#### ABSTS5A2-34IM033M

Request Samples



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

#### **Features**

- Usable Bandwidth of 75 MHz
- High Out of Band Attenuation
- Compact Package Size

## **Applications**

- Cellular, LTE, WCDMA RF SAW Filter
- Wireless & telecommunication applications
- Low loss RF Filter for Receive Path.

## **Electrical Specifications**

Parameters		Specifications					
		Min	Тур	Max			
Nominal Center Frequ		1842.5					
Insertion Loss (dB)* (1805 ~ 1880 MHz)			2.0	4.0			
Amplitude Ripple ( $dB_{p-p}$ ) (1805 ~ 1880 MHz)			1.0	3.3			
Input VSWR (1805		1.7	2.3				
Output VSWR (1805 ~ 1880 MHz)			1.6	2.2			
	DC~960 MHz	32	35				
	1558~1608 MHz	32	36				
	1710~1785 MHz	34	38				
	1920~2400 MHz	25	37				
	$2400 \sim 2500 \text{ MHz}$	33	39				
Attenuation	2500 ~ 3610 MHz	25	35				
(dB) (reference level from 0dB)	3610 ~ 3760 MHz	25	38				
оаву	3760 ~ 5415 MHz	20	35				
	5415 ~ 5640 MHz	20	36				
	5640 ~ 7220 MHz	18	27				
	7220 ~ 7520 MHz	16	25				
	7520 ~ 8000 MHz	14	23				
Terminating Source Impedance $(\Omega)$			50//33nH				
Terminating Load In	Terminating Load Impedance ( $\Omega$ )		50//12nH				
Maximum Input Power (dBm)				10			
DC Voltage (V)				0			

<sup>\*</sup>Note: Specification of insertion loss excludes loss that comes from the test board.

## **Mechanical Specifications**

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



## ABSTS5A2-34IM033M

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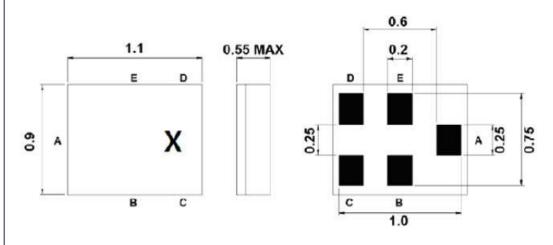


1.1 x 0.9 x 0.55 mm **RoHS/RoHS II Compliant** MSL Level = 3

## **Environmental Specifications**

Parameters	Specifications				
Operating Temperature Range	$-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$				
Storage Temperature Range	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$				
MSL level	3				
ESD	50V (MM), 100V (HBM)				

## **Package Dimensions**



Pin No.	Symbol	Function
A	IN	Input
В	GND	Ground
C	GND	Ground
D	OUT	Output
Е	GND	Ground

## **Marking Description:**

X: Year/ Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	В	C	D	Е	F	G	Н	J	K	L	M
2014	N	P	Q	R	S	Т	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	1	m
2016	n	p	q	r	S	t	u	v	w	X	у	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>	Q	<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>	g	<u>h</u>	j	<u>k</u>	1	<u>m</u>
2020	<u>n</u>	<u>p</u>	q	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	W	<u>X</u>	У	<u>z</u>



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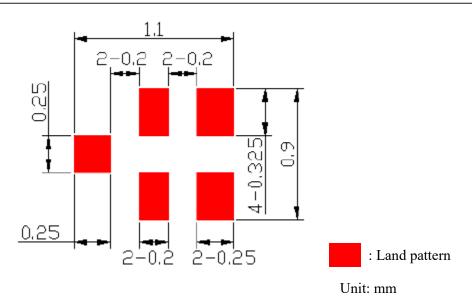


Check Inventory (>)

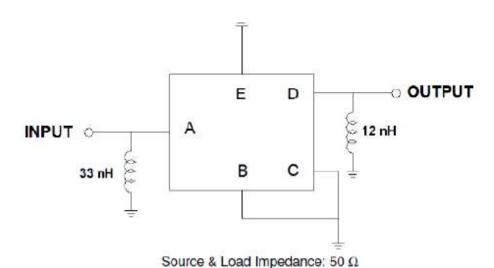


1.1 x 0.9 x 0.55 mm **RoHS/RoHS II Compliant** MSL Level = 3

## **PCB** Footprint



#### **Measurement Circuit**





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#### **Transmission Characteristics**

## S21 Response (Narrowband)





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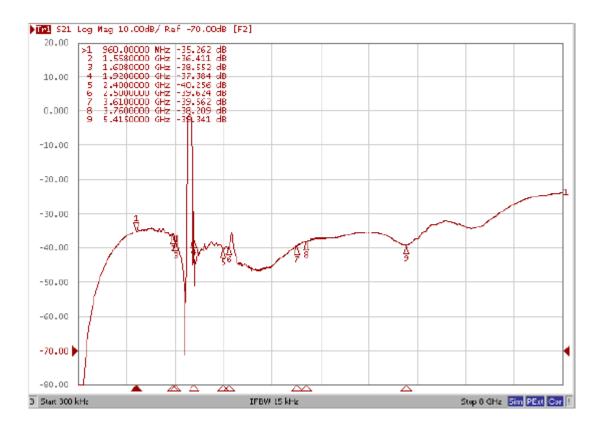


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## S21 response (Broadband)





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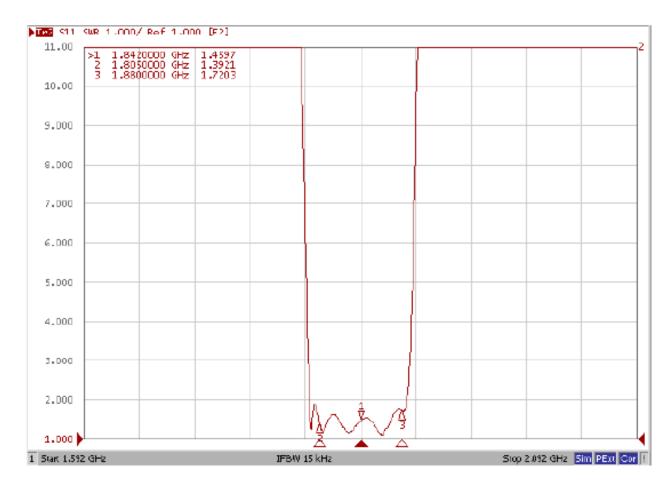
Check Inventory (>)



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

## **Reflection Characteristics**

#### S11 VSWR





## ABSTS5A2-34IM033M

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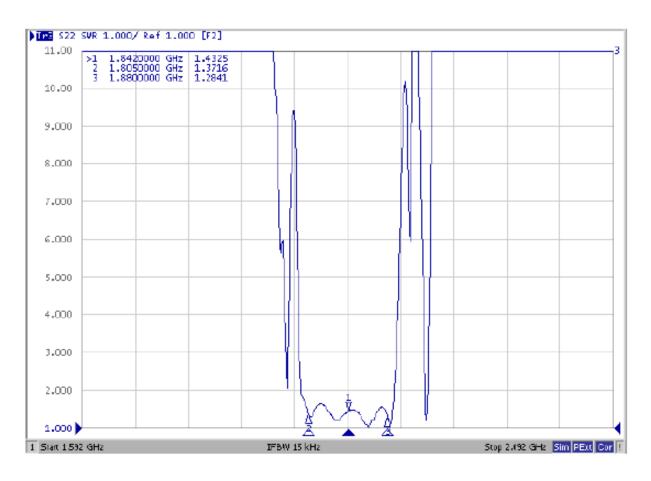


Check Inventory (>)



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

#### S22 VSWR





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Request Samples ()

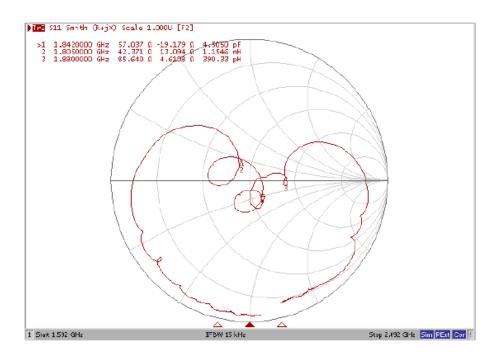


Check Inventory (>)

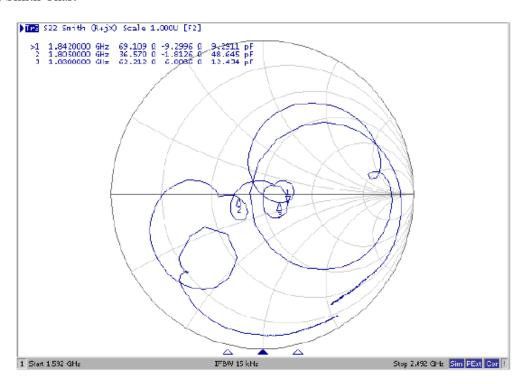


1.1 x 0.9 x 0.55 mm **RoHS/RoHS II Compliant** MSL Level = 3

### S11 Smith Chart



#### S22 Smith Chart





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Request Samples



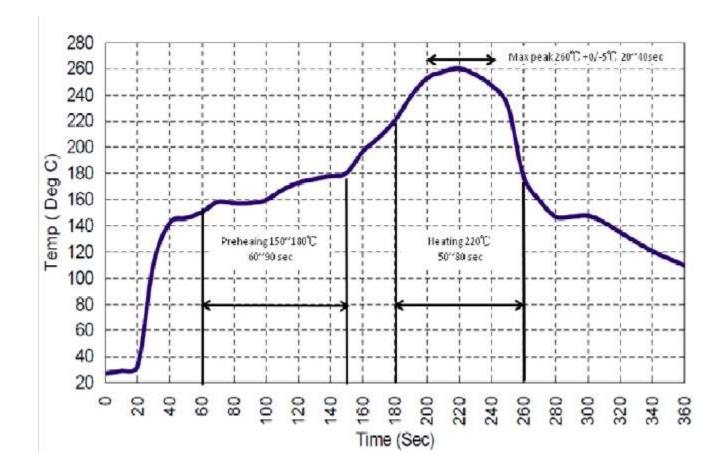
Check Inventory (>)



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

### **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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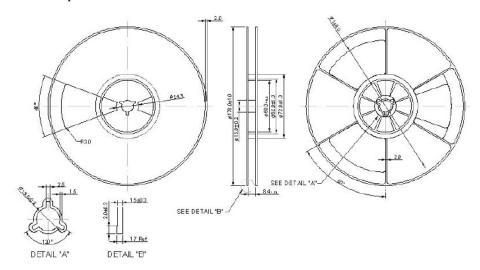
Check Inventory (>)



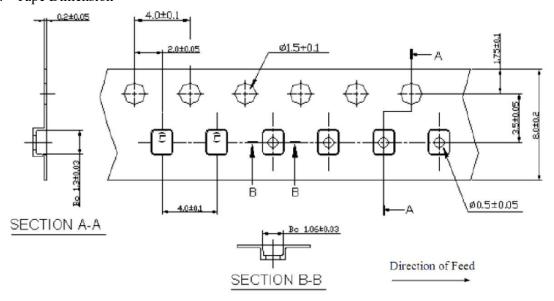
1.1 x 0.9 x 0.55 mm RoHS/RoHS II Compliant MSL Level = 3

#### **Packaging**

Reel Dimension
 Number of pieces/reel:5k



## 2. Tape Dimension



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