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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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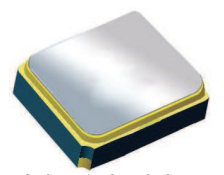
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# Surface Mount 1910.00MHz SAW Filter



2.0 x 1.6 x 0.9 mm

**AFS20A20-1910.00-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:

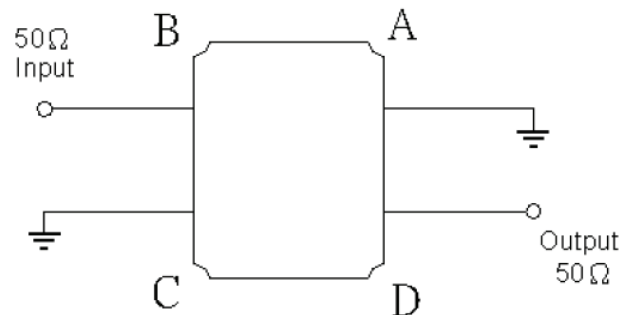
### Maximum Ratings

| Item                        | Value           |
|-----------------------------|-----------------|
| Input Power Level           | +15 dBm max.    |
| DC Permissive Voltage       | 5.0V DC max.    |
| Operating Temperature Range | 0°C to + 70°C   |
| Storage Temperature Range   | -30°C to + 85°C |

| Parameters                                      | Minimum | Typical | Maximum | Units    | Notes            |
|---|---------|---------|---------|----------|------------------|
| Center Frequency ( $f_c$ )                      |         | 1910.00 |         | MHz      |                  |
| Insertion Loss (IL)                             |         | 1.20    | 1.80    | dB       | (1900 ~ 1920MHz) |
| Effective Bandwidth                             |         | 20.00   |         | MHz      |                  |
| Amplitude Ripple                                |         | 0.4     | 2.00    | dB       | (1900 ~ 1920MHz) |
| Worst-Case Input / Output Return Loss           |         | 16.0    | 8.0     | dB       | (1900 ~ 1920MHz) |
| Stop-band Attenuation<br>(Referenced to 0.0 dB) | 15      | 32      |         | dB       | (925 ~ 1600MHz)  |
|   | 25      | 28      |         |          | (1600 ~ 1825MHz) |
|   | 20      | 29      |         |          | (1825 ~ 1840MHz) |
|   | 10      | 35      |         |          | (1840 ~ 1850MHz) |
|   | 5       | 13.50   |         |          | (1850 ~ 1880MHz) |
|   | 25      | 32      |         |          | (2040 ~ 2660MHz) |
|   | 25      | 33      |         |          | (2660 ~ 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:

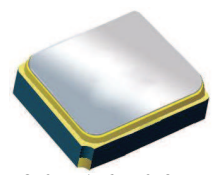


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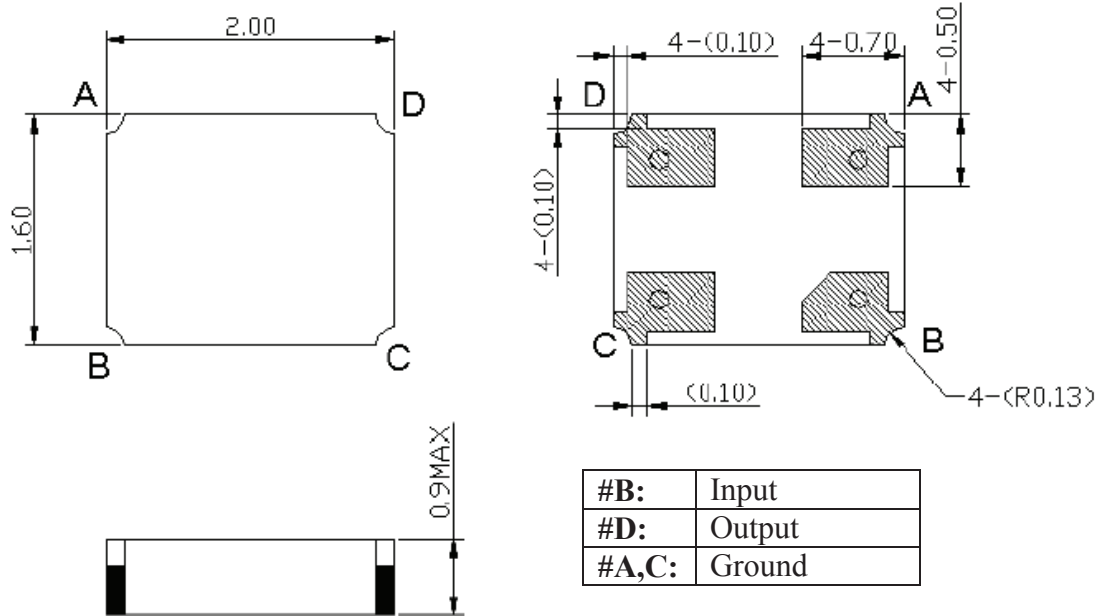


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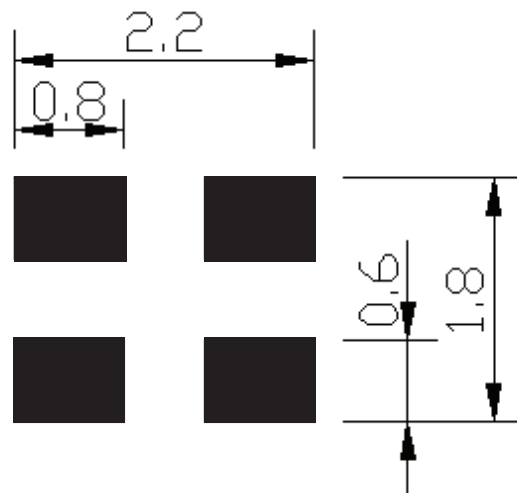
2.0 x 1.6 x 0.9 mm

## OUTLINE DIMENSIONS:



\*All Dimensions are in mm

## Recommended Land Pattern:



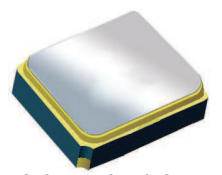


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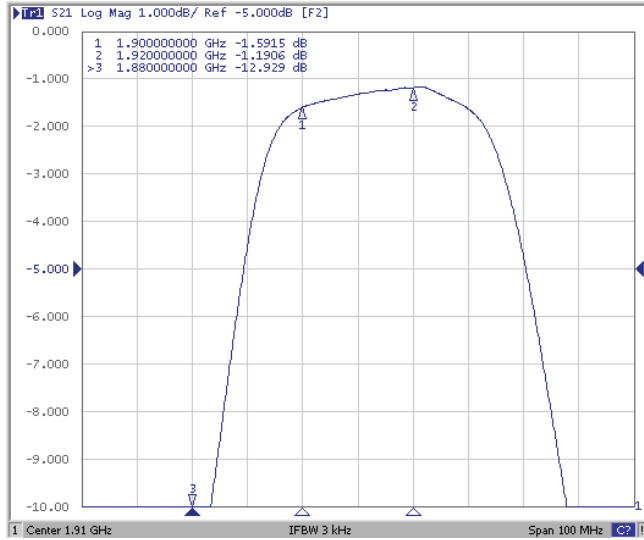
RoHS  
Compliant



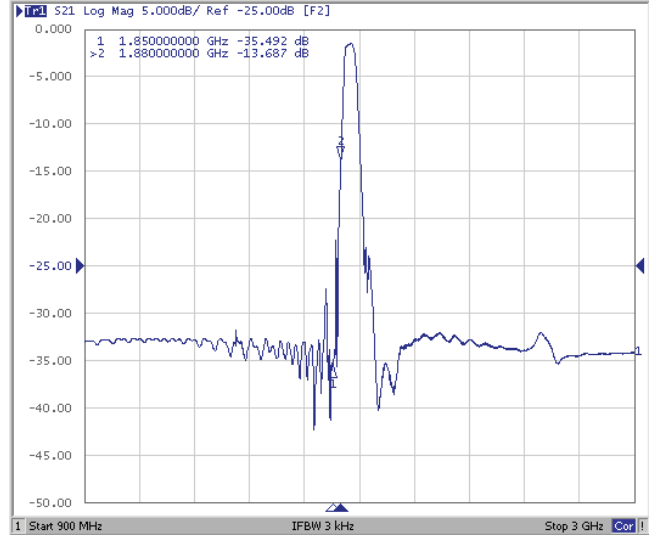
2.0 x 1.6 x 0.9 mm

## FREQUENCY CHARACTERISTICS:

### Filter Frequency Response (Narrowband)

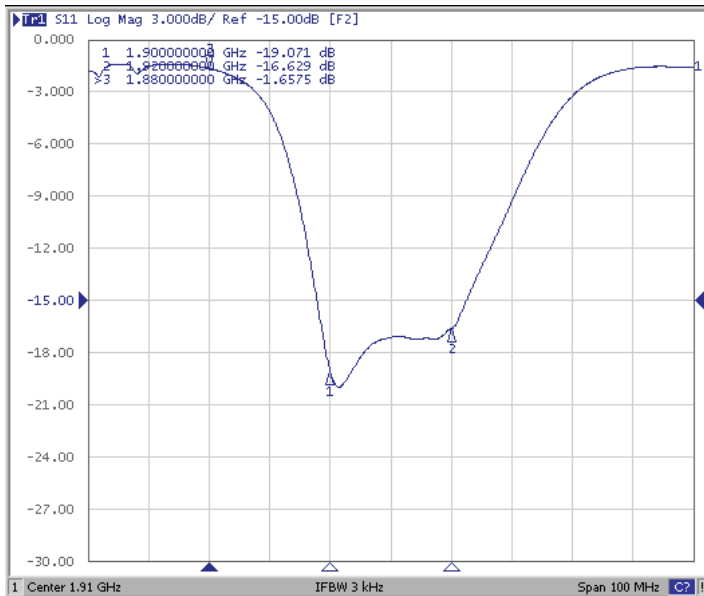


### Filter Frequency Response (Wideband)

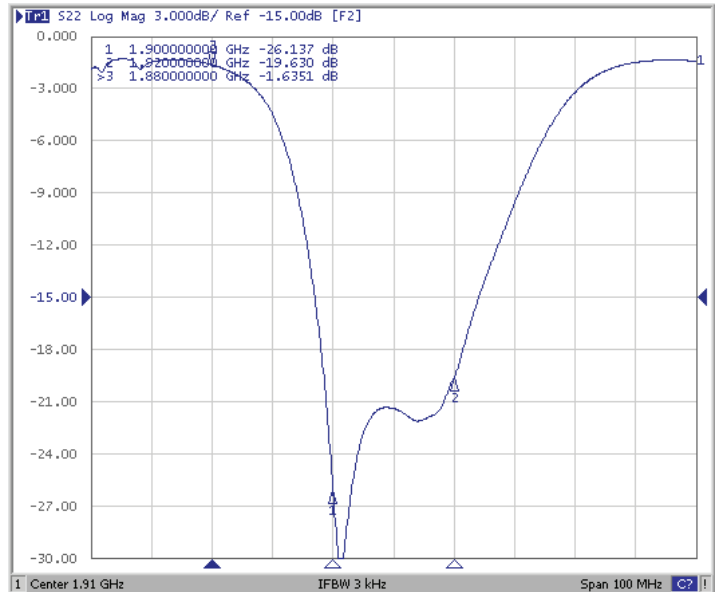


## REFLECTION FUNCTIONS:

### S11



### S22

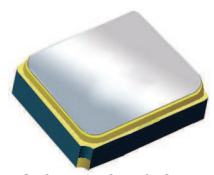


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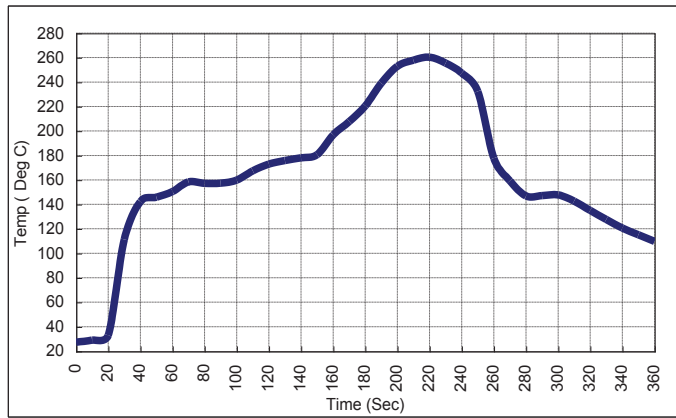


**RoHS**  
Compliant



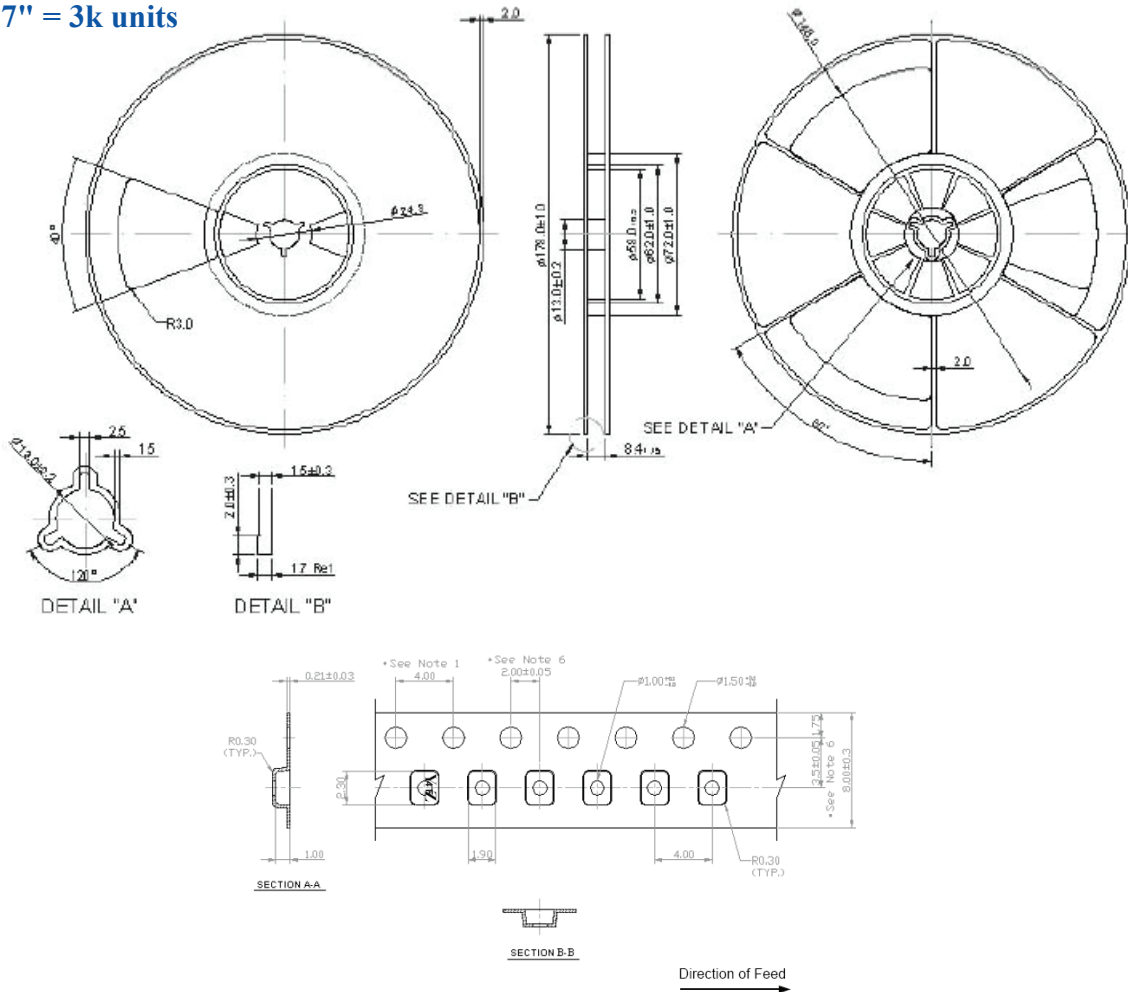
2.0 x 1.6 x 0.9 mm

## 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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