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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.

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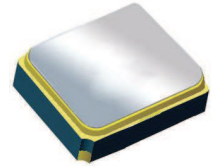
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# Surface Mount 2017.50MHz SAW Filter



2.0 x 1.6 x 0.9 mm

**AFS20A15-2017.50-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:

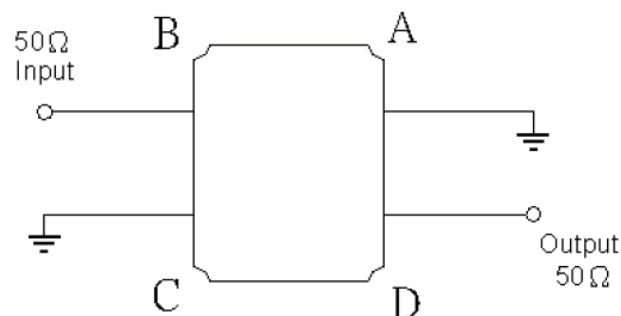
### Maximum Ratings

| Item                        | Value           |
|-----------------------------|-----------------|
| Input Power Level           | +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) |
| Effective 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<br>(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:

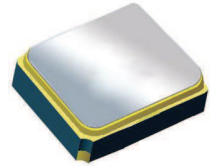


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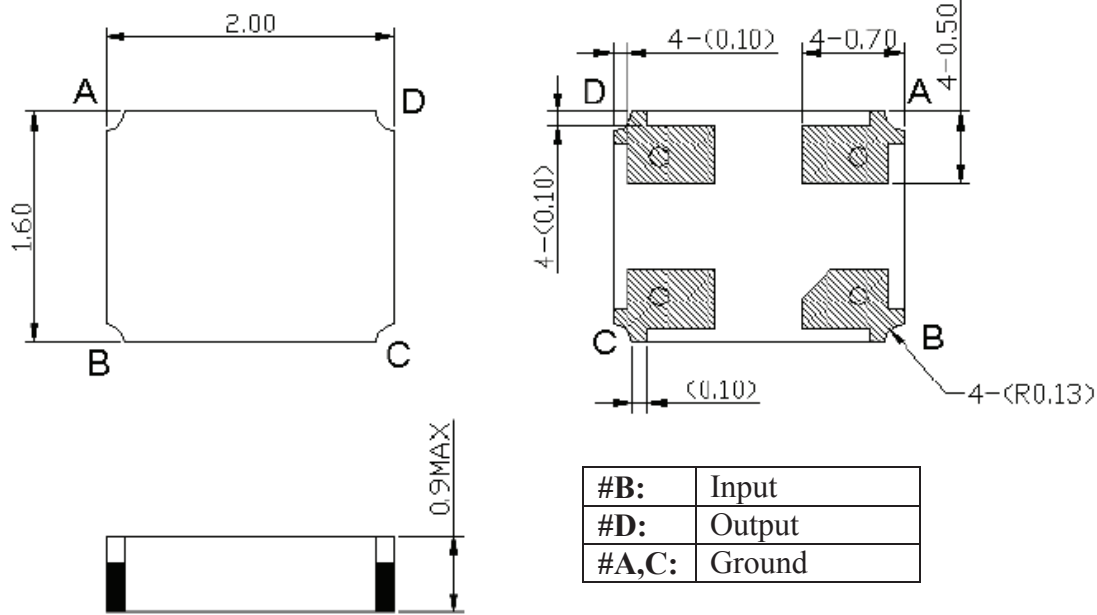


RoHS  
Compliant



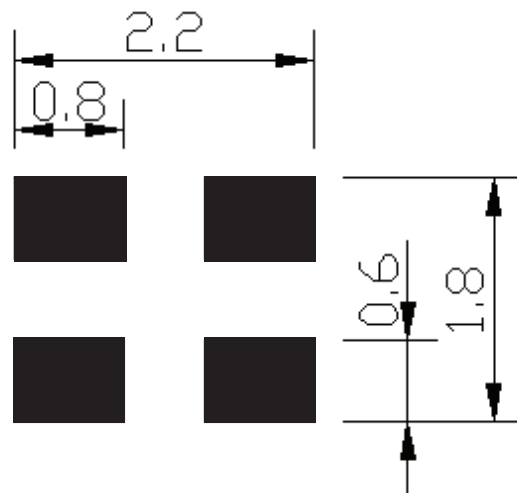
2.0 x 1.6 x 0.9 mm

## OUTLINE DIMENSIONS:



\*All Dimensions are in mm

## Recommended Land Pattern:



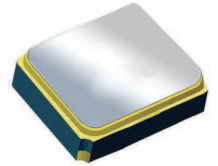


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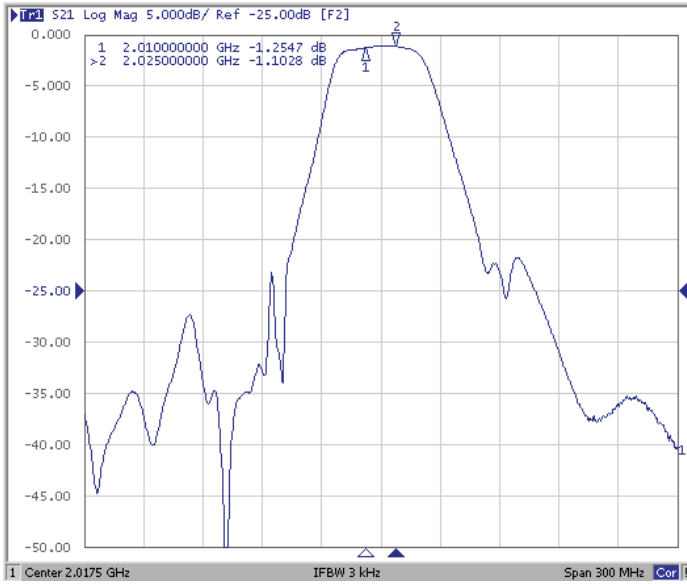
RoHS  
Compliant



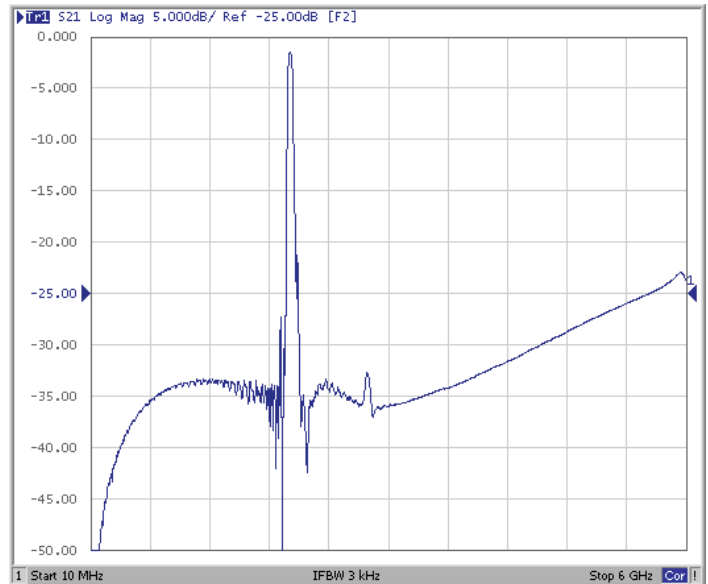
2.0 x 1.6 x 0.9 mm

## FREQUENCY CHARACTERISTICS:

### Filter Frequency Response (Narrowband)

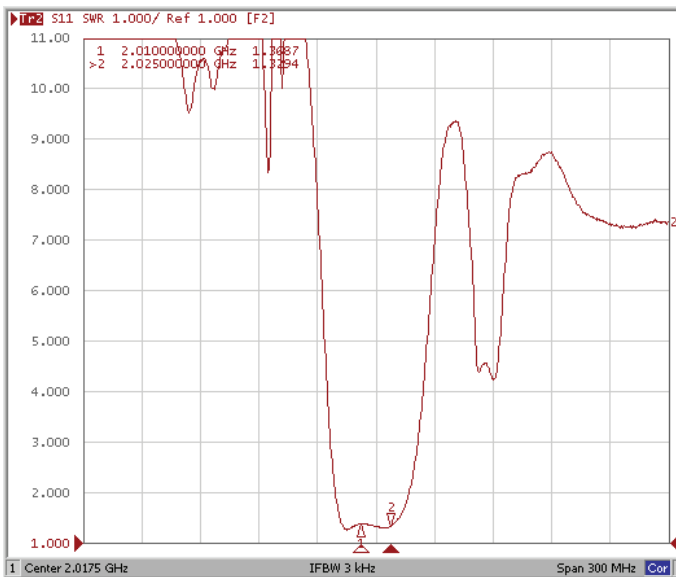


### Filter Frequency Response (Wideband)

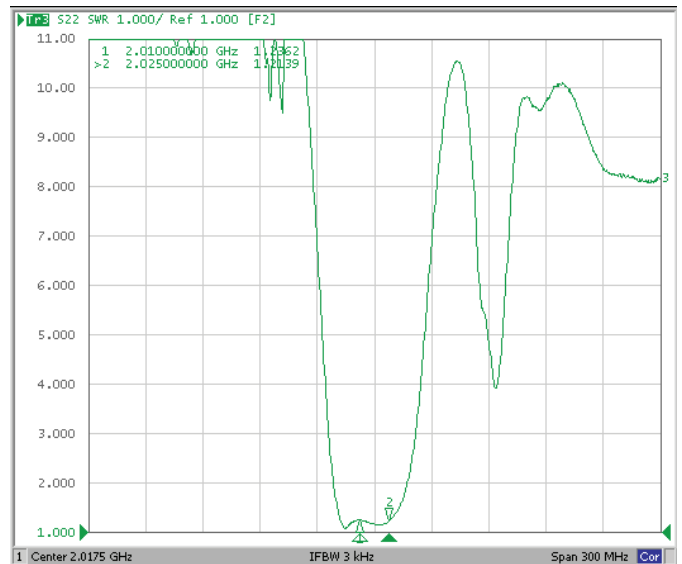


## REFLECTION FUNCTIONS:

### S11



### S22



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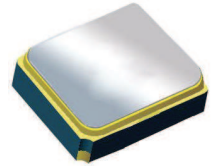
Revised: 01.22.13

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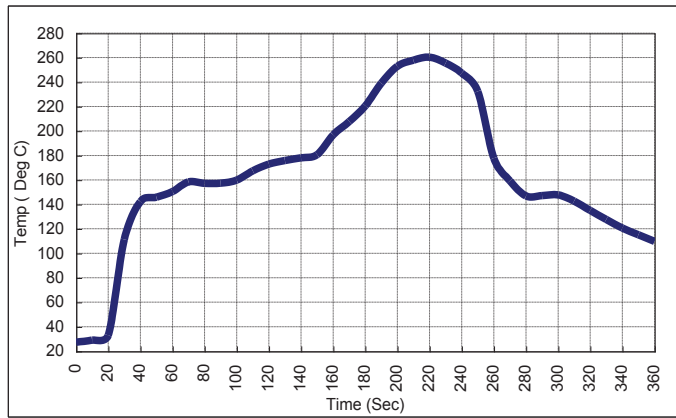


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Compliant



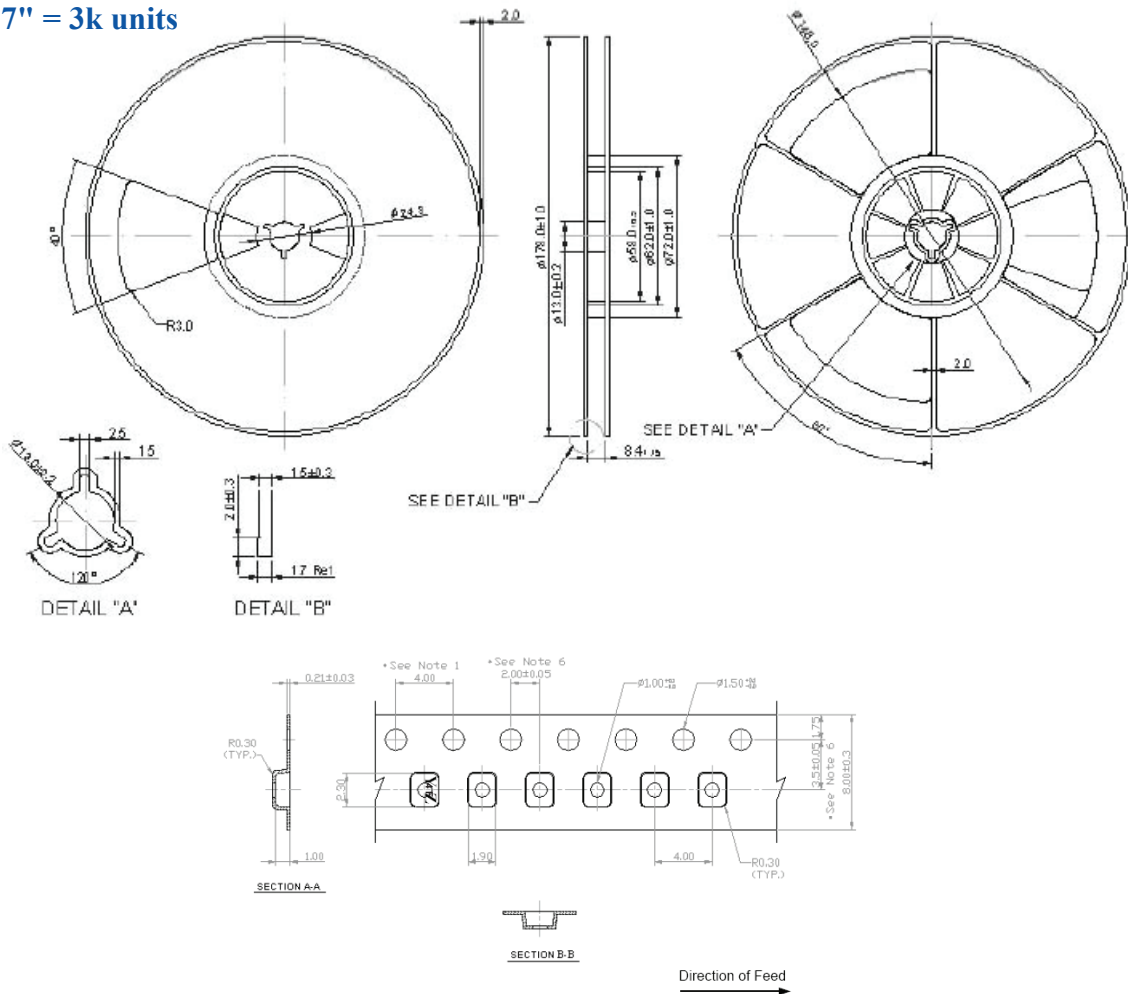
2.0 x 1.6 x 0.9 mm

## REFLOW PROFILE:



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

Reel Count : 7" = 3k units



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