

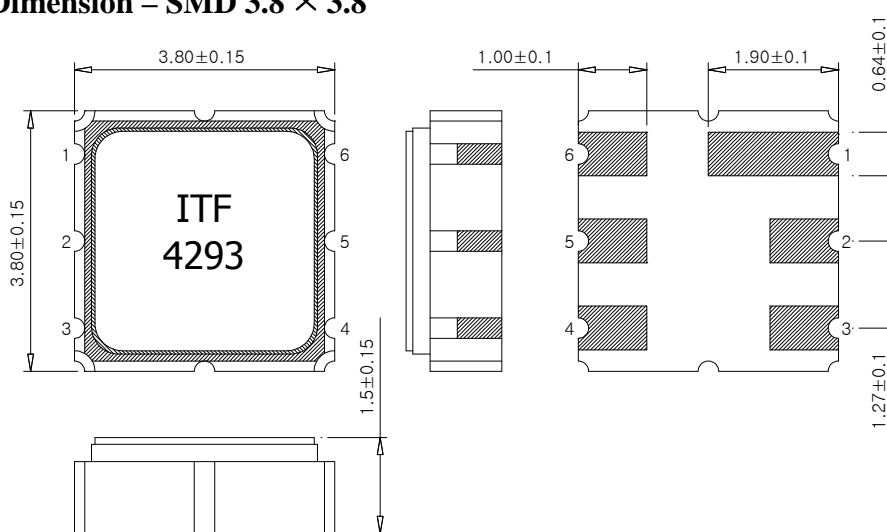
SAW Bandpass Filter F4293



Features

- RF bandpass filter
- High attenuation
- 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (3.8 mm * 3.8 mm)
- RoHS Compliant

Package Dimension – SMD 3.8 × 3.8



Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 μm, Over a 1.27 ~ 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	℃	-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.	F4293	
		Rev. Date	2014-08-27	
		Rev.	NSPH01-AS01	1/7

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Specifications

Fc = 429 MHz

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	429	-	MHz
Insertion Loss (Fc +/- 9 MHz)	-	2.2	4.0	dB
Amplitude Ripple (Fc +/- 9 MHz)	-	1.0	2.0	dB
Relative Attenuation				
0.3 ~ 415 MHz	30	40	-	dB
415 ~ 416 MHz	20	30	-	
417 MHz	-	10	-	
458 ~ 1500 MHz	35	45	-	
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

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Matching Schematic

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



Marking Configuration


ITF ¹⁾

4293 ²⁾

1) Manufacturer name

2) Marking Number

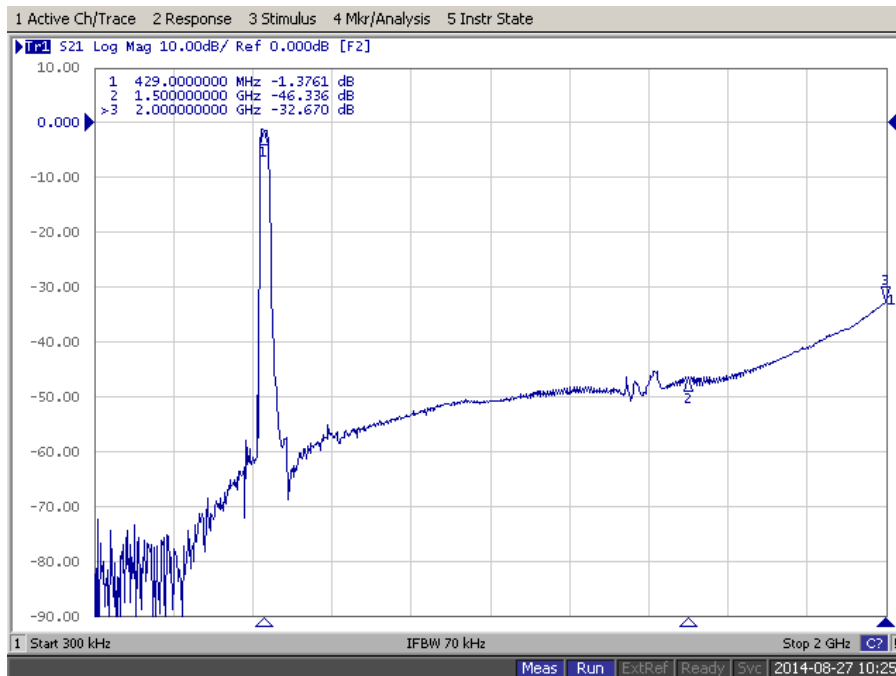
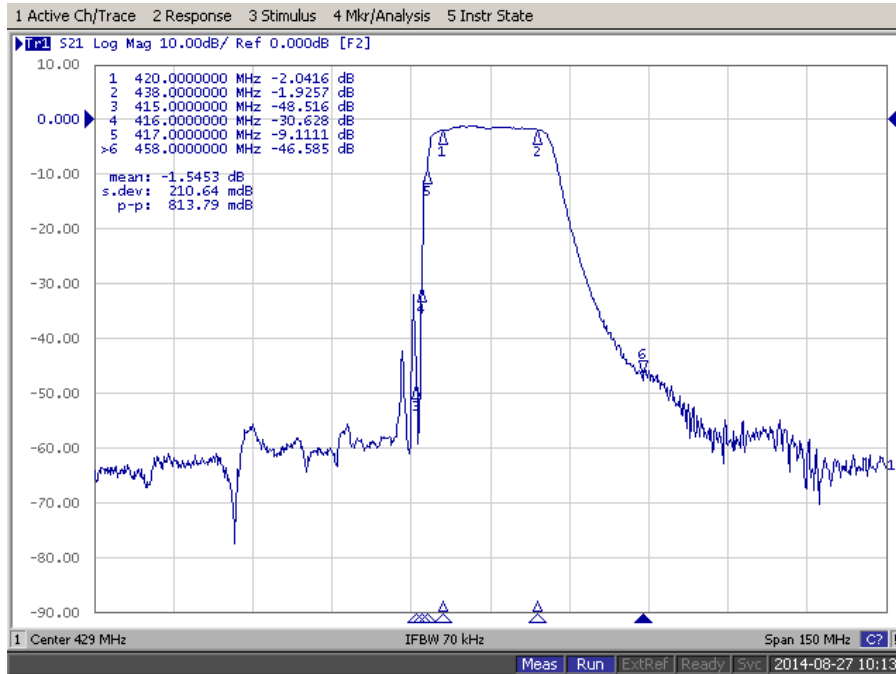
* Ink or Laser Marking available

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Typical Performance (at 25°C)



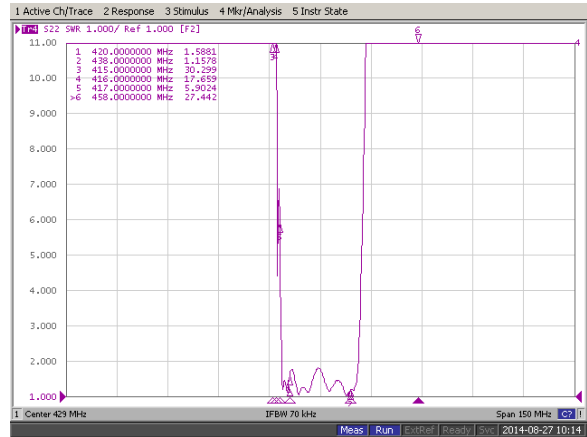
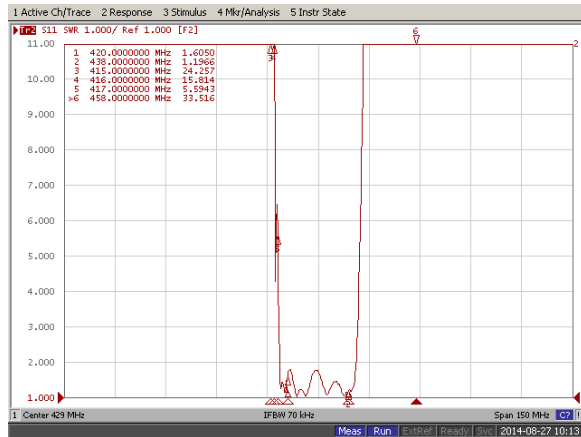
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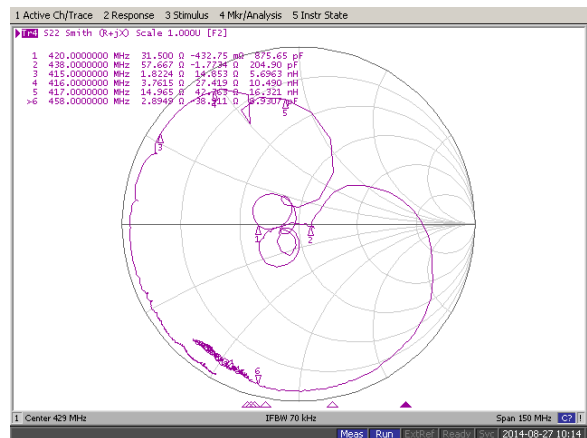
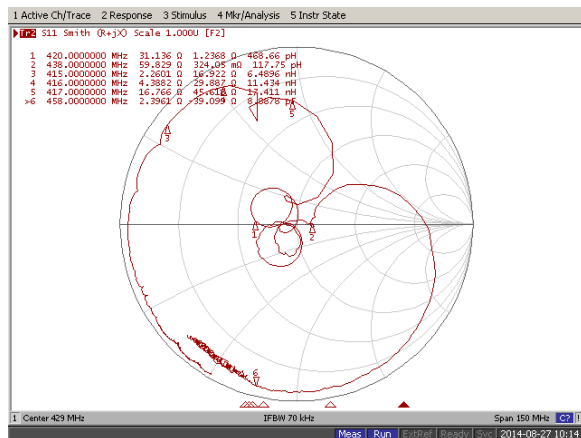
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Input / Output VSWR Charts



Input / Output Smith Charts



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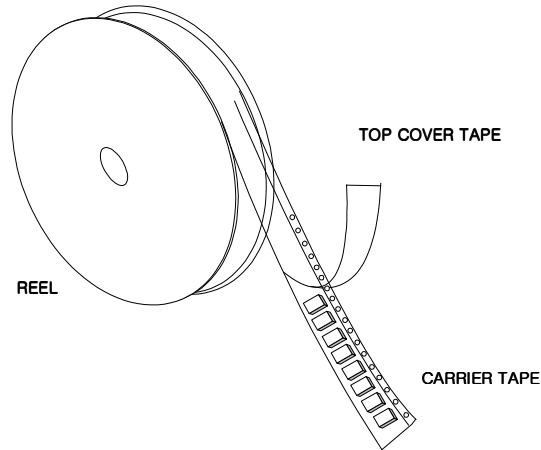
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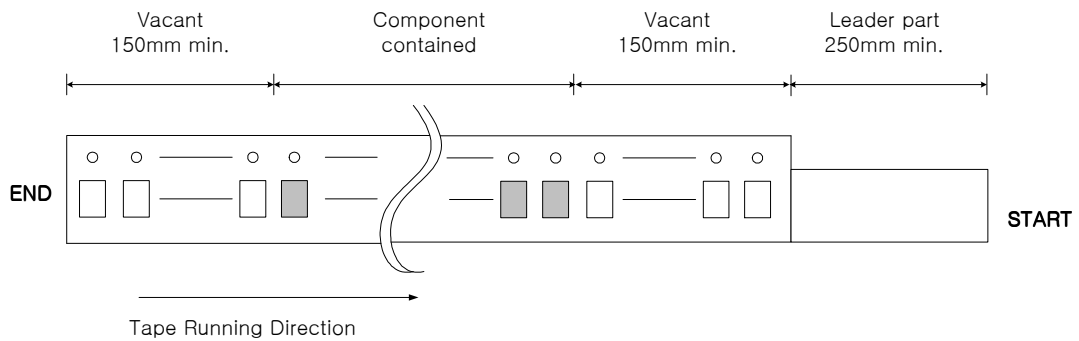
Packing Specification

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

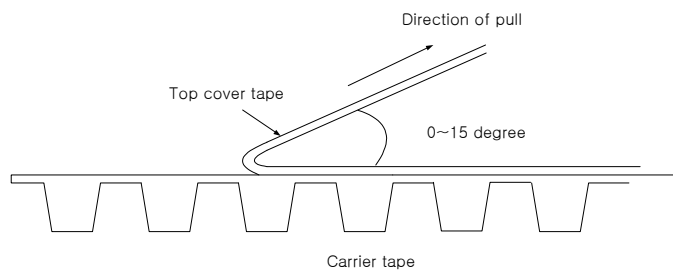


2. Tensile strength of carrier tape

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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