



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!



## Contact us

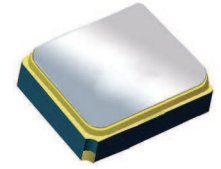
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# Surface Mount 1575.42MHz SAW Filter



2.0 x 1.6 x 0.9 mm

**AFS20A53-1575.42-T3**

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



**RoHS  
Compliant**

## FEATURES:

- 2.0 x 1.6 x 0.9 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:

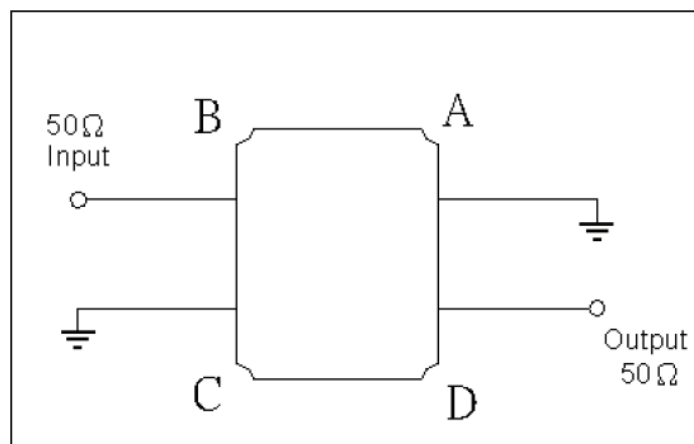
### Maximum Ratings

Item	Value
Input Power Level	+20 dBm max.
DC Permissive Voltage	3.0V DC max.
Operating Temperature Range	-55°C to + 105°C
Storage Temperature Range	-55°C to + 105°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency ( $f_c$ )		1575.42		MHz	
Insertion Loss (IL)		2.1	3.0	dB	1565.42 ~ 1585.42MHz
Effective Bandwidth	20	53		MHz	
Amplitude Ripple		1.3	2.0	dB	1565.42 ~ 1585.42MHz
Worst-Case Input / Output Return Loss	8	11		dB	1565.42 ~ 1585.42MHz
Group Delay		4	26		1565.42 ~ 1585.42MHz
Stop-band Attenuation (Referenced to 0.0 dB)	15	19		dB	300 ~ 1500MHz
	15	21			1650MHz ~ 1900MHz
	15	21			1900MHz ~ 3000MHz
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:

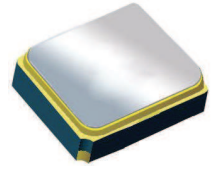


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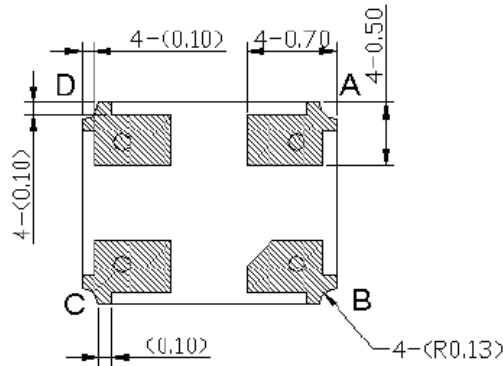
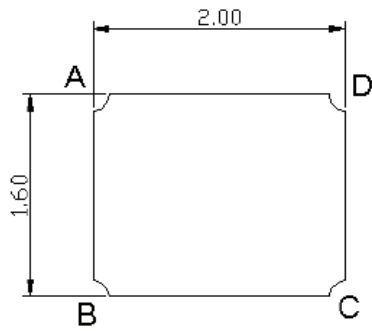


RoHS  
Compliant



2.0 x 1.6 x 0.9 mm

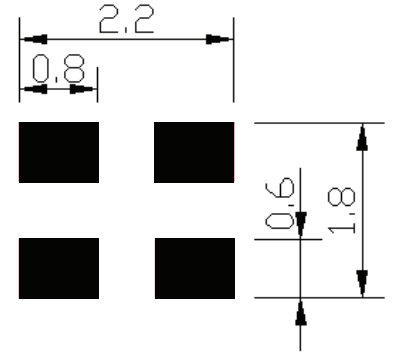
## OUTLINE DIMENSIONS:



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

\* All Dimensions are in mm

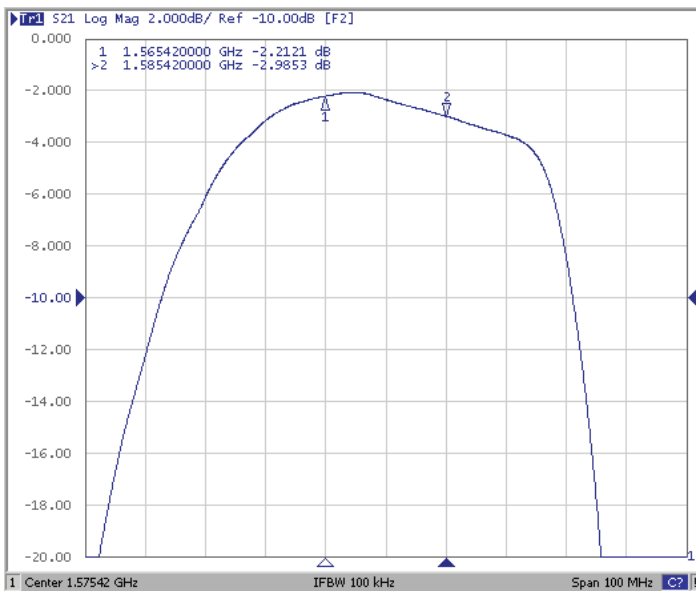
## Recommended Land Pattern:



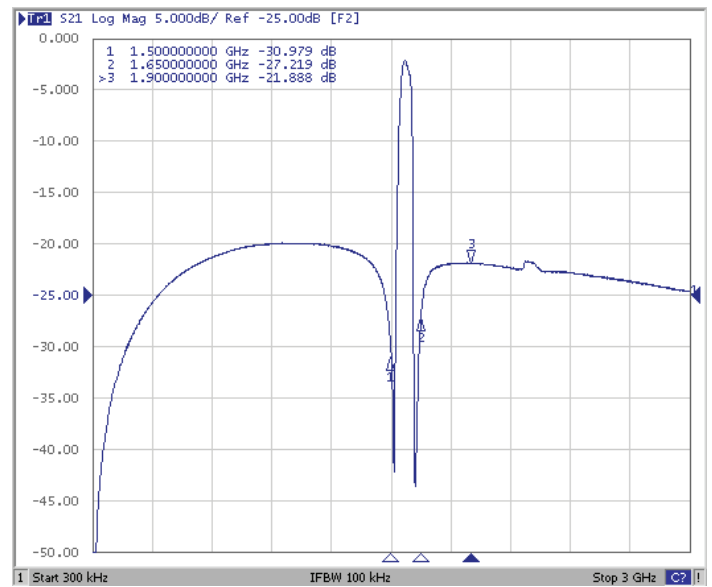
\*All Dimensions are in mm

## FREQUENCY CHARACTERISTICS:

### Filter Frequency Response (Narrowband)



### Filter Frequency Response (Wideband)



Detail S-parameter information (.s2p file) available upon request



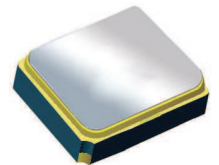


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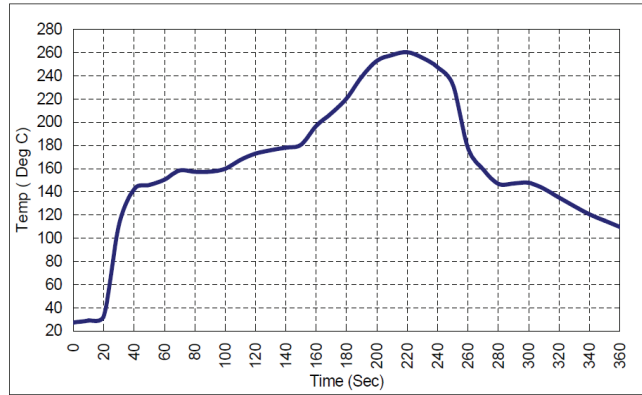


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Compliant



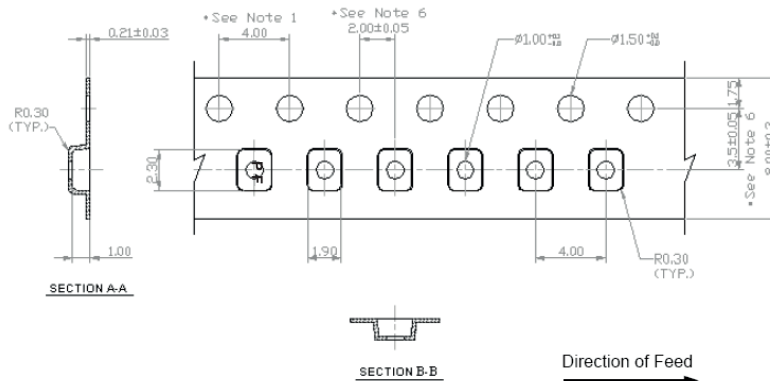
2.0 x 1.6 x 0.9 mm

## REFLOW PROFILE:

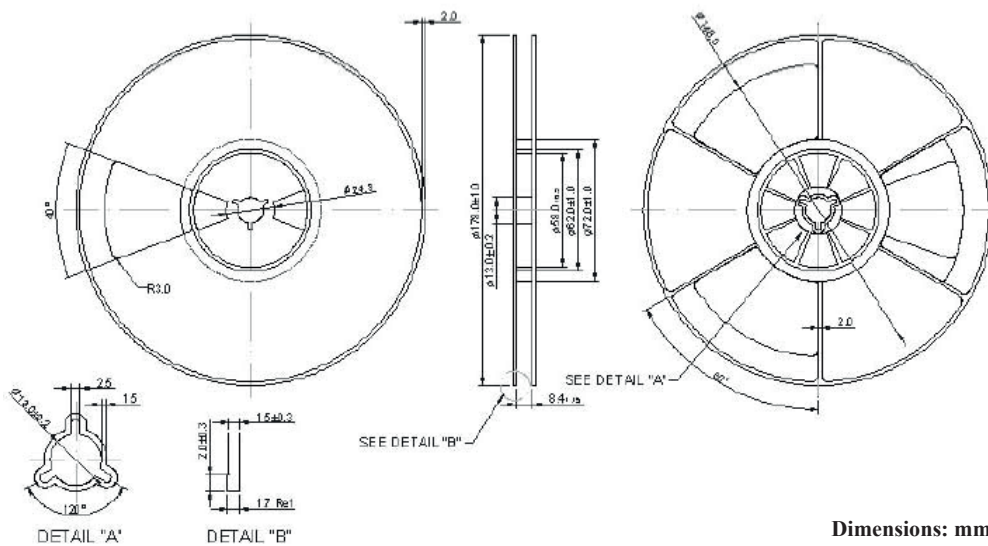


## PACKAGING: 3000 Units/Reel “-T2” parts (2k/reel) are no longer available effective 01/01/2013

Reel Count : 7" = 3k units



Dimensions: mm



Dimensions: mm

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