

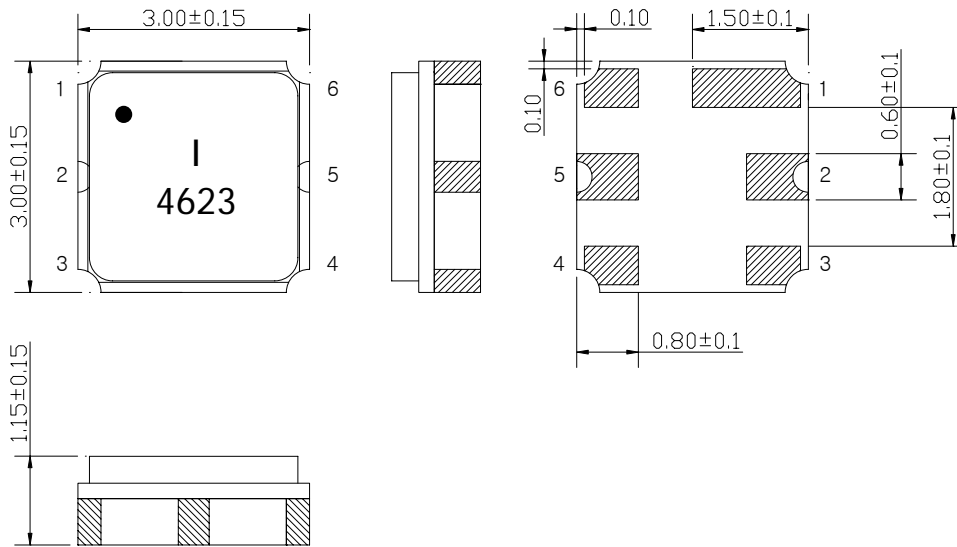
# SAW Bandpass Filter F4623



## Features

- RF bandpass filter for CDMA450 Rx. Part
- Usable bandwidth 5MHz(460.0 MHz ~ 465.0 MHz)
- High attenuation
- No matching single-balanced operation ( single 50Ω / balance 100Ω )
- Ceramic Surface Mounted Device Package ( 3.0 mm × 3.0mm )
- RoHS Compliant

## Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> Ceramic

Lid : Kovar, Ni Plated

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

Pin Configurations	
2	Input
4	Output (+)
6	Output (-)
1, 3, 5	Case ground

## Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	25	85
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	20

Electrostatics Sensitive Device (ESD)

	<b>ITF Co., Ltd.</b> 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F4623	
		Rev. Date	2006-02-17	
		Rev.	DR6001-PS03	1/8

**SAW Bandpass Filter F4623****Preliminary Specifications**

	Minimum	Typical	Maximum	Unit
Center Frequency ( Fc )	-	462.5	-	MHz
Insertion Loss (In Fc +/- 2.5 MHz)	-	2.5	3.0	dB
Amplitude Ripple (In Fc +/- 2.5 MHz)	-	0.5	1.0	dB
VSWR (In Fc +/- 2.5 MHz)	-	1.7	2.1	
Relative Attenuation 0.3 MHz ~ 450.0 MHz 450.0 MHz ~ 455.0 MHz 482.5 MHz ~ 492.5 MHz 492.5 MHz ~ 1200 MHz 1200 MHz ~ 1500 MHz 1500 MHz ~ 2000 MHz	45 30 20 45 40 30	50 35 30 - - -	- - - - - -	dB
Amplitude Imbalance   S31/S21   ( In Fc +/- 2.5 MHz)	-	± 0.15	± 0.30	dB
Phase Imbalance (∅ S31 - ∅ S21 + 180°) ( In Fc +/- 2.5 MHz)	-	± 2.0	± 2.5	°
Temperature Range (Operational)	-30	25	85	°C
Input RF Power (In Fc +/- 2.5 MHz)			20	dBm
Input/Output Impedance	Single 50 / balance 100			Ohms

**Notes :**

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 3 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

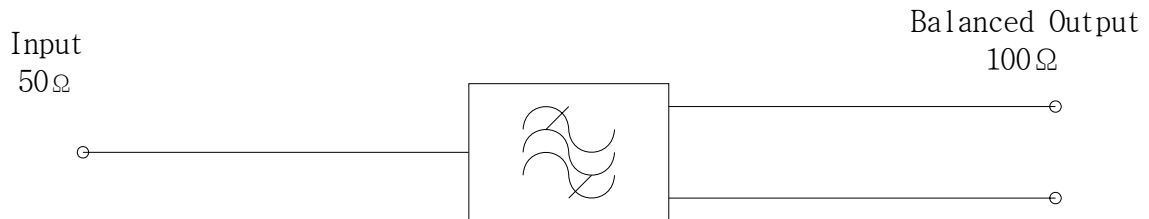
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## Matching Schematic

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



## Marking Configuration

- <sup>1)</sup>  
I <sup>2)</sup>  
4623 <sup>3)</sup>

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

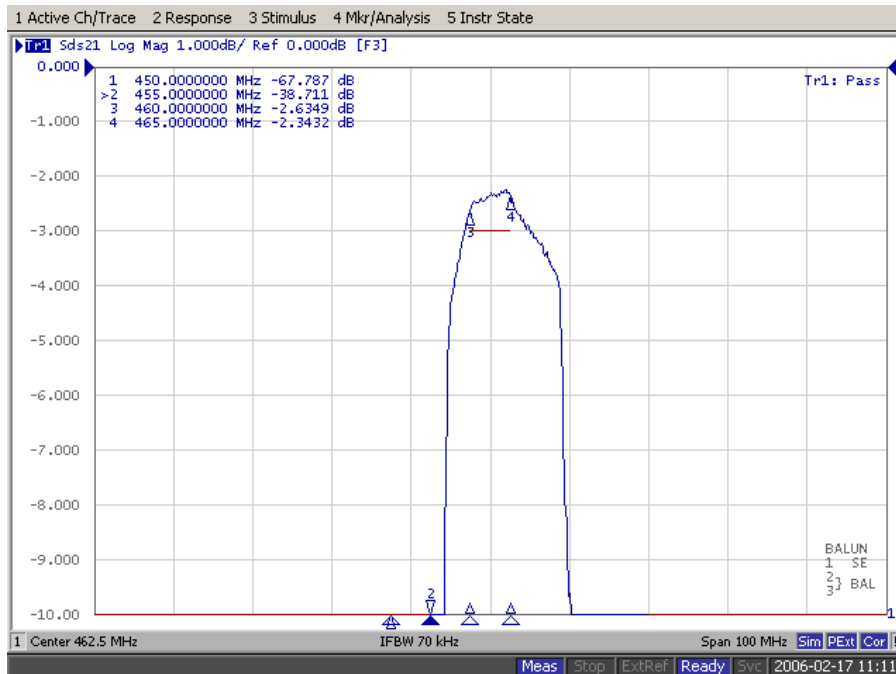
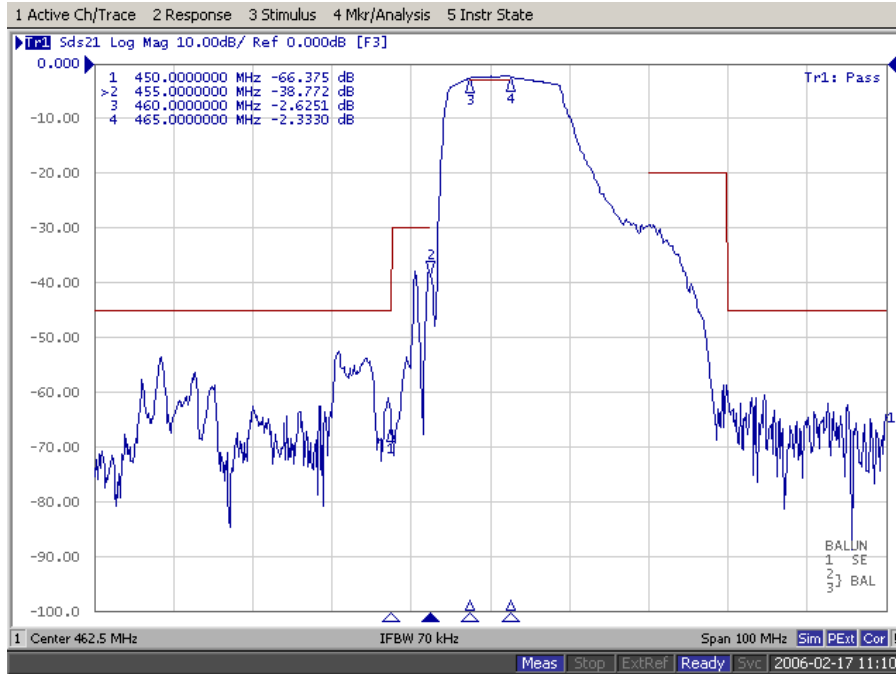
Ink or Laser Marking available

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## Typical Performance ( at 25°C )

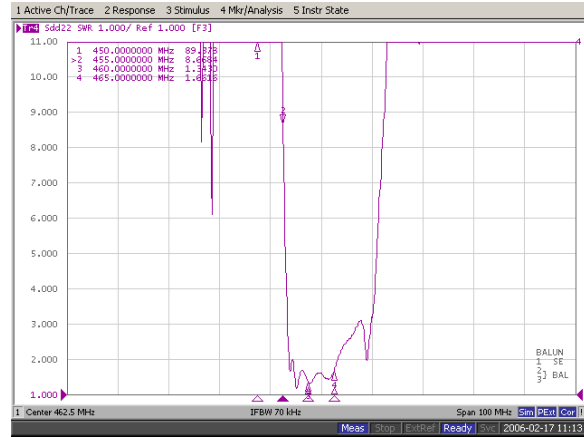
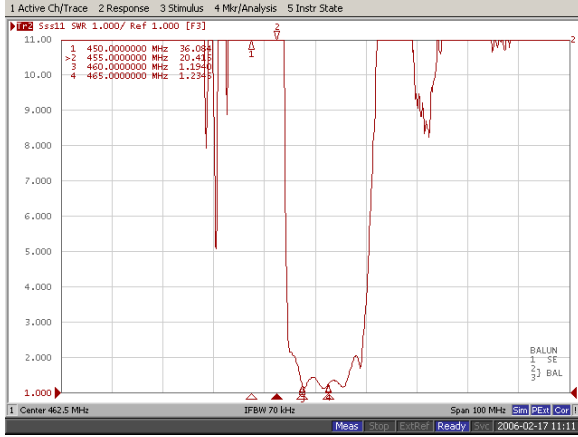


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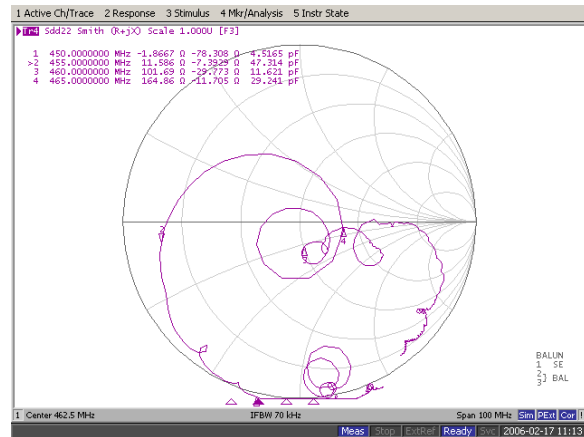
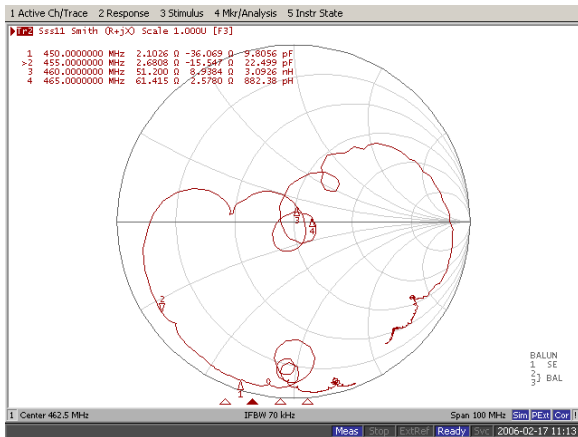
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## Input / Output VSWR Charts



## Input / Output Smith Charts

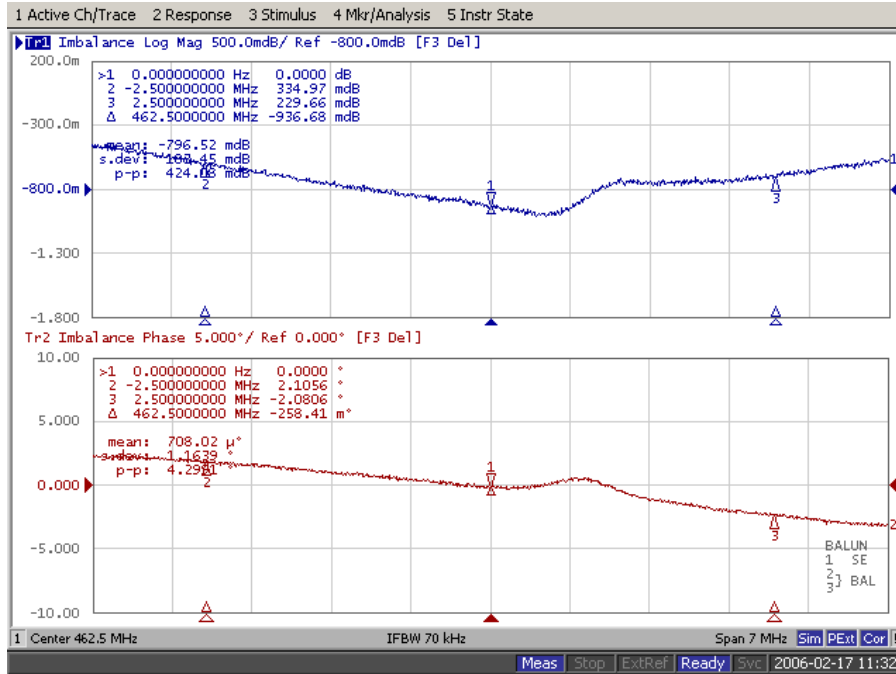


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## Amplitude/Phase Imbalance



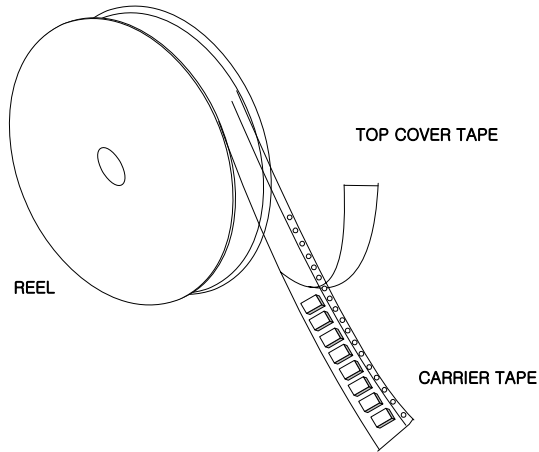
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# SAW Bandpass Filter F4623



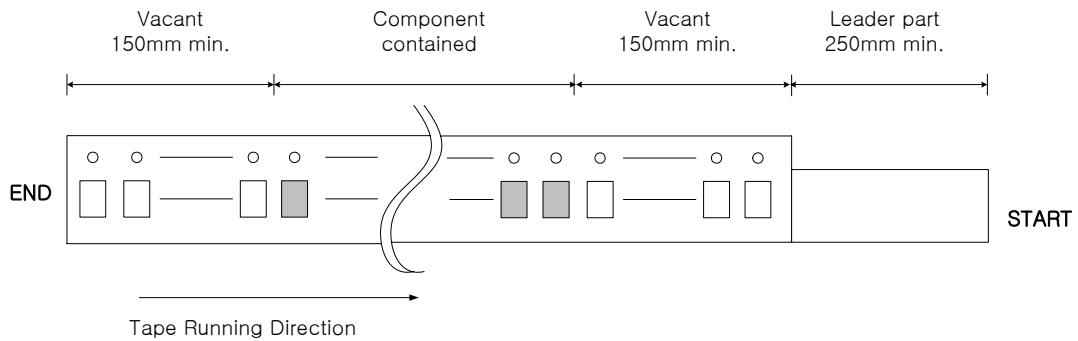
## Packing Specification

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

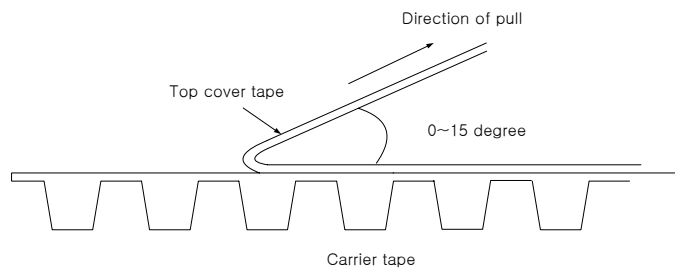


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

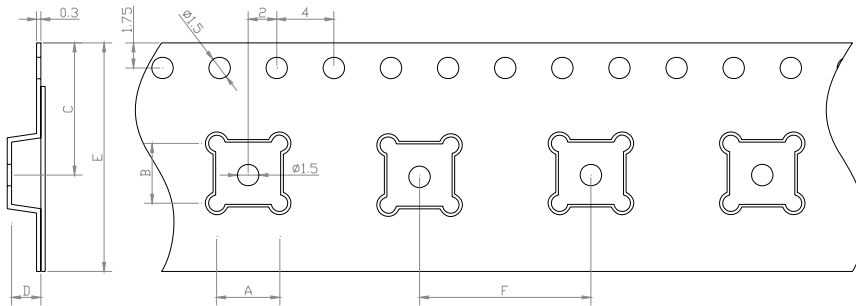


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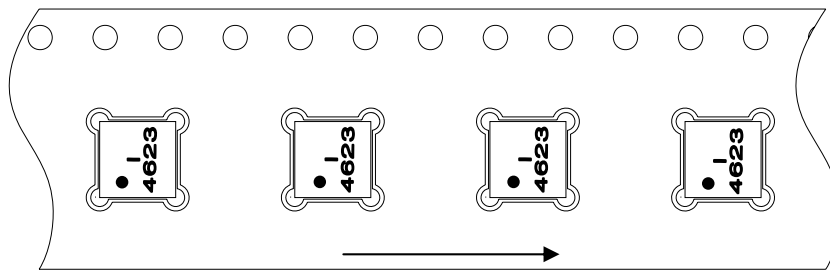


## Carrier Tape Dimensions [unit : mm]



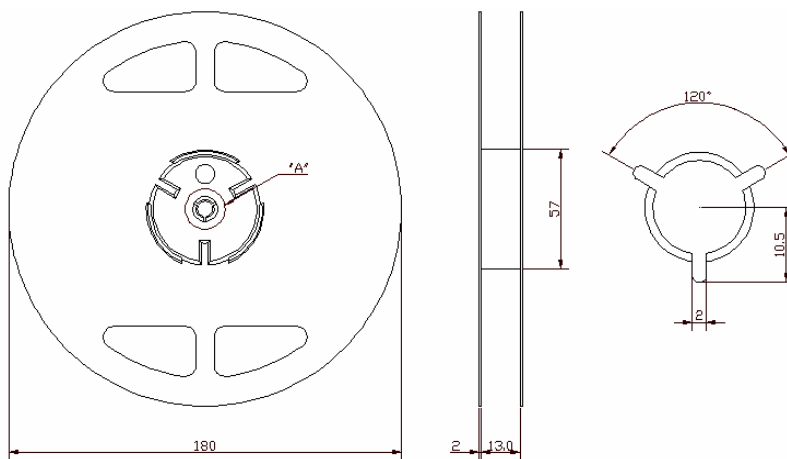
A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

## Part Direction



Tape Running Direction

## Reel Dimensions [unit : mm]



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