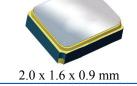
# **Surface Mount 1575.42MHz SAW Filter**

### 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:**

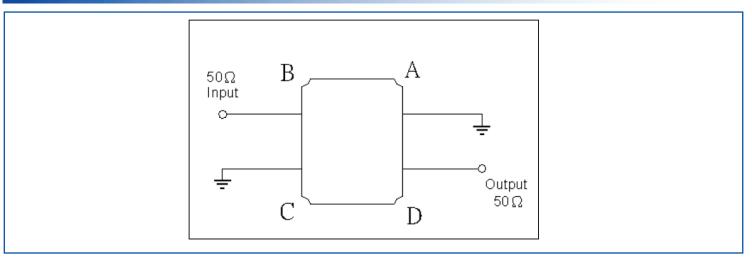
#### **Maximum Ratings**

| 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 <sub>c</sub> )           |         | 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      |         |       | 300 ~ 1500MHz        |
|  | 15      | 21      |         | dB    | 1650MHz ~ 1900MHz    |
|  | 15      | 21      |         |       | 1900MHz ~ 3000MHz    |
| Source Impedance (Z <sub>S</sub> )           |         | 50      |         | Ω     | See note # 1         |
| Load Impedance (Z <sub>L</sub> )             |         | 50      |         | Ω     | See note # 1         |

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

#### **TEST CIRCUIT:**



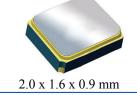




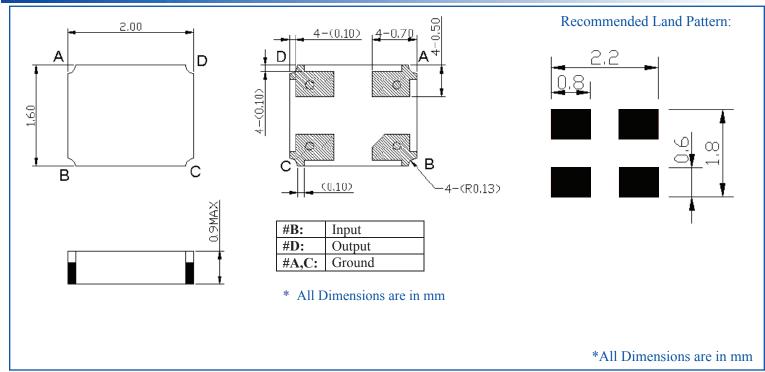
## **Surface Mount 1575.42MHz SAW Filter**

AFS20A53-1575.42-T3





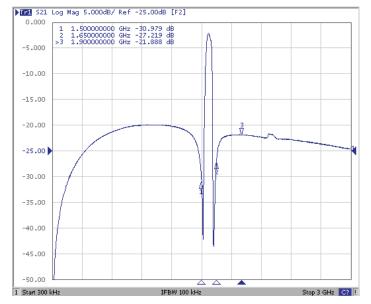
#### > OUTLINE DIMENSIONS:



#### **► FREQUENCY CHARACTERISTICS:**

### 

#### Filter Frequency Response (Wideband)



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

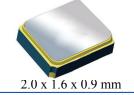




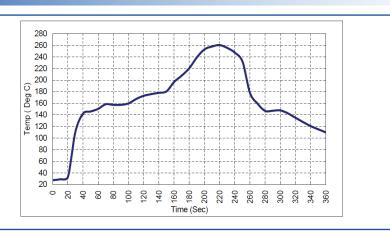
## **Surface Mount 1575.42MHz SAW Filter**

AFS20A53-1575.42-T3

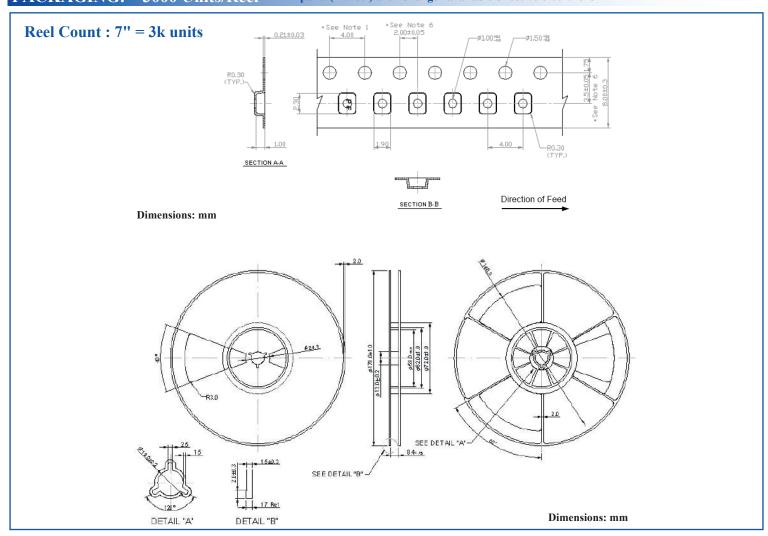




#### **REFLOW PROFILE:**



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



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