



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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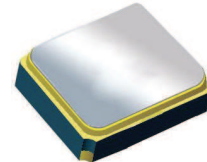
# Surface Mount 1591.5 MHz SAW Filter

AFS14A35-1591.5-T3

Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable



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:

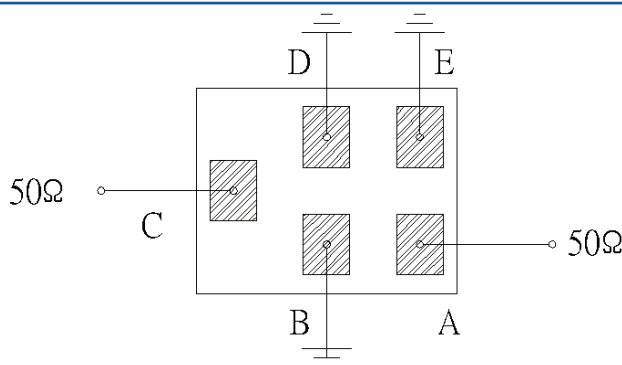
### Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3.0V DC max.
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency ( $f_c$ )		1591.5		MHz	
Insertion Loss (IL)		2.4	3.7	dB	1574~1609 MHz
Effective Bandwidth		35		MHz	
Amplitude Ripple		1.3	2.6	dB	1574~1609 MHz
Worst-Case Input / Output Return Loss	7.7	9.5		dB	1574~1609 MHz
Group Delay Variation		17	50	ns	1574~1609 MHz
Stop-band Attenuation (Referenced to 0.0 dB)	28	34		dB	10 ~1200 MHz
	28	34			1200~1450 MHz
	20	37			1450~1540 MHz
	9	31			1626~1710 MHz
	30	37			1710~2000 MHz
	30	37			2000~2500 MHz
Temperature Coefficient of frequency		-36		ppm/°C	
Source Impedance ( $Z_S$ )		50		$\Omega$	See note # 1
Load Impedance ( $Z_L$ )		50		$\Omega$	See note # 1

**Note #1:** No matching network required for operation into 50 $\Omega$ 's

## TEST CIRCUIT:

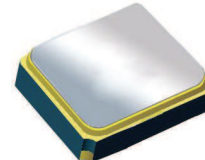


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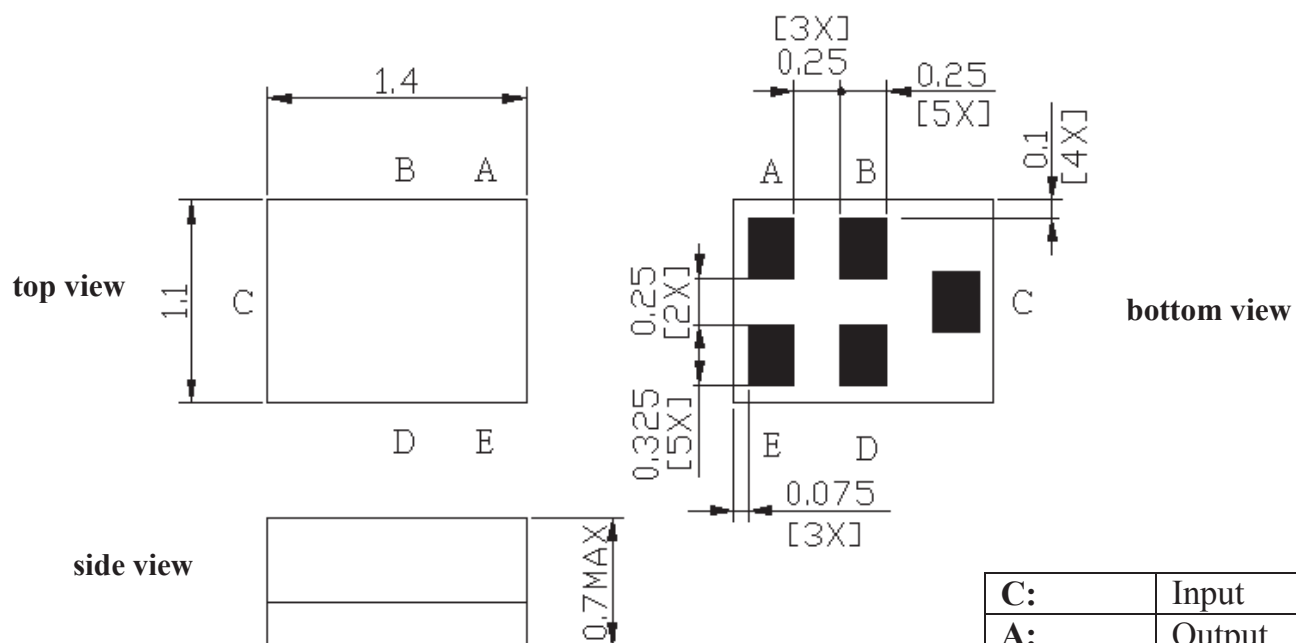


**RoHS**  
Compliant



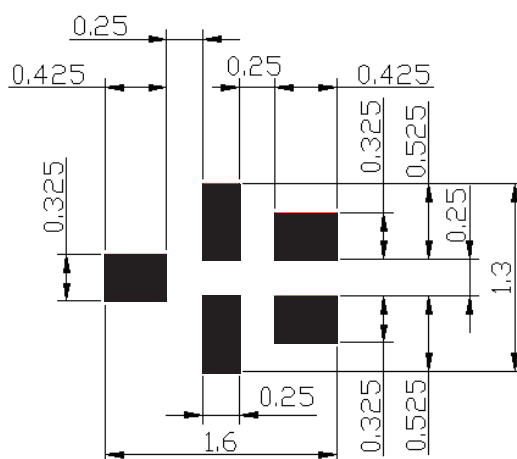
1.4 x 1.1 x 0.7 mm

## OUTLINE DIMENSIONS:



<b>C:</b>	Input
<b>A:</b>	Output
<b>B, D, E:</b>	Ground

## Recommended Land Pattern:



■ : Land Pattern

Unit : mm

\*All Dimensions are in mm



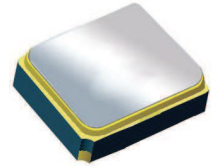


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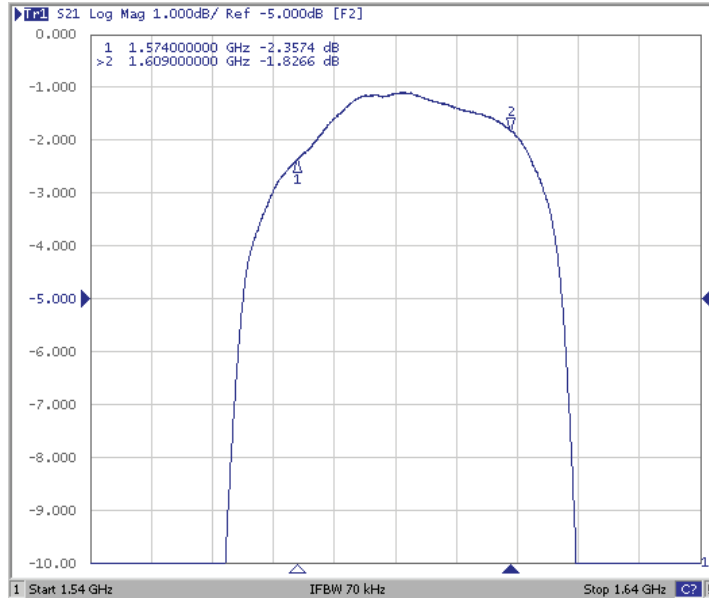
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Compliant



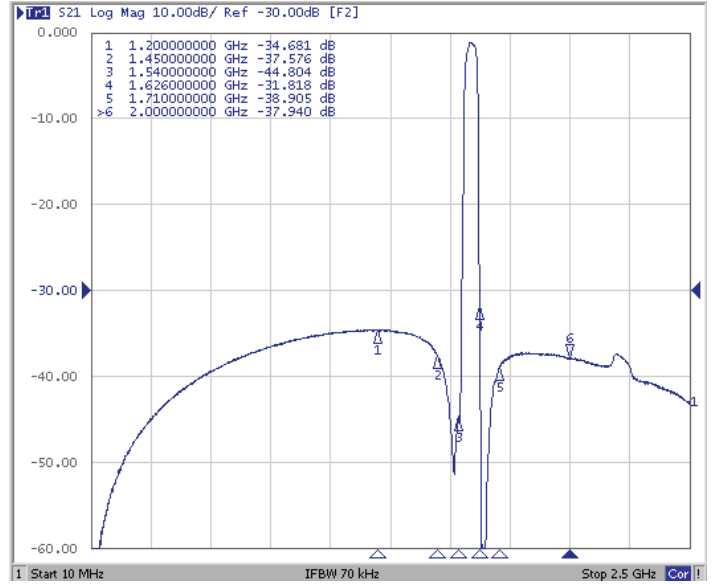
1.4 x 1.1 x 0.7 mm

## FREQUENCY CHARACTERISTICS:

### Filter Frequency Response (Narrowband)

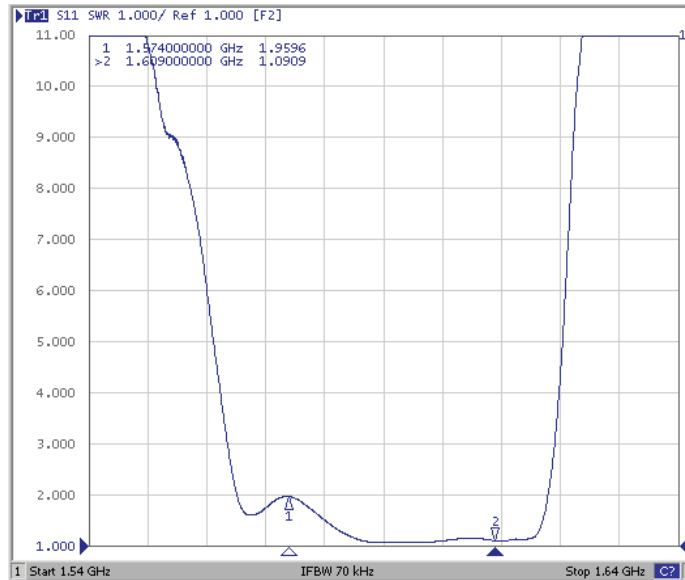


### Filter Frequency Response (Wideband)

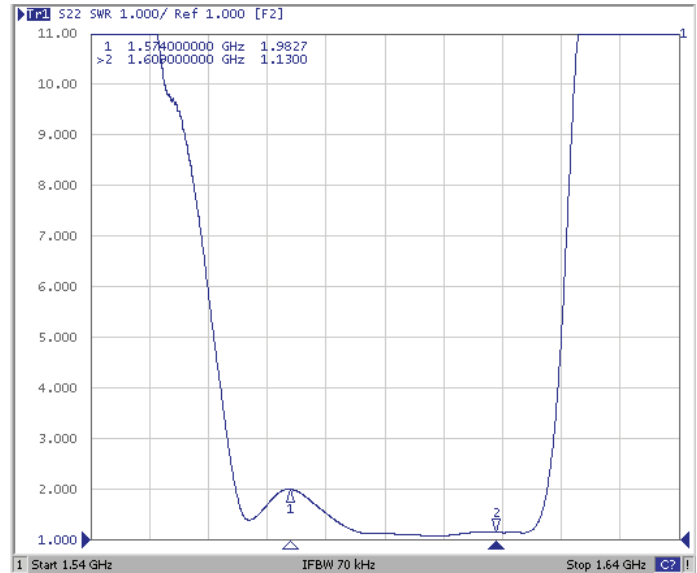


## REFLECTION FUNCTIONS:

### S11



### S22

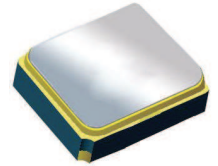


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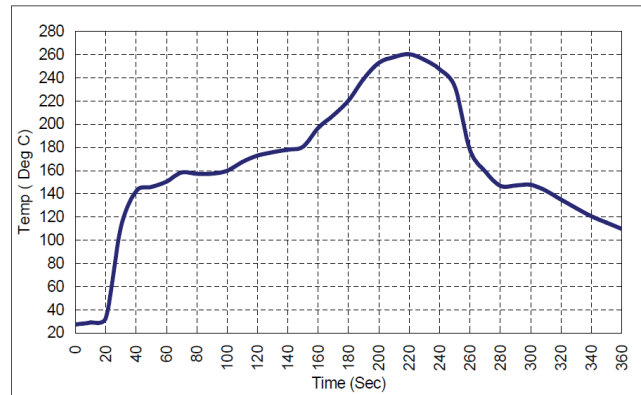


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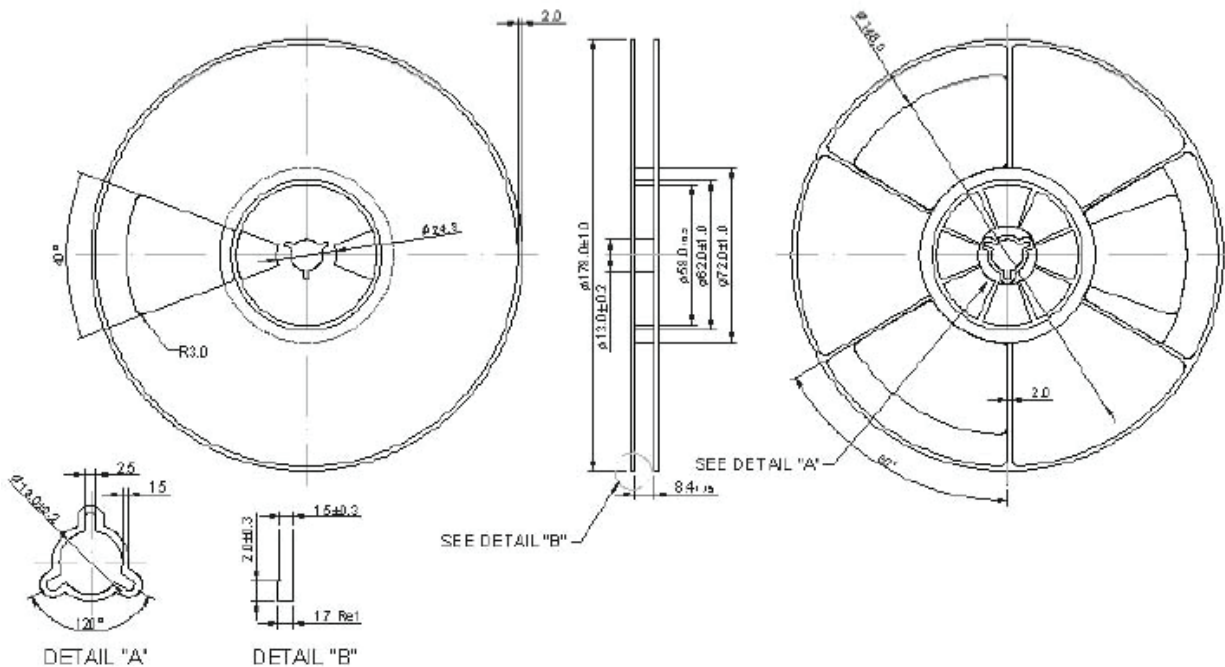
1.4 x 1.1 x 0.7 mm

## REFLOW PROFILE:



## PACKAGING: 3000 Units/Reel

Reel Count : 7" = 3k units



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