

# Surface Mount 2017.50MHz SAW Filter

AFS20A15-2017.50-T2



RoHS  
Compliant



2.0 x 1.6 x 0.9 mm

## 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:

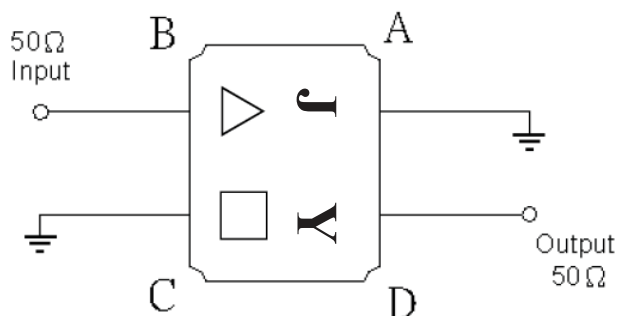
### Maximum Ratings

Item	Value
Input Power Level	+10 dBm max.
DC Permissive Voltage	3.0V DC max.
Operating Temperature Range	-30°C to + 85°C
Storage Temperature Range	-40°C to + 95°C

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency ( $f_c$ )		2017.50		MHz	
Insertion Loss (IL)		1.25	2.20	dB	(2010 ~ 2025MHz)
3-dB Bandwidth		15.00		MHz	
Amplitude Ripple		0.10	1.00	dB	(2010 ~ 2025MHz)
Worst-Case Input / Output Return Loss		16.54	10.16	dB	(2010 ~ 2025MHz)
Stop-band Attenuation (Referenced to 0.0 dB)	30	33		dB	(DC ~ 1020MHz)
	20	33			(1220 ~ 1570MHz)
	30	34			(1570 ~ 1590MHz)
	20	34			(1590 ~ 1820MHz)
	31	34			(1820 ~ 1850MHz)
	20	27			(1850 ~ 1950MHz)
	19	21			(2085 ~ 2400MHz)
	29	33			(2400 ~ 2430MHz)
	25	32			(2430 ~ 2790MHz)
	30	32			(2790 ~ 2820MHz)
	25	34			(2820 ~ 3000MHz)
	20	32			(3000 ~ 4010MHz)
	25	32			(4010 ~ 4060MHz)
10	22		(4060 ~ 6000MHz)		
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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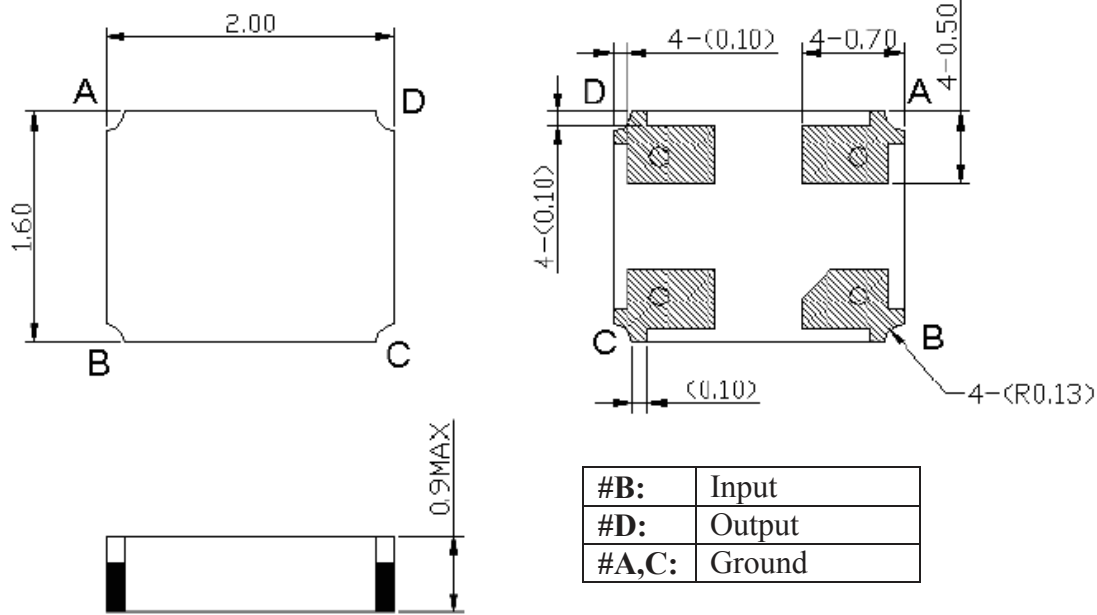


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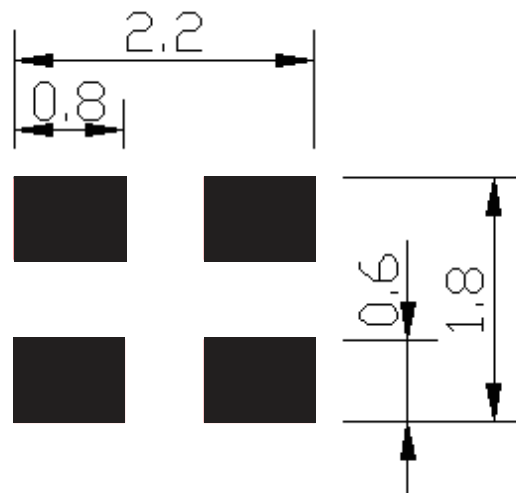
2.0 x 1.6 x 0.9 mm

## OUTLINE DIMENSIONS:



\*All Dimensions are in mm

## Recommended Land Pattern:

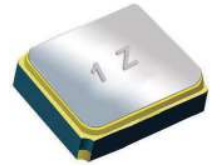


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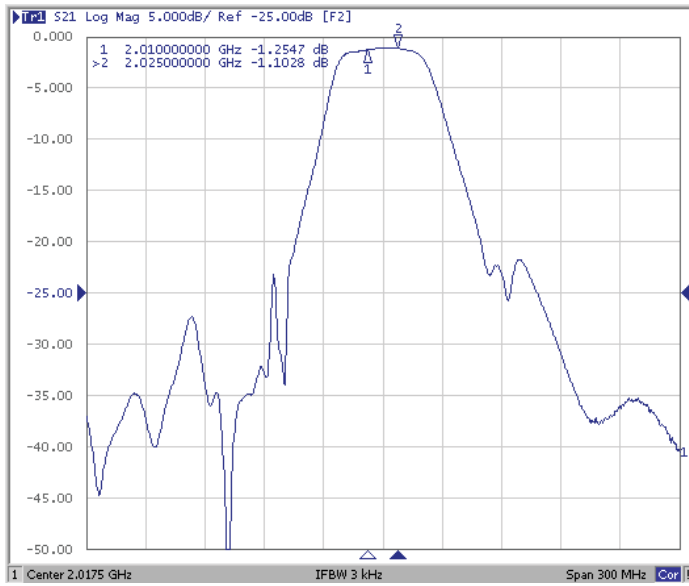
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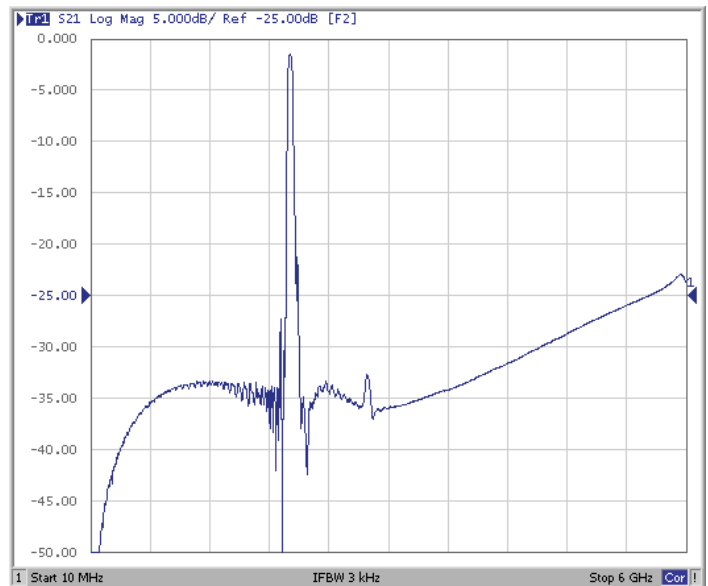
2.0 x 1.6 x 0.9 mm

## FREQUENCY CHARACTERISTICS:

### Filter Frequency Response (Narrowband)

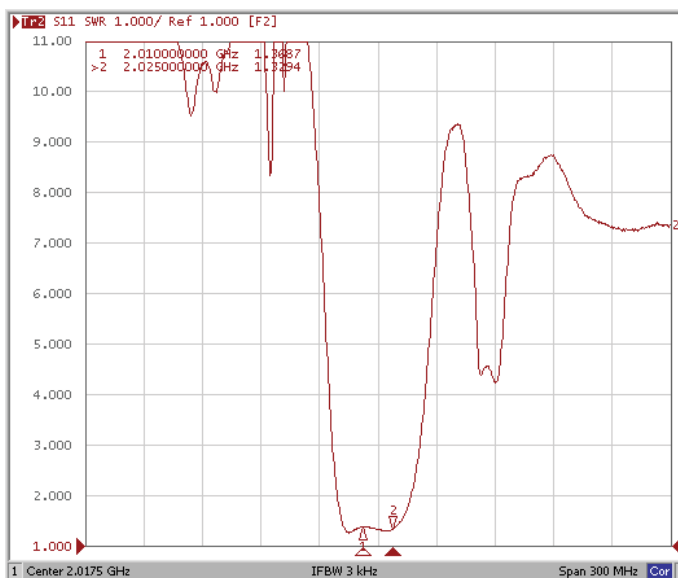


### Filter Frequency Response (Wideband)

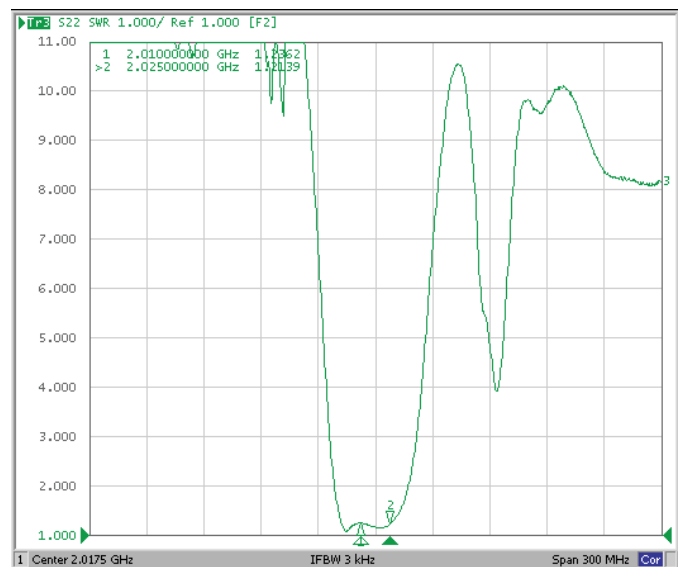


## REFLECTION FUNCTIONS:

### S11



### S22



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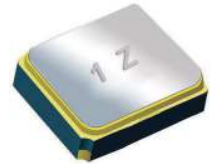
Revised: 07.24.12

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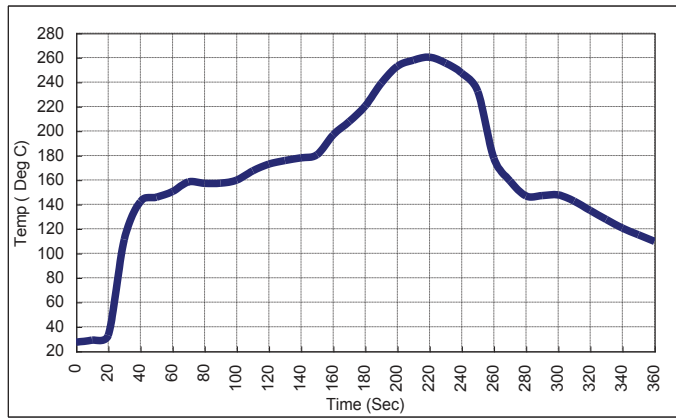


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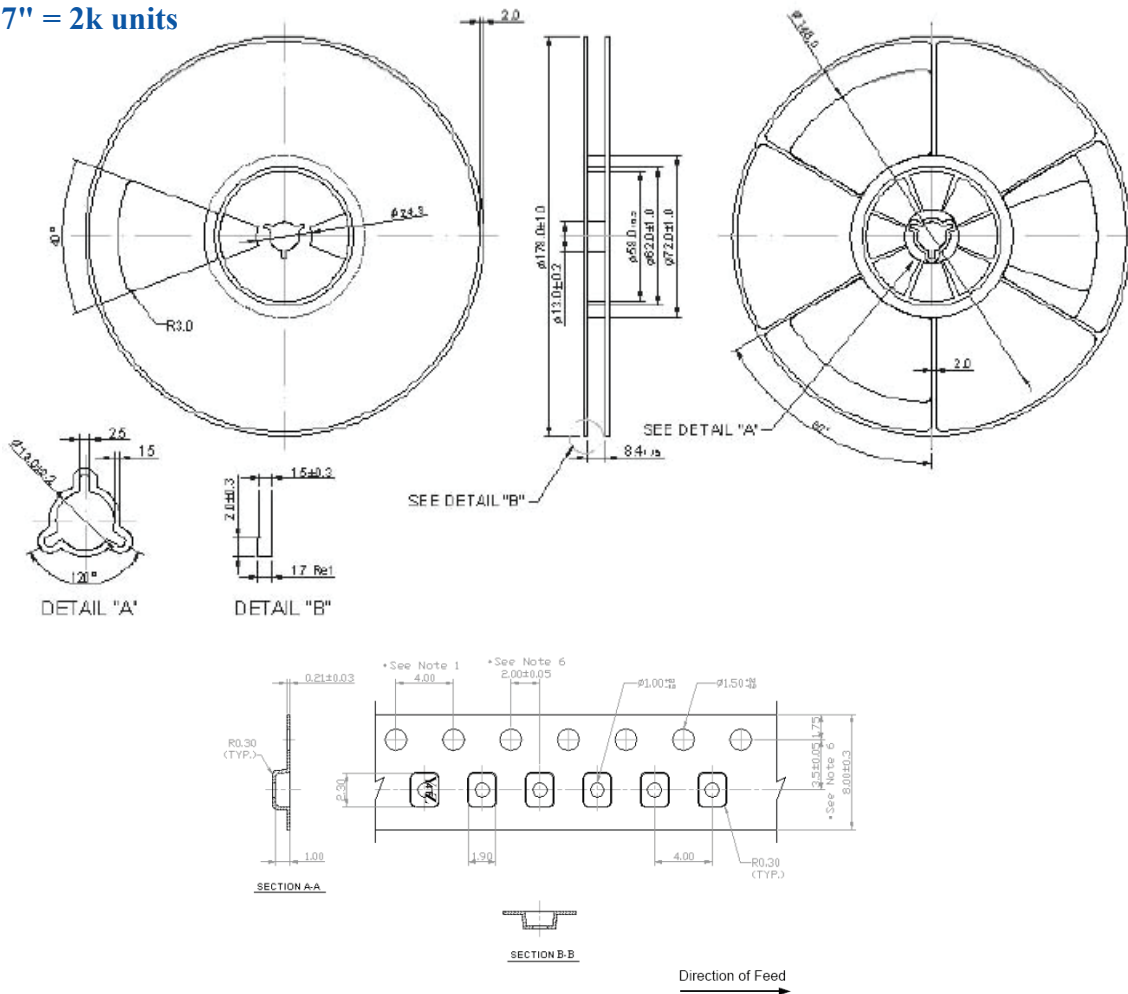
2.0 x 1.6 x 0.9 mm

## REFLOW PROFILE:



## PACKAGING: 2000 Units/Reel

Reel Count : 7" = 2k units



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