

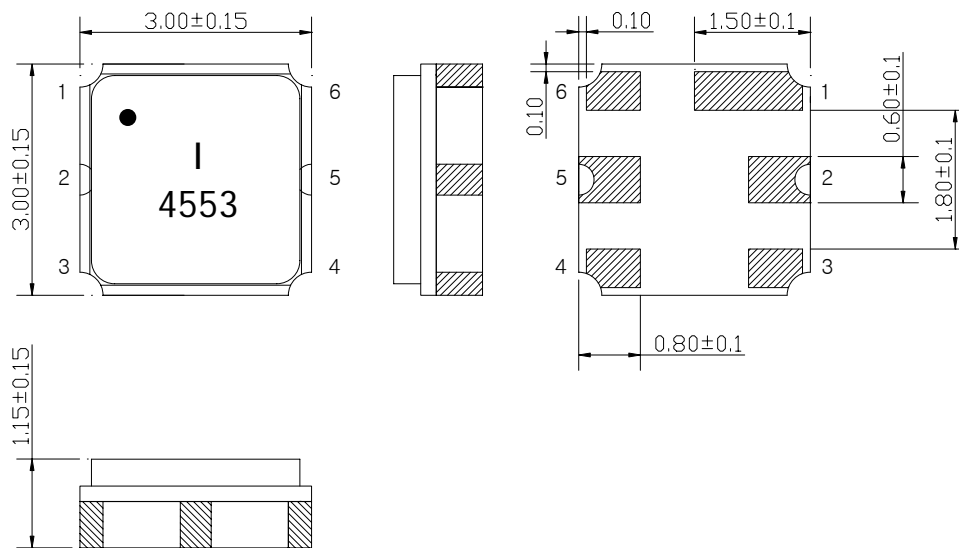
SAW Bandpass Filter F4553



Features

- RF bandpass filter for CDMA450 A-Band Tx. Part
- Usable bandwidth 5MHz (452.5 MHz ~ 457.5 MHz)
- High attenuation
- No matching single-ended operation
- Ceramic Surface Mounted Device Package (3.0 mm × 3.0mm)
- RoHS Compliant

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al_2O_3 Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 μm , Over a 1.27 ~ 8.89 μm
Ni Plating


Pin Configurations

2	Input
5	Output
1, 3, 4, 6	Case ground

Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	$^{\circ}\text{C}$	-30	25	85
Storage Temperature Range	$^{\circ}\text{C}$	-40	-	85
Power Handling Capability	dBm	-	-	30

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.	F4553	
		Rev. Date	2006-06-08	
		Rev.	NR5008-AS02	1/7

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Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	455.0	-	MHz
Insertion Loss (In Fc +/- 2.5 MHz)	-	2.0	2.8	dB
Amplitude Ripple (In Fc +/- 2.5 MHz)	-	0.8	1.5	dB
VSWR (In Fc +/- 2.5 MHz)	-	1.4	2.0	
Relative Attenuation				
0.3 MHz ~ 350.0 MHz	25	30	-	dB
350.0 MHz ~ 441.0 MHz	25	30	-	
462.5 MHz ~ 467.5 MHz	38	50	-	
467.5 MHz ~ 1200 MHz	25	30	-	
1200 MHz ~ 2000 MHz	20	-	-	
Temperature Range (Operational)	-30	25	85	°C
Input RF Power (In Fc +/- 2.5 MHz)			30	dBm
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
- 3) All attenuation measurements are measured relative to insertion loss

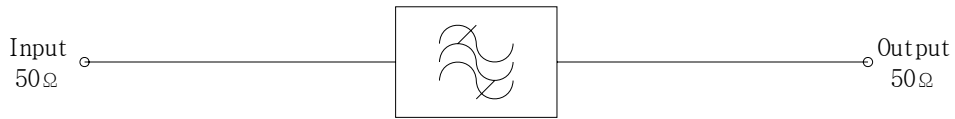
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F4553	
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Matching Schematic

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



Marking Configuration

●¹⁾
I²⁾
4553³⁾

- 1) Pad Number 1 Index
- 2) Manufacturer name
- 3) Marking Number

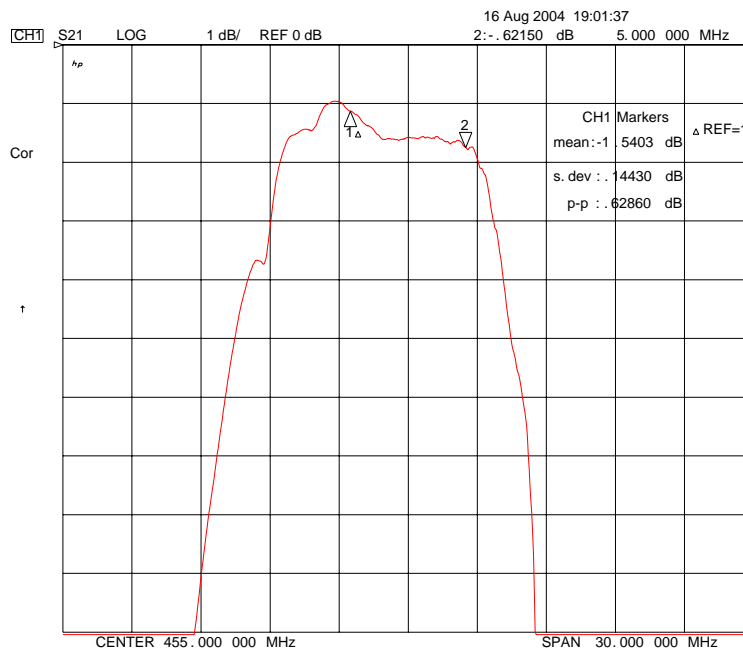
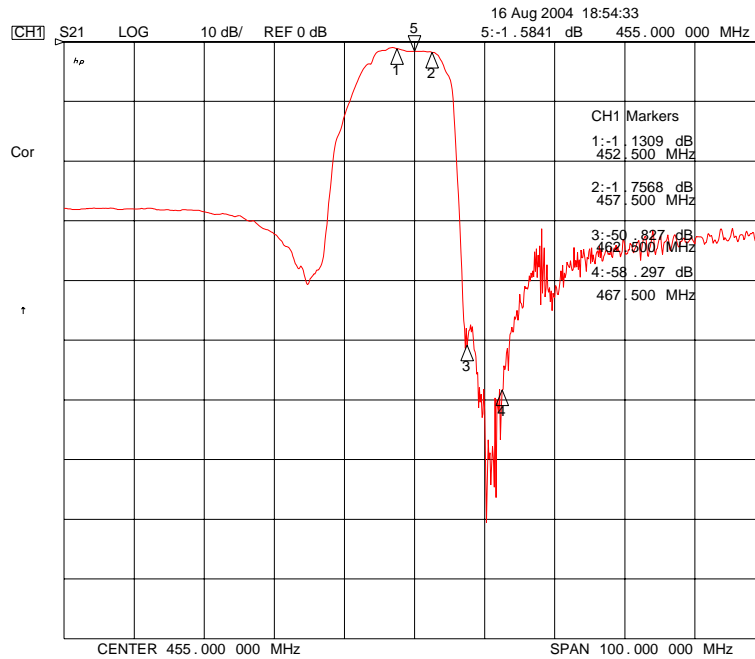
* Ink or Laser Marking available

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Typical Performance (at 25°C)



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Rev. Date

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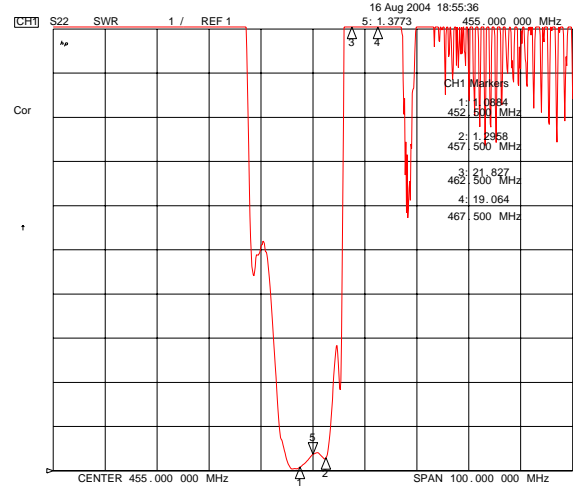
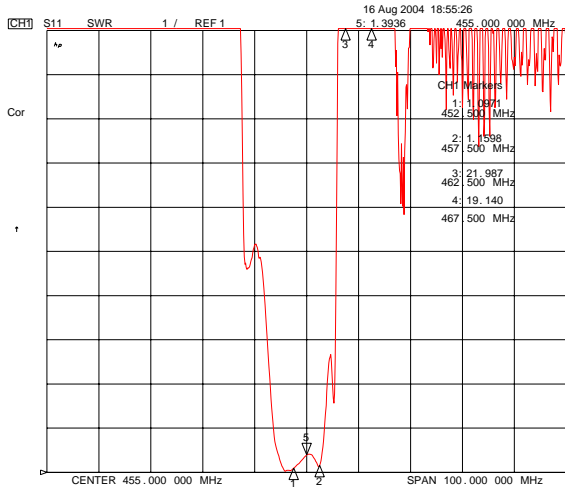
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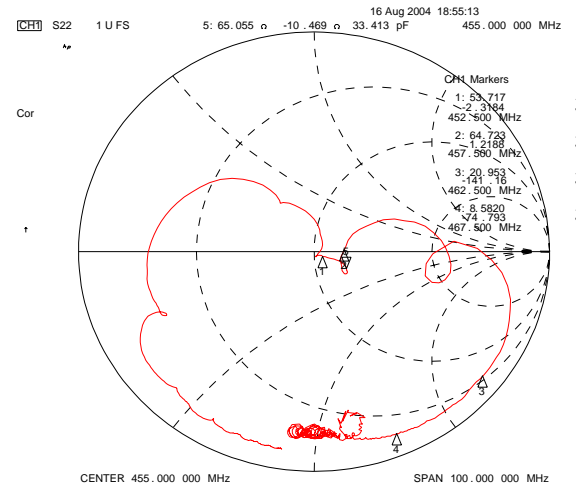
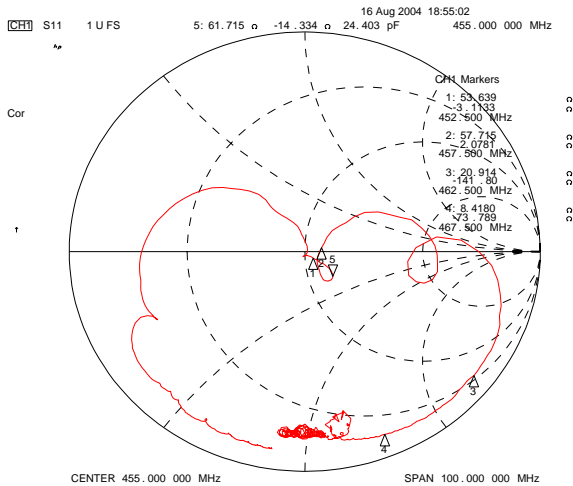
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Input / Output VSWR Charts



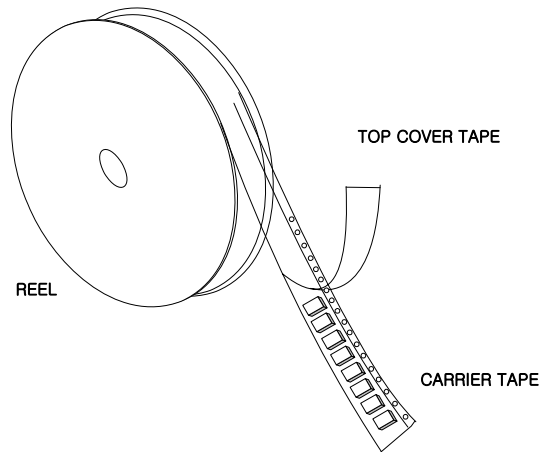
Input / Output Smith Charts



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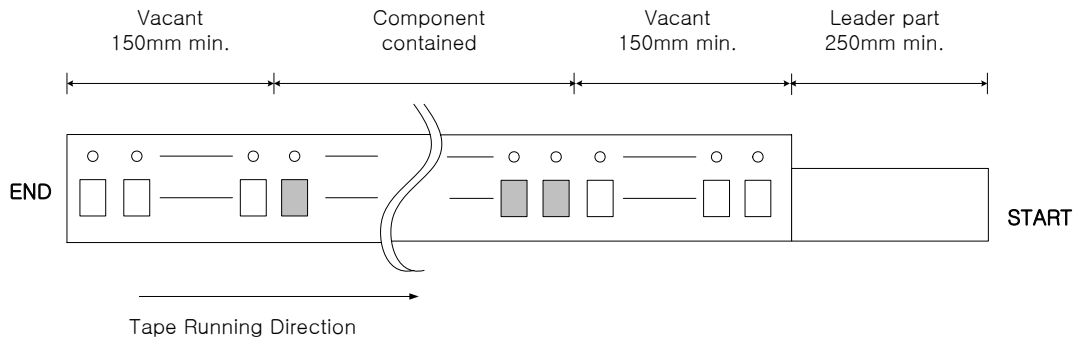
Packing Specification

1. Reeling Quantity : 3000 pcs / 13" reel (or 1000 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

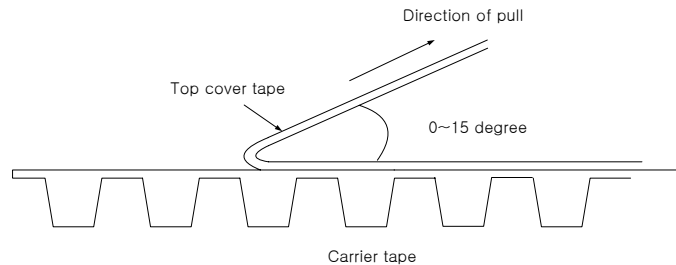


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

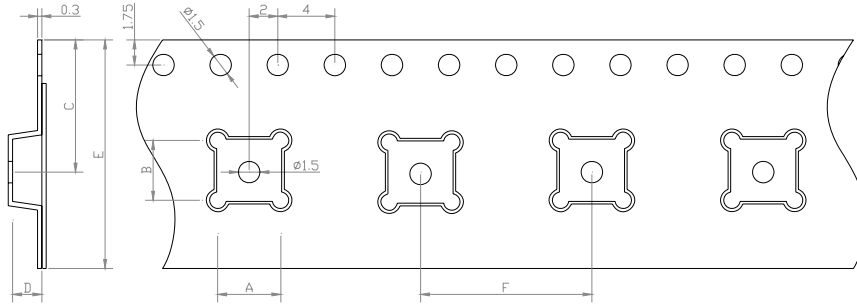


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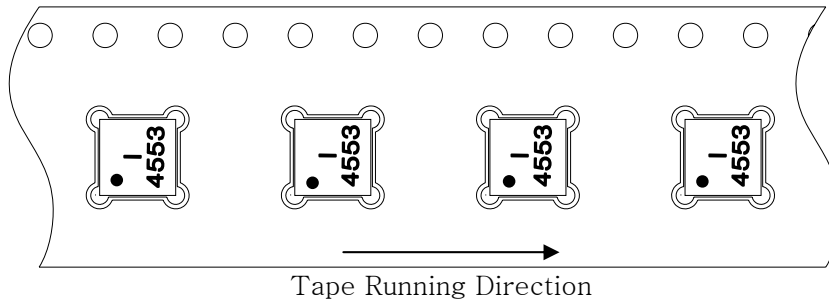


Carrier Tape Dimensions [unit : mm]

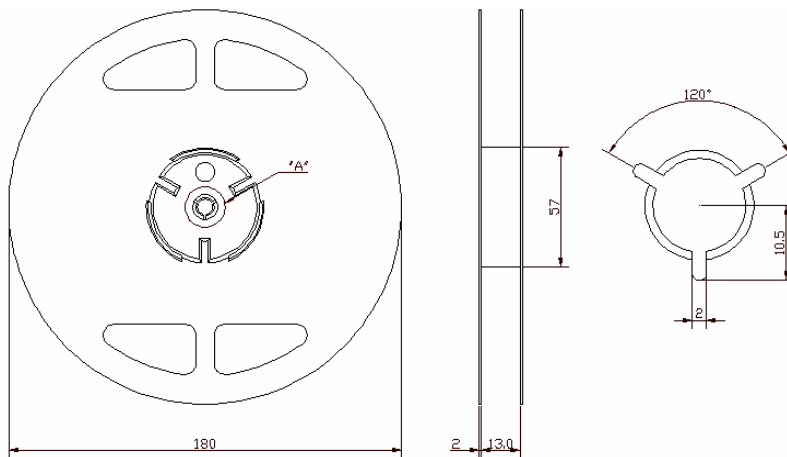


A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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