

# 881.5 MHz SMD SAW Filter

ABSTS5A2-1CHM011M

Request Samples



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1.1 x 0.9 x 0.55 mm  
RoHS/RoHS II Compliant  
MSL Level = 3

## Features

- Low Insertion Loss
- High Out of Band Attenuation
- Usable bandwidth of 25MHz

## Applications

- Mobile Communications
- Cellular, CDMA systems
- Low loss Receive RF filter.

## Electrical Specifications

Parameters		Specifications		
		Min	Typ	Max
Nominal Center Frequency (Fc) (MHz)			881.5	
Insertion Loss (dB) (869.0 ~ 894.0 MHz)			1.3	1.8
Amplitude Ripple (dB <sub>p-p</sub> ) (869.0 ~ 894.0 MHz)			0.3	1.1
Input VSWR (869.0 ~ 894.0 MHz)			1.6	2.0
Output VSWR (869.0 ~ 894.0 MHz)			1.6	2.0
Attenuation (dB)	1 ~ 824 MHz	48	54	
	824 ~ 849 MHz	46	51	
	849 ~ 854 MHz	30	41	
	909 ~ 979 MHz	20	27	
	1710 ~ 1910 MHz	40	45	
	1920 ~ 2500 MHz	35	41	
	2500 ~ 6000 MHz	30	36	
Terminating Source & Load Impedance (Ω)			50	
Maximum Input Power (dBm)				10
DC Voltage (V)				0

## Mechanical Specifications

Parameters	Specifications
Filter Dimension	1.1 x 0.9 x 0.55 mm
Mounting Type	SMD Mount



5101 Hidden Creek Ln Spicewood TX 78669  
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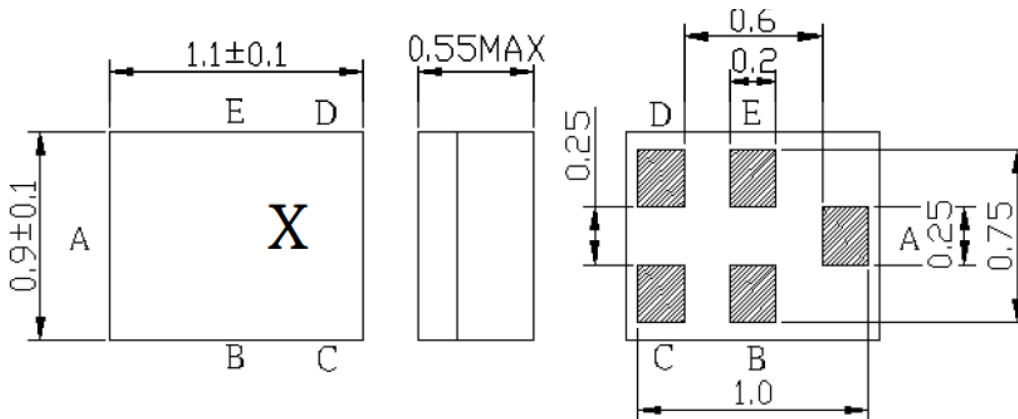


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## Environmental Specifications

Parameters	Specifications
Operating Temperature Range	-30°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C
MSL level	3
ESD	100V (MM), 200V (HBM)

## Package Dimensions



## Marking Description

X: Date Code (Year + Month)

Pin No.	Symbol	Function
A	IN	Input
B	GND	Ground
C	GND	Ground
D	OUT	Output
E	GND	Ground

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>j</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

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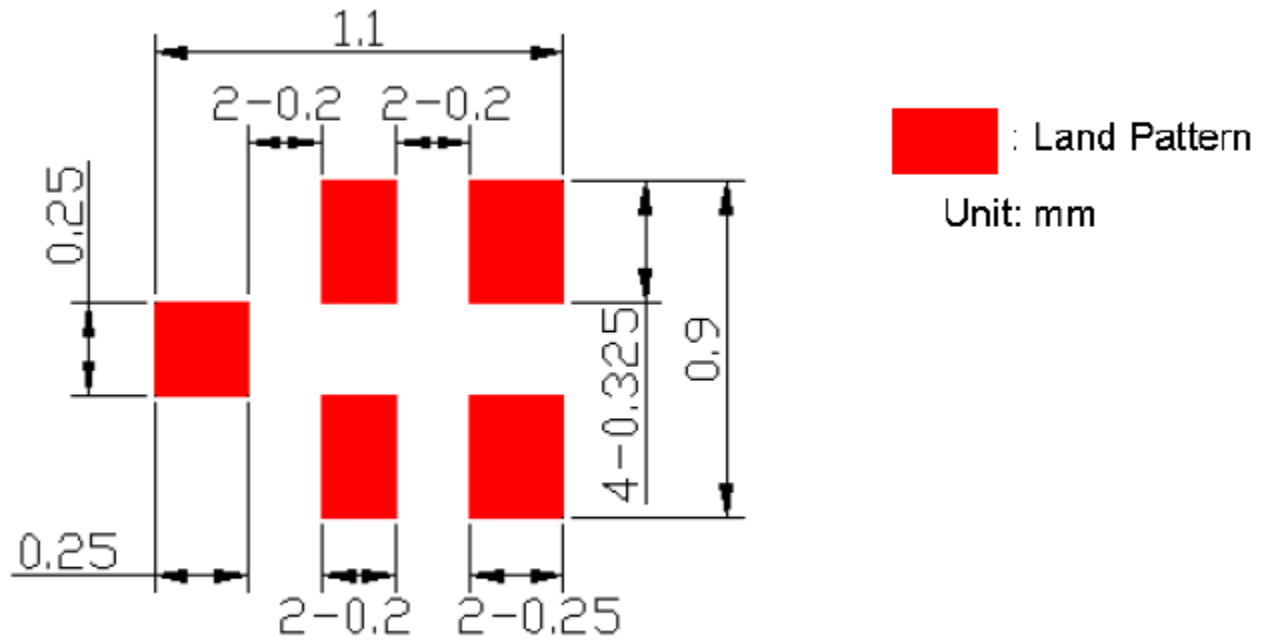


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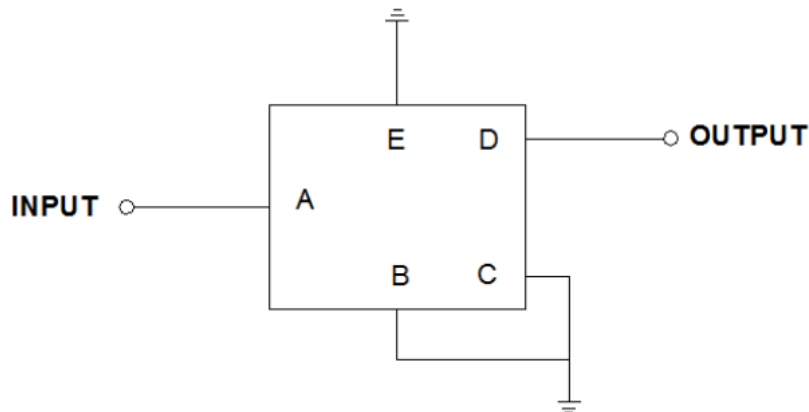


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## PCB Footprint



## Measurement Circuit



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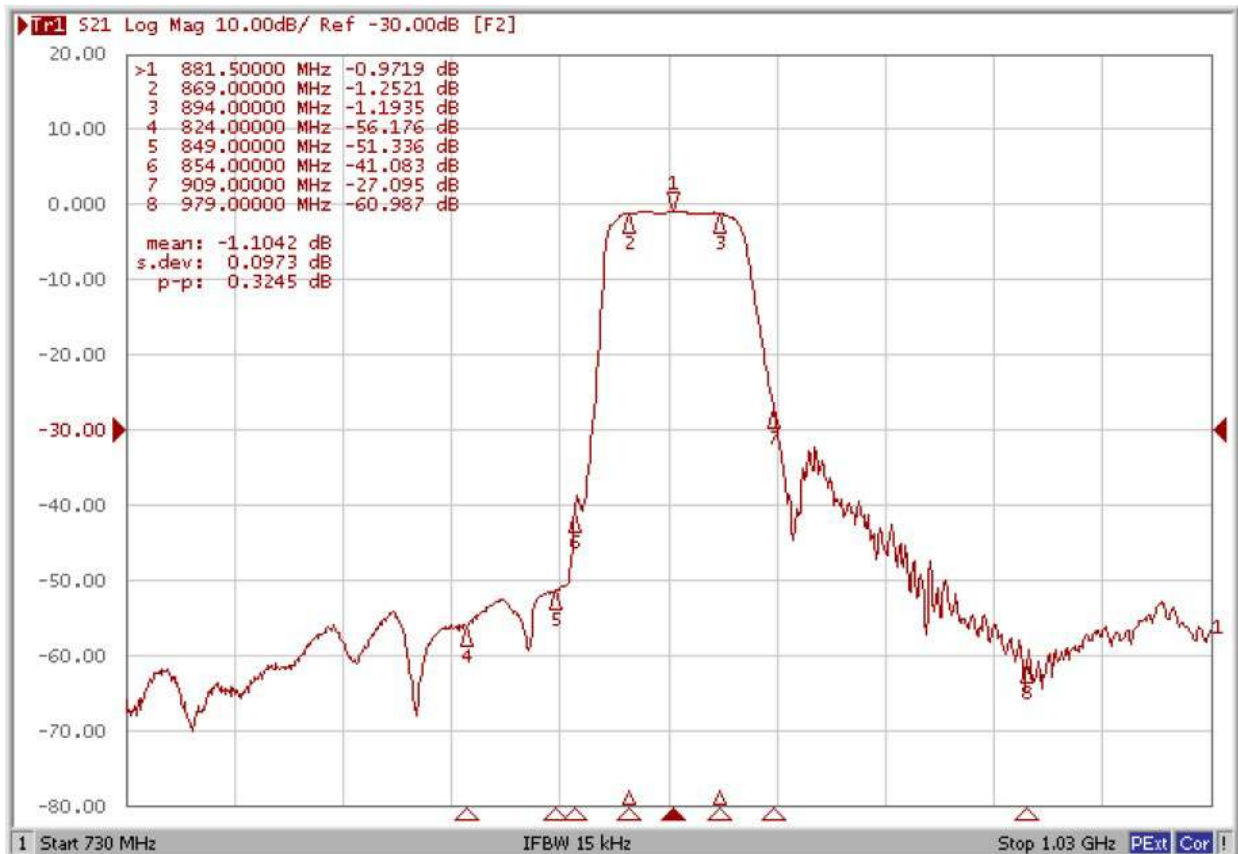
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## Transmission Characteristics

### S21 Response (Narrowband)



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## S21 Response (Broadband)



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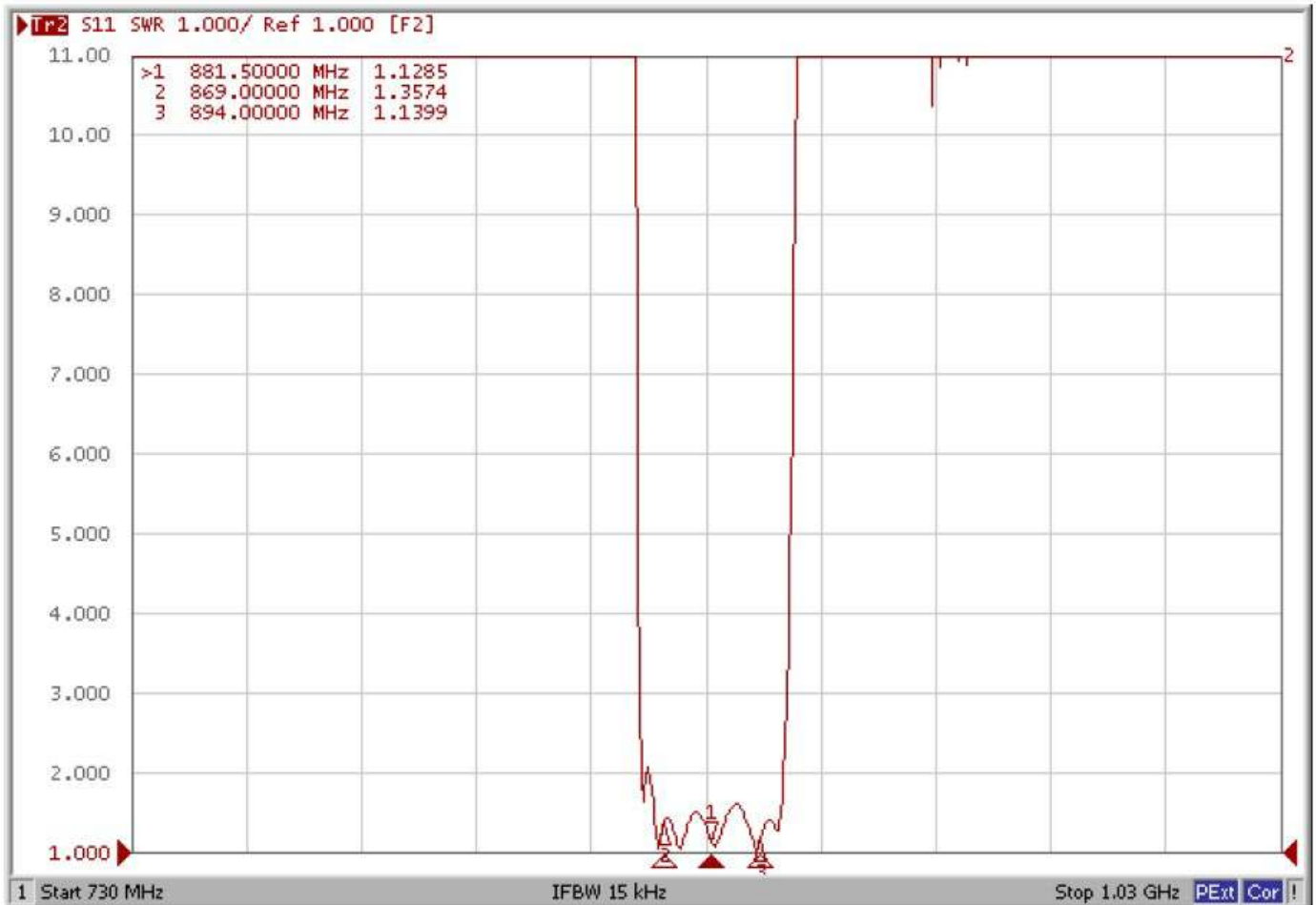
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## Reflection Characteristics

### S11 Response



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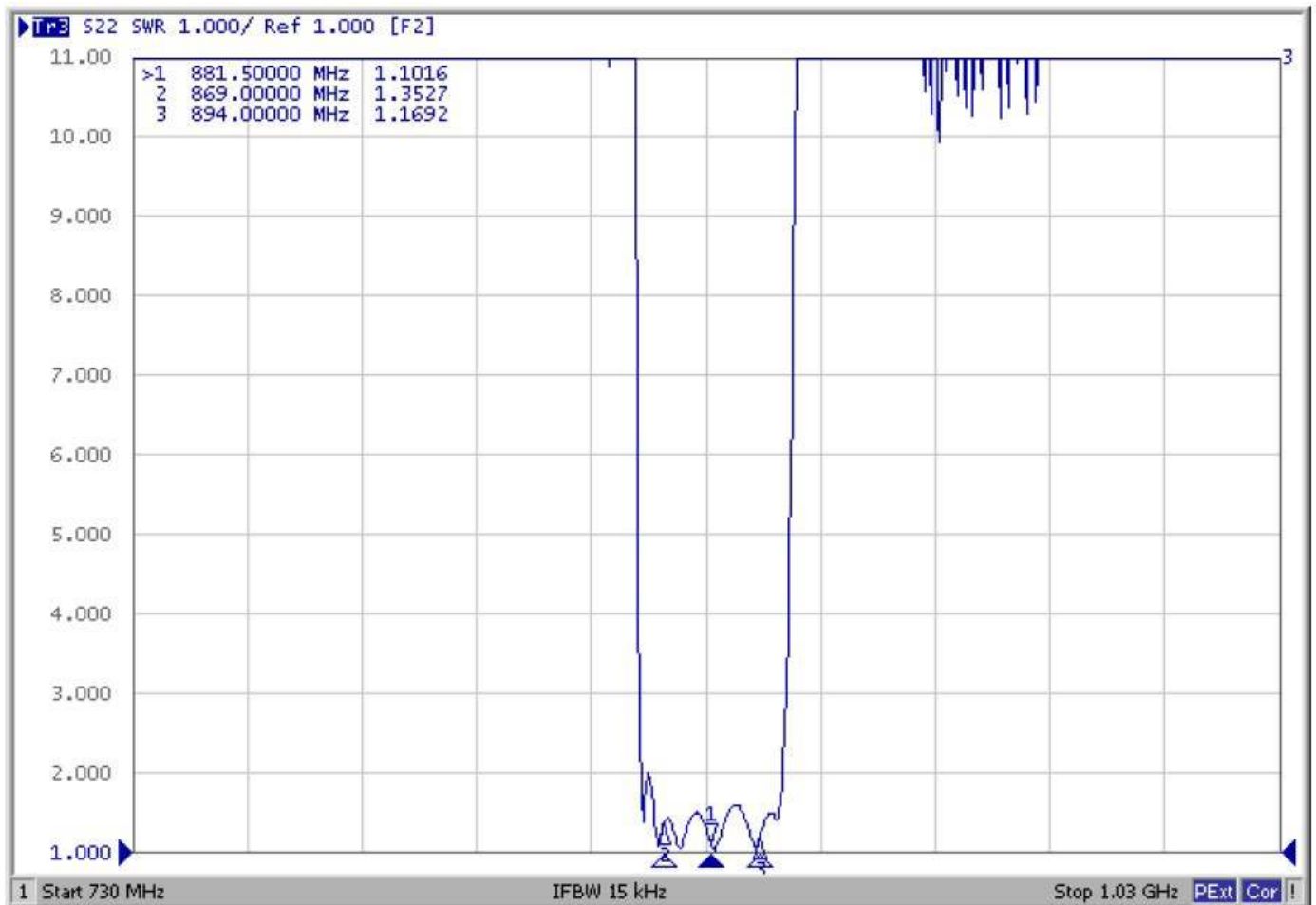


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S22 Response



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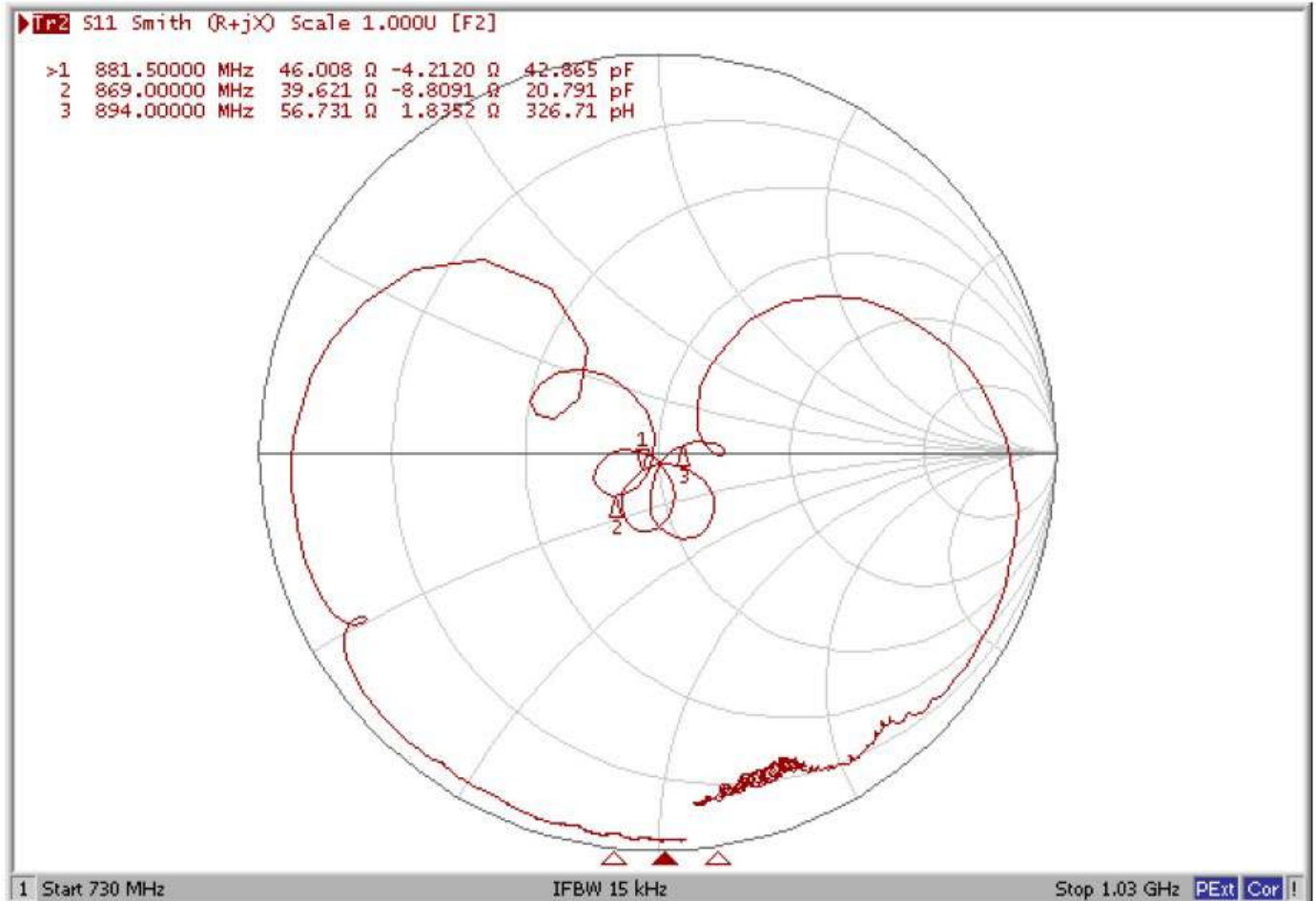


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Smith Chart





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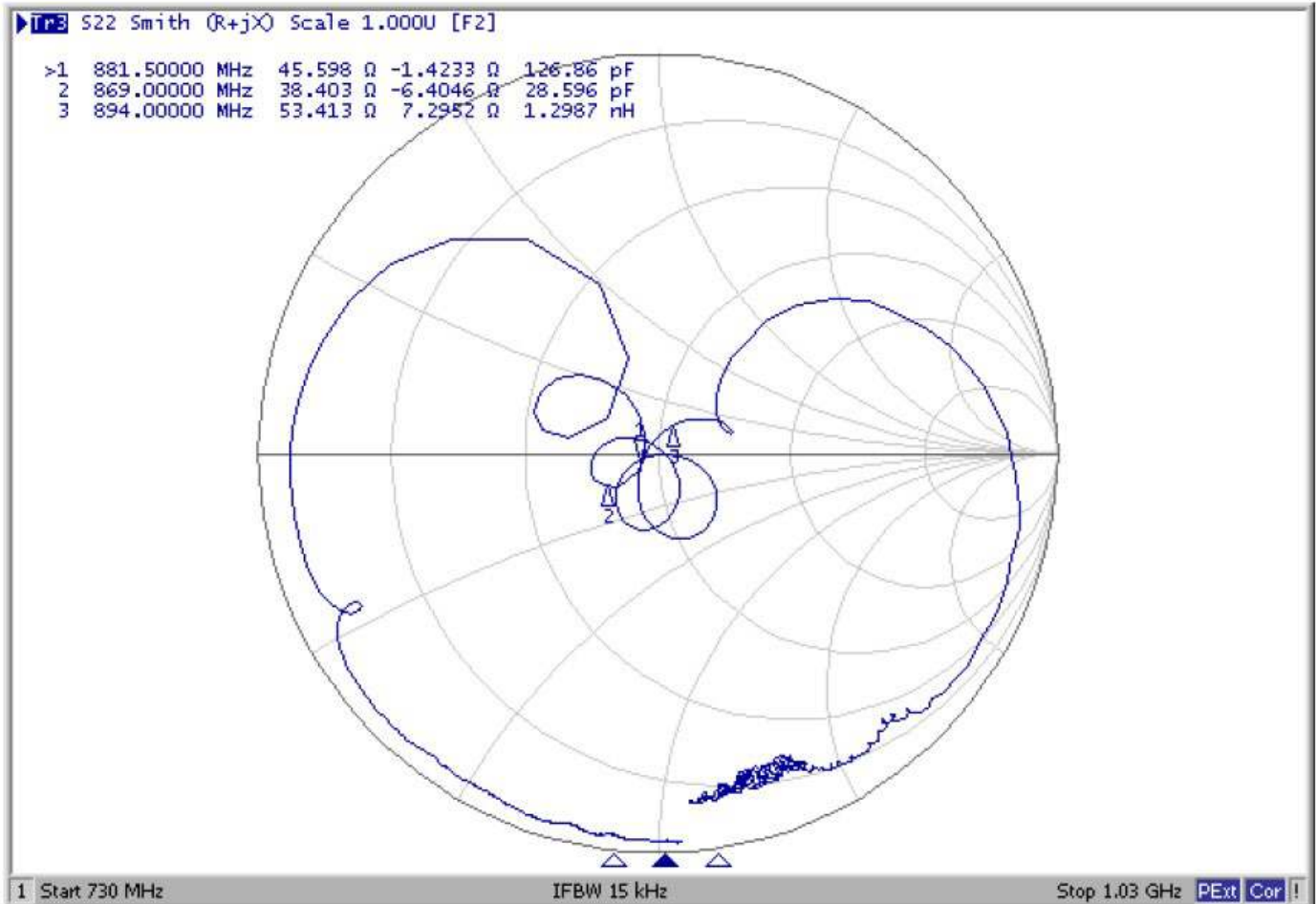


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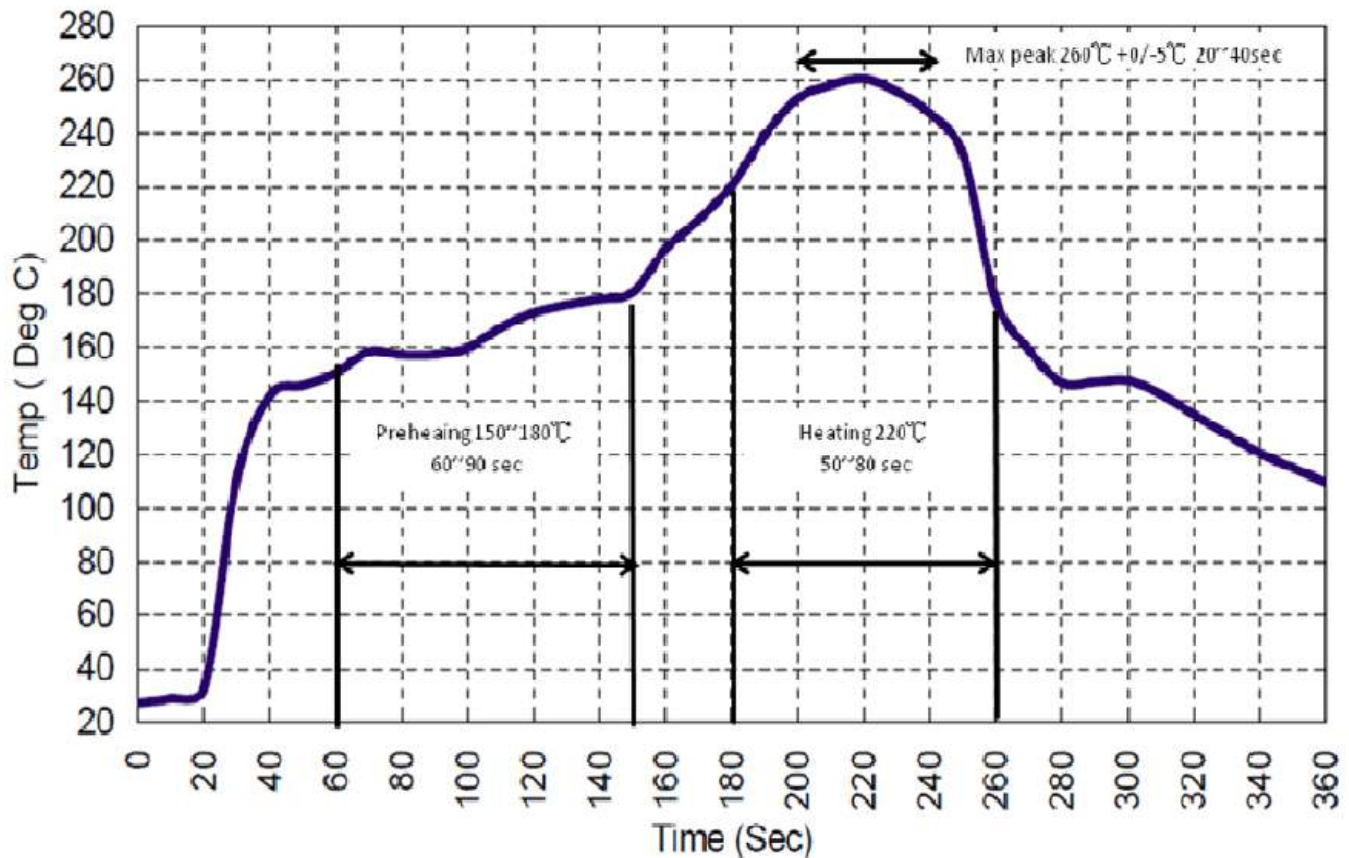
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## Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds minimum.
3. Heating shall be fixed at 220°C for 50~80seconds and at 260°C+0/-5°C peak (20~40sec)
4. Time: 2 times



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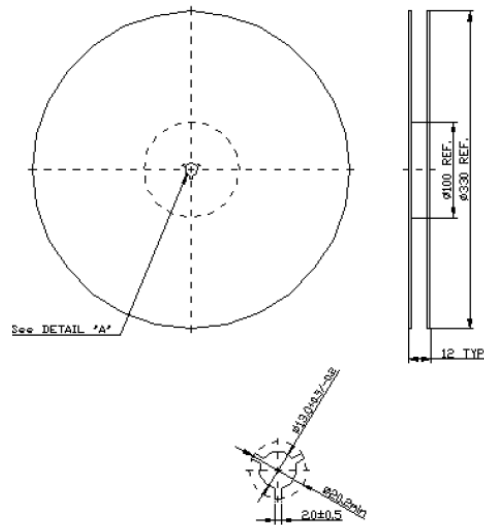


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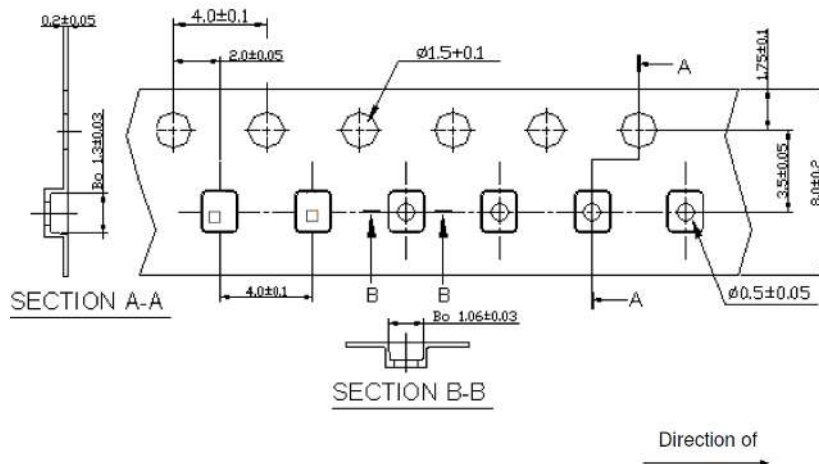
## Packaging

### 1. Reel Dimension

Number of pieces/reel: 5k



### 2. Tape Dimension



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