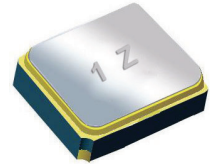


# Surface Mount 1902.00MHz SAW Filter

AFS14A35-1902.00-T2



**RoHS**  
Compliant



1.4 x 1.1 x 0.7 mm

## FEATURES:

- 1.4 x 1.1 x 0.7 mm low profile SMT package
- Low Insertion loss
- Excellent selectivity with high out-of-band rejection

## APPLICATIONS:

- Wireless Communication
- Remote Control
- Cellular Phones

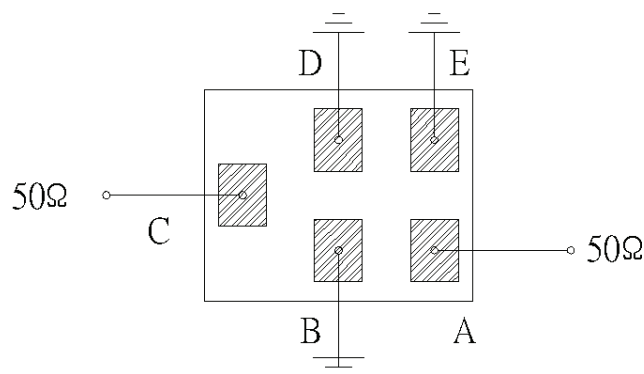
## ELECTRICAL SPECIFICATIONS:

### Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3.0V DC max.
Operating Temperature Range	-20°C to + 75°C
Storage Temperature Range	-30°C to + 85°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency ( $f_c$ )		1902.00		MHz	
Insertion Loss (IL)		1.8	2.4	dB	(1884.55~1919.45MHz)
3-dB Bandwidth		35		MHz	
Amplitude Ripple		0.5	1.0	dB	(1884.55~1919.45MHz)
Worst-Case Input / Output Return Loss		9.54	7.35	dB	(1884.55~1919.45MHz)
Output amplitude balance ( $ S_{31}/S_{21} $ )	-3	+1.9	+3.0	dB	(1884.55~1919.45 MHz)
Output Phase Balance ( $\Phi(S_{31}) - \Phi(S_{21}) + 180^\circ$ )	-12	+6	+12	°	(1884.55~1919.45 MHz)
Stop-band Attenuation (Referenced to 0.0 dB)	35	40		dB	1349~1455 MHz
	35	46			1614~1687 MHz
	34	36			1731~1801 MHz
	18	22			1986~2056 MHz
	25	33			2037~2039 MHz
	35	42			2113~2186 MHz
	40	48			2386~2451 MHz
	40	51			3000~3840 MHz
	35	48			4941~5760 MHz
Terminating Source Impedance ( $Z_s$ )		50		$\Omega$	
Terminating Load Impedance ( $Z_L$ ) (Differential)		200 $\Omega$ // 22nH			

## TEST CIRCUIT:

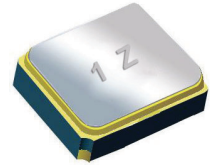


# Surface Mount 1902.00MHz SAW Filter

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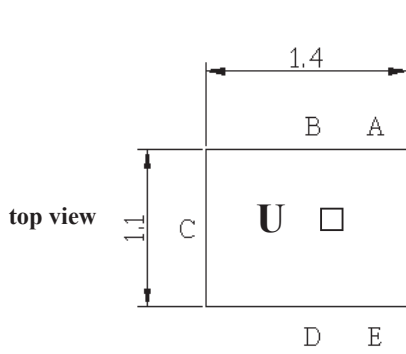


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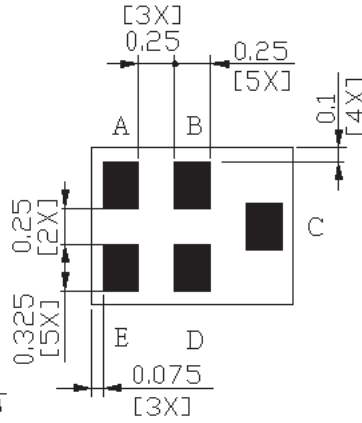


1.4 x 1.1 x 0.7 mm

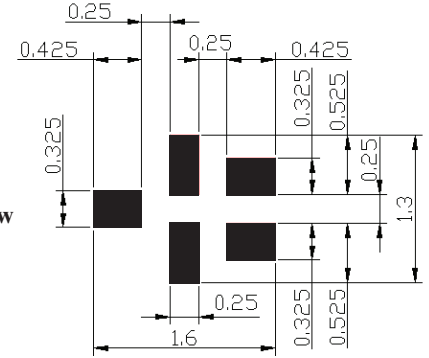
## OUTLINE DIMENSIONS:



side view



### Recommended Land Pattern:



■ : Land Pattern  
Unit : mm

C:	Input
A:	Output
B, D, E:	Ground

\*All Dimensions are in mm

### □ Year/Month Code (Follow the table)

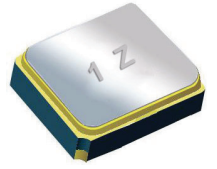
Year/Month	1	2	3	4	5	6	7	8	9	10	11	12
2009	A	B	C	D	E	F	G	H	J	K	L	M
2010	N	P	Q	R	S	T	U	V	W	X	Y	Z
2011	A	B	C	D	E	F	G	H	J	K	L	M
2012	N	P	Q	R	S	T	U	V	W	X	Y	Z
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z

# Surface Mount 1902.00MHz SAW Filter

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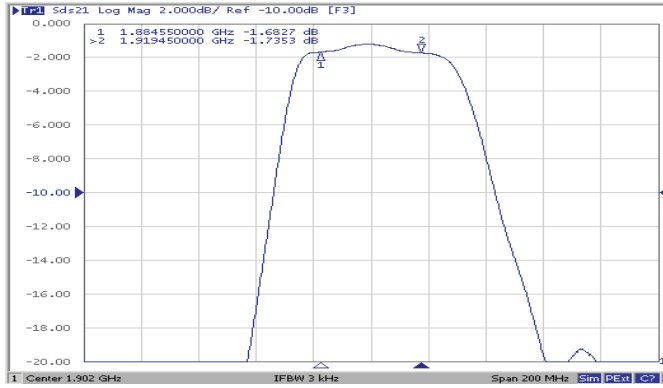
RoHS  
Compliant



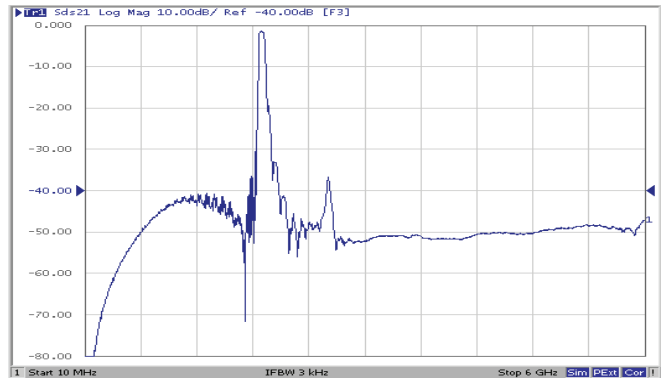
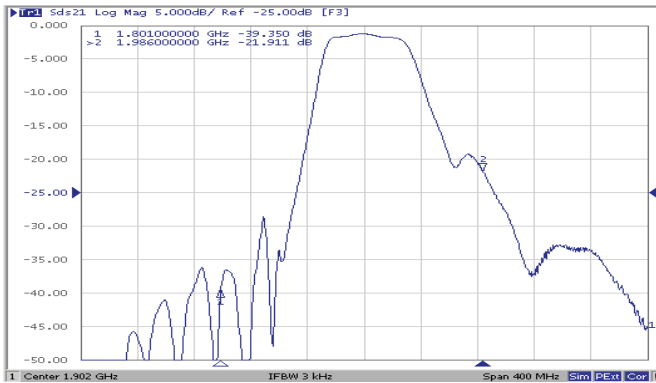
1.4 x 1.1 x 0.7 mm

## FREQUENCY CHARACTERISTICS:

### Filter Frequency Response (Narrowband)

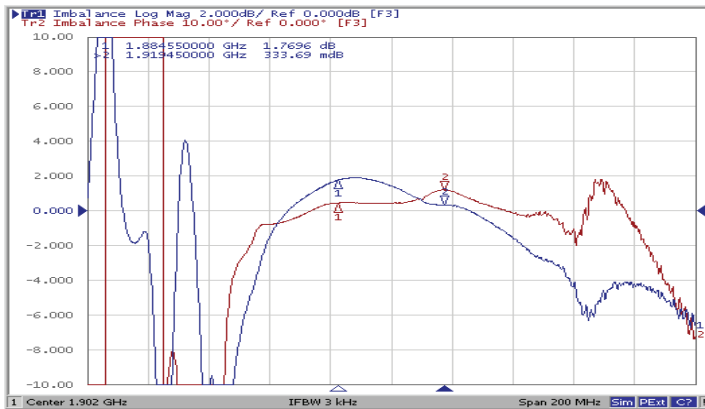


### Filter Frequency Response (Wideband)

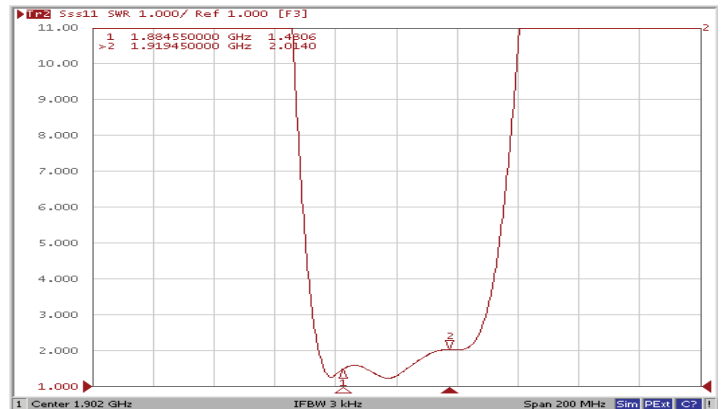


## REFLECTION FUNCTIONS:

### S11



### S22



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Revised: 06.22.12

