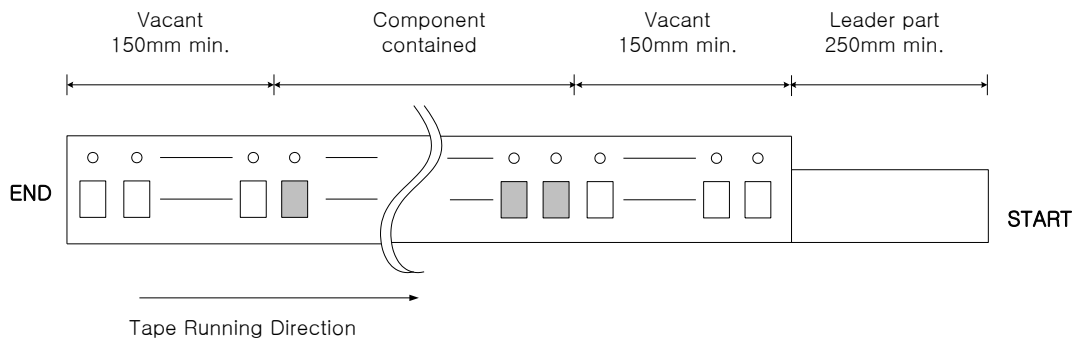
Packing Specification

1. Reeling Quantity : 3000 pcs / 13" 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

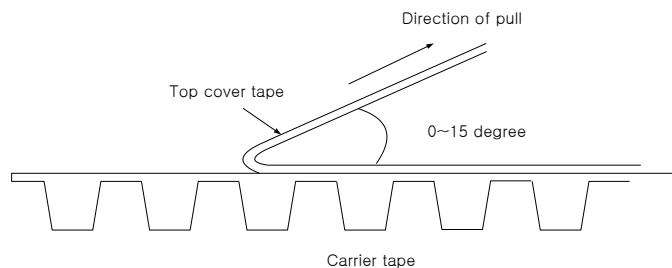


2. Tensile strength of carrier tape

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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