

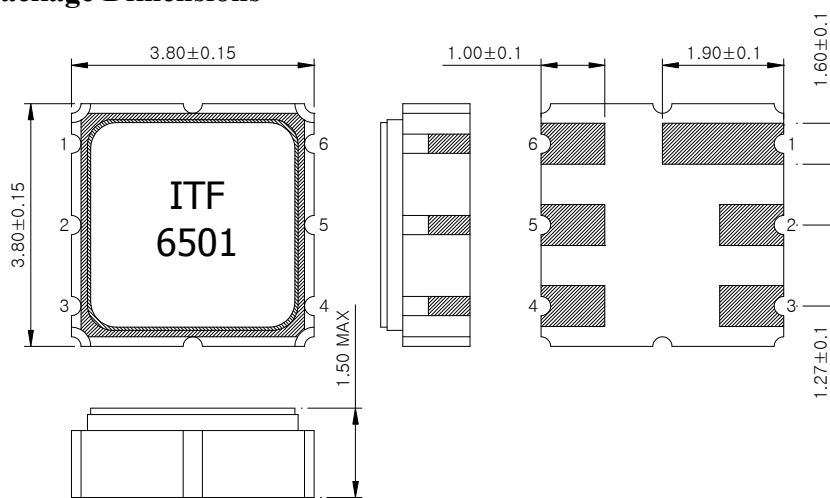
SAW Bandpass Filter F6501



Features

- RF bandpass filter
- High attenuation
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package
- RoHS Compliant

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al_2O_3 Ceramic

Lid : Kovar, Ni Plated


Terminations : Au plating $0.3 \sim 1.0$ μm , Over a $1.27 \sim 8.89$ μm
Ni Plating

Pin Configuration	
2	Input
5	Output
1, 3, 4, 6	Case 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	-	-	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.	F6501	
		Rev. Date	2014-12-08	
		Rev.	NSNI04-AS02	1/8

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Specifications

$F_c = 650.0\text{MHz}$

		Minimum	Typical	Maximum
Center Frequency (F_c)	MHz	-	650	-
Insertion Loss (648 ~ 652 MHz)	dB	-	2.0	4.0
Amplitude Ripple (648 ~ 652 MHz)	dBp-p	-	0.5	1.0
Absolute Group Delay at F_c	nsec	-	100	-
Group Delay Variation (648 ~ 652 MHz)	nsec	-	50	-
VSWR (648 ~ 652 MHz)		-	1.5	2.0
Relative Attenuation				
0.3~600 MHz		40	55	-
668~1150 MHz	dB	40	50	-
1150~1500 MHz		35	45	-
1500!2500 MHz		30	40	-
Input/Output Impedance	Ohms	-	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
- 3) All attenuation measurements are measured relative to insertion loss

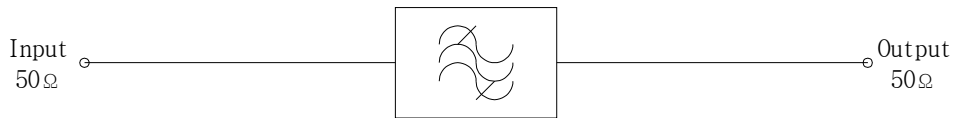
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Matching Schematic


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



Marking Configuration

ITF¹⁾
6501²⁾

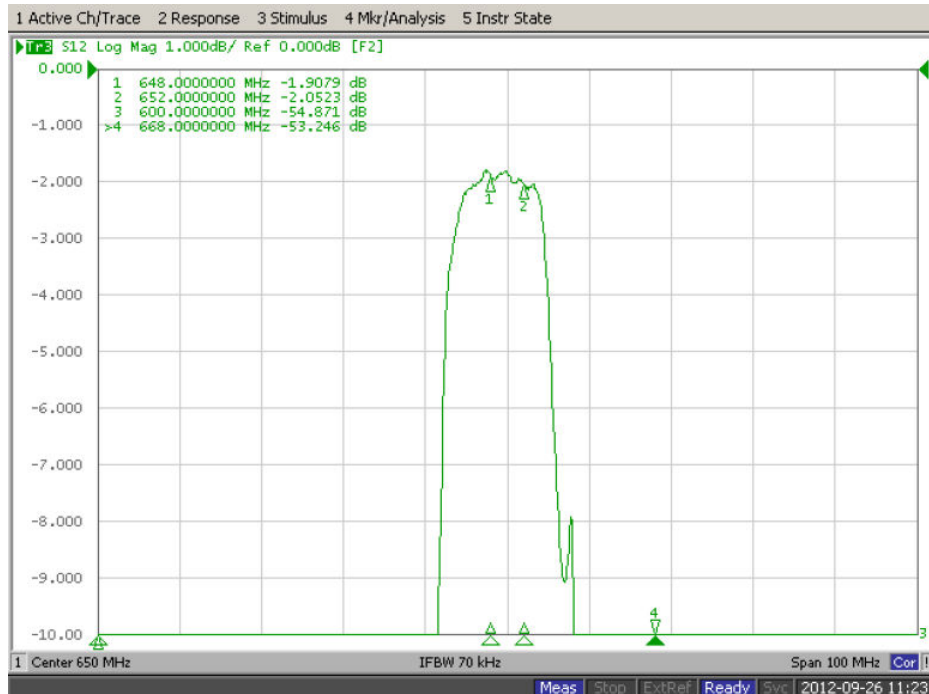
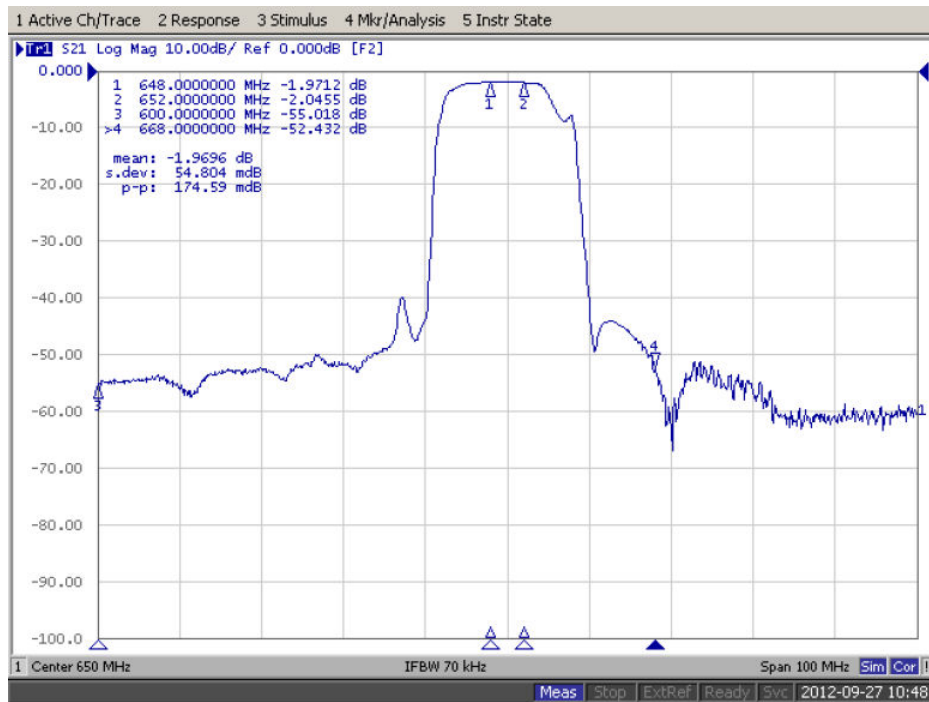
- 1) Manufacturer name
- 2) Marking Number

 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F6501	
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Typical Performance (at 25°C)



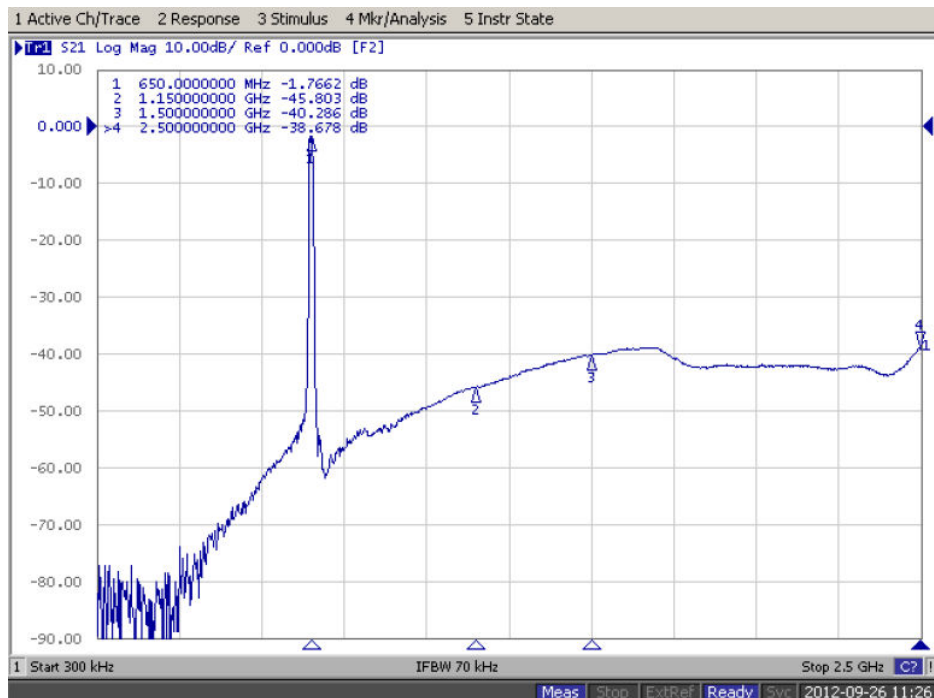
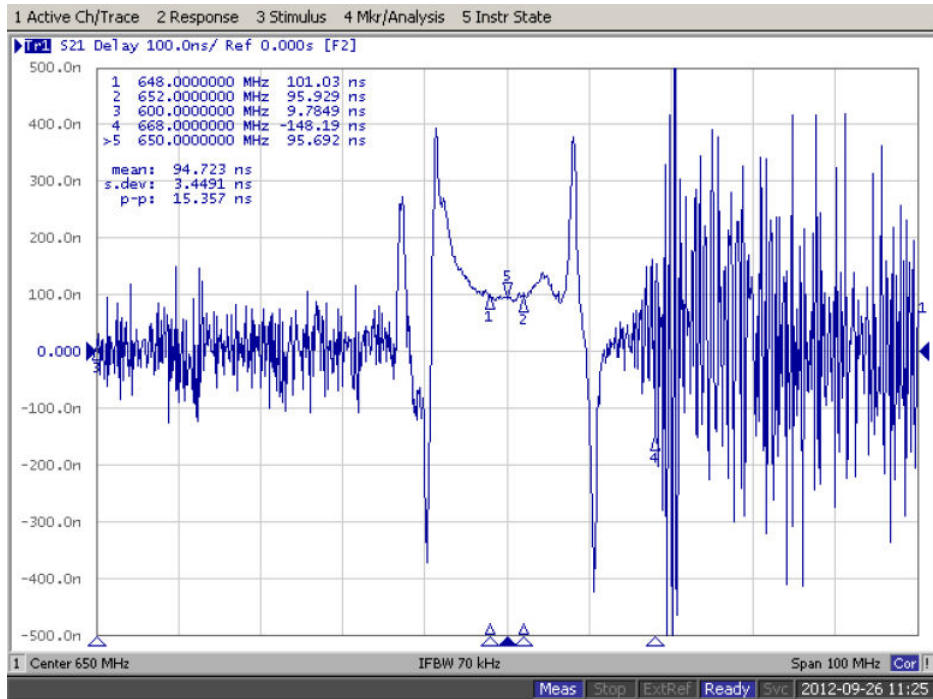
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Typical Performance (at 25°C)



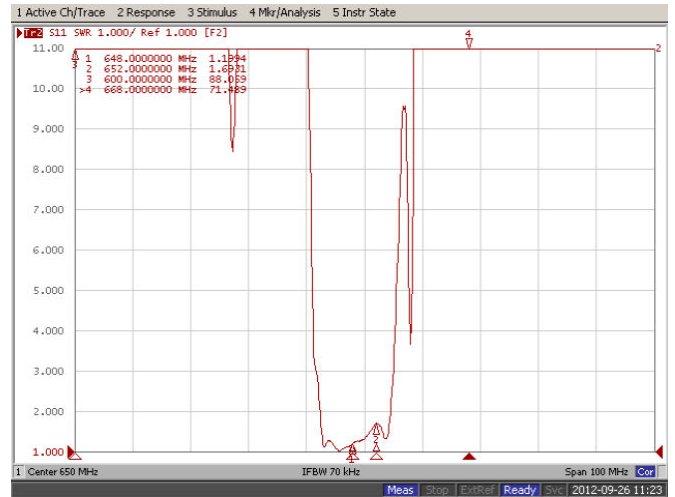
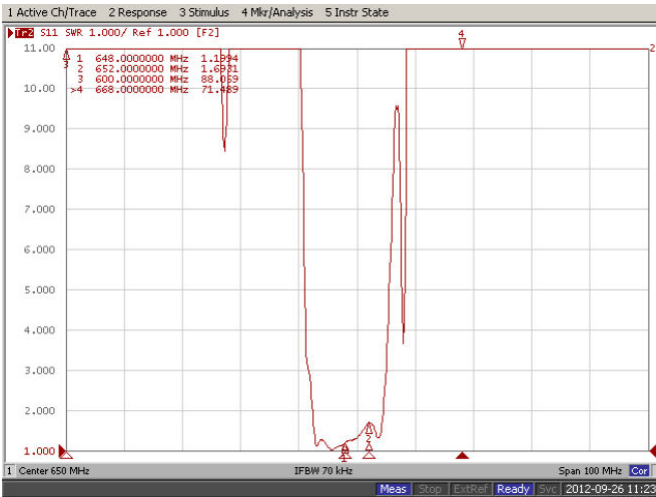
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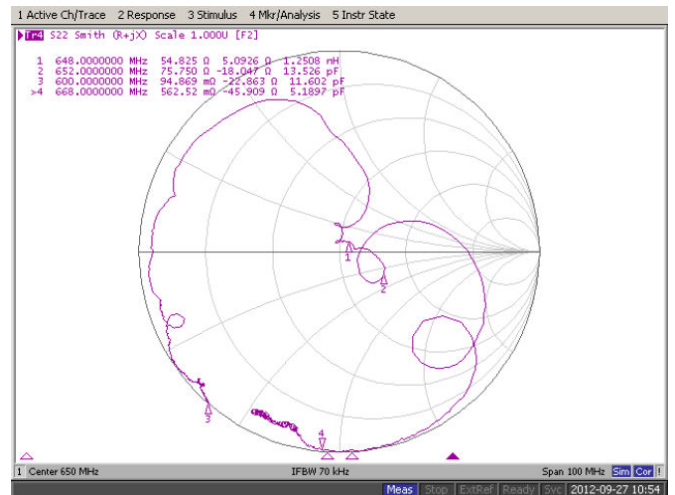
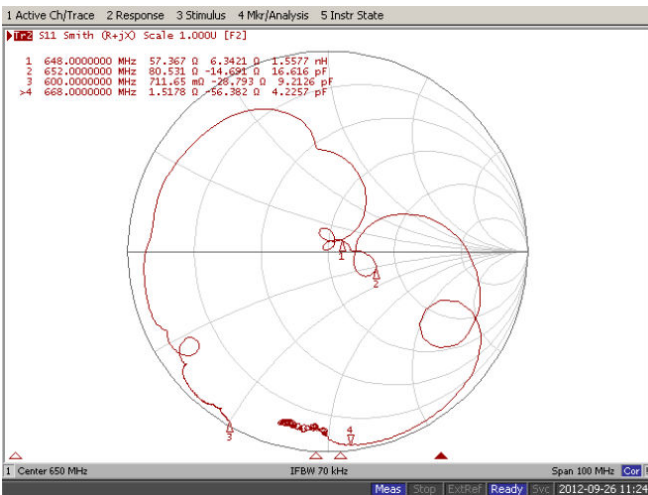
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Input / Output VSWR Charts



Input / Output Smith Charts



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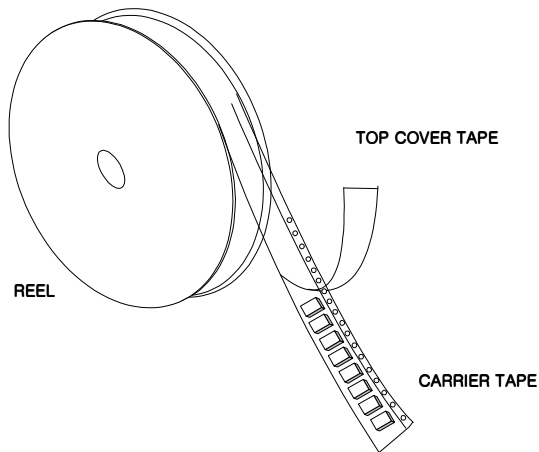
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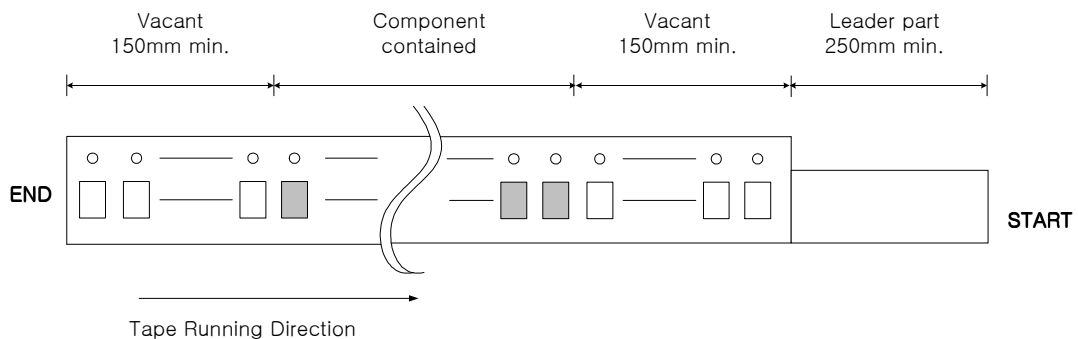
Packing Specification

1. Reeling Quantity : 1000 pcs / 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

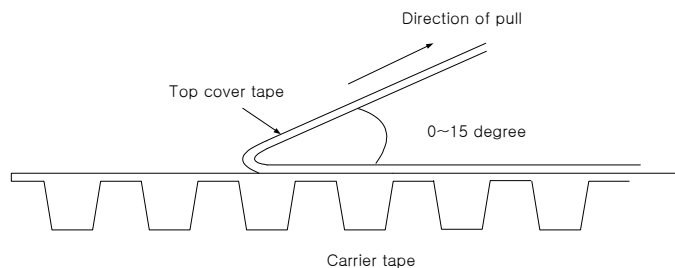


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

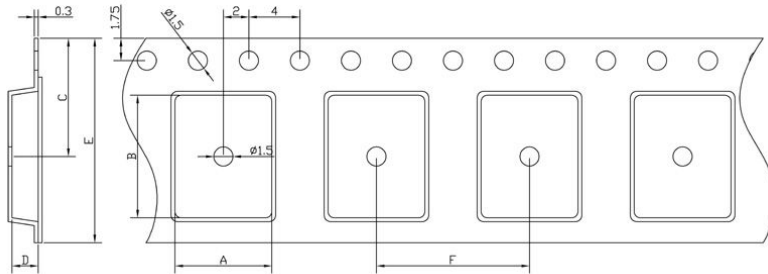


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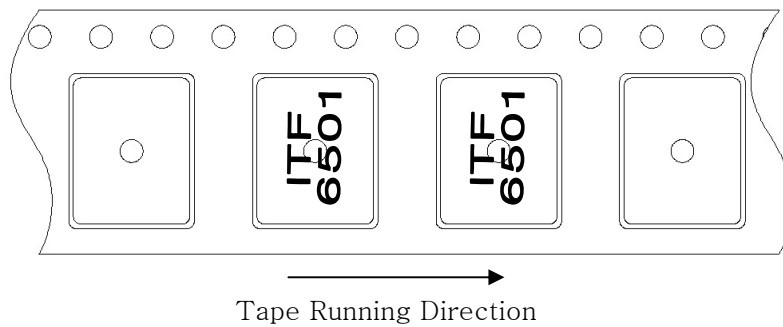


Carrier Tape Dimensions [unit : mm]

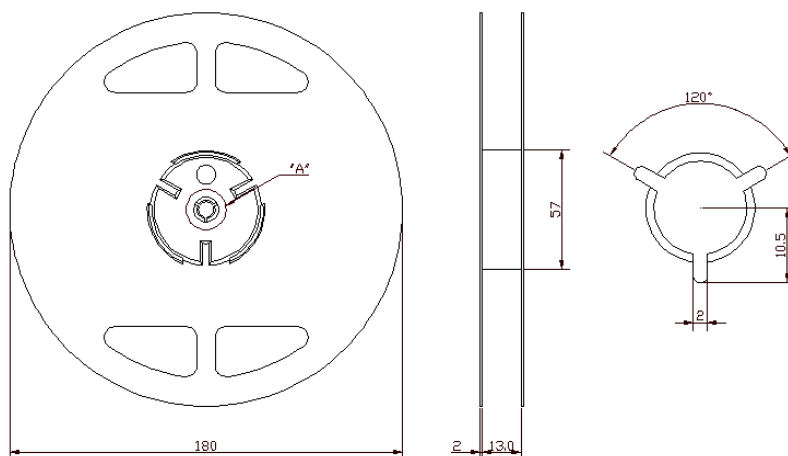



A	4.30 ± 0.1
B	4.30 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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