



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

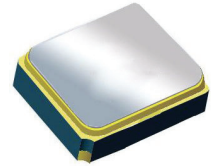
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# Surface Mount 1575.42MHz SAW Filter



1.4 x 1.1 x 0.7 mm

**AFS14A04-1575.42-T3**

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



**RoHS  
Compliant**

## FEATURES:

- 1.4 x 1.1 x 0.7 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:

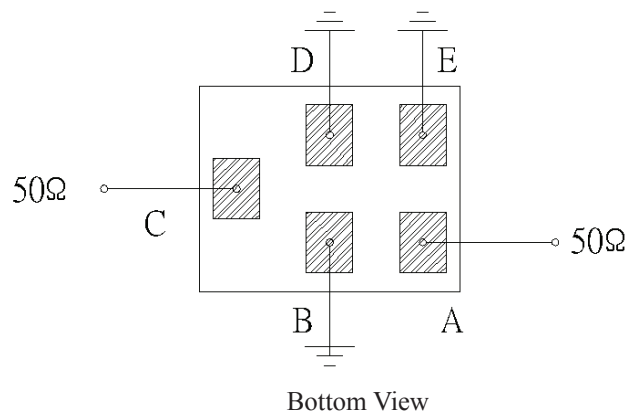
### Maximum Ratings

| Item                        | Value           |
|-----------------------------|-----------------|
| Input Power Level           | +15 dBm max.    |
| DC Permissive Voltage       | 3.0V DC max.    |
| Operating Temperature Range | -40°C to + 85°C |
| Storage Temperature Range   | -40°C to + 85°C |

| Parameters                                      | Minimum | Typical | Maximum | Units    | Notes                 |
|---|---------|---------|---------|----------|-----------------------|
| Center Frequency ( $f_c$ )                      |         | 1575.42 |         | MHz      |                       |
| Insertion Loss (IL)                             |         | 0.90    | 1.50    | dB       | (1574.42~1576.42 MHz) |
| Effective Bandwidth                             |         | 40      |         | MHz      |                       |
| Amplitude Ripple                                |         | 0.1     | 0.75    | dB       | (1574.42~1576.42 MHz) |
| Worst-Case Input / Output Return Loss           |         | 23      | 12.7    | dB       | (1574.42~1576.42 MHz) |
| Stop-band Attenuation<br>(Referenced to 0.0 dB) | 35      | 38      |         | dB       | D.C~1450 MHz          |
|   | 30      | 45      |         |          | 1450~1520 MHz         |
|   | 45      | 48      |         |          | 1625~1640 MHz         |
|   | 38      | 40      |         |          | 1640~1805 MHz         |
|   | 38      | 40      |         |          | 1805~1910 MHz         |
|   | 38      | 43      |         |          | 1910~2000 MHz         |
|   | 30      | 45      |         |          | 2000~4000 MHz         |
|   | 20      | 22      |         |          | 4000~6000 MHz         |
| Source Impedance ( $Z_S$ )                      |         | 50      |         | $\Omega$ | See note # 1          |
| Load Impedance ( $Z_L$ )                        |         | 50      |         | $\Omega$ | See note # 1          |

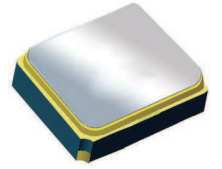
**Note #1:** No matching network required for operation into 50 $\Omega$ 's

## TEST CIRCUIT:



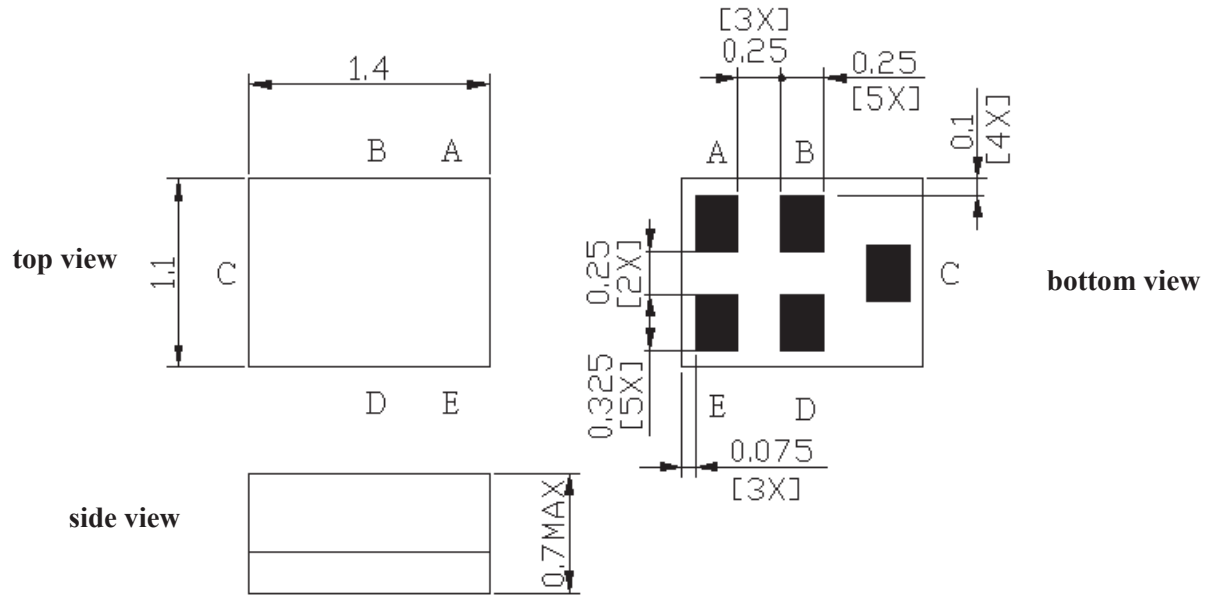
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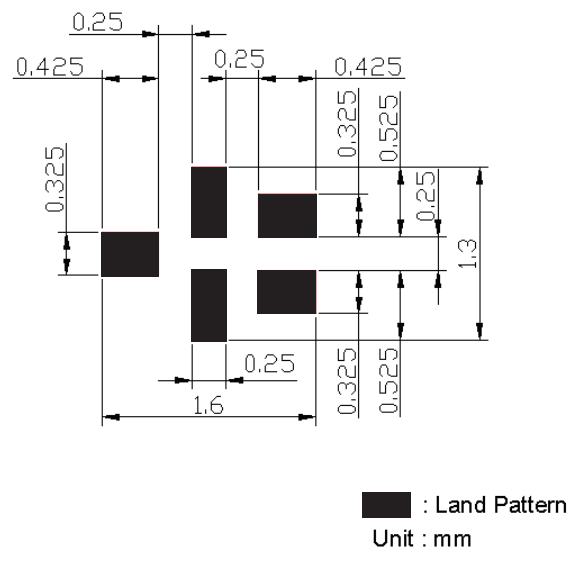
1.4 x 1.1 x 0.7 mm

## OUTLINE DIMENSIONS:



|                 |        |
|-----------------|--------|
| <b>C:</b>       | Input  |
| <b>A:</b>       | Output |
| <b>B, D, E:</b> | Ground |

### Recommended Land Pattern:



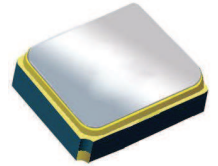
\*All Dimensions are in mm

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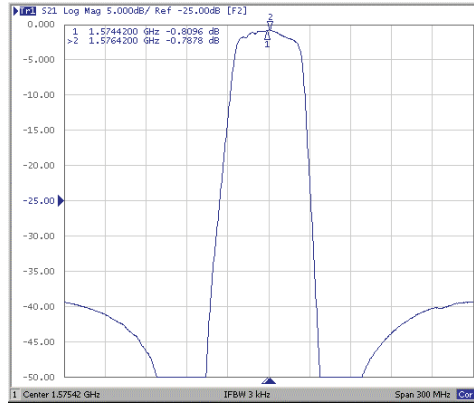
RoHS  
Compliant



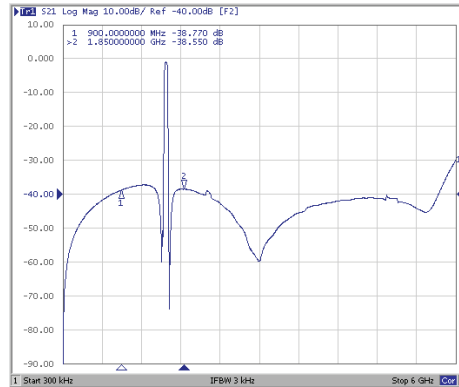
1.4 x 1.1 x 0.7 mm

## FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)

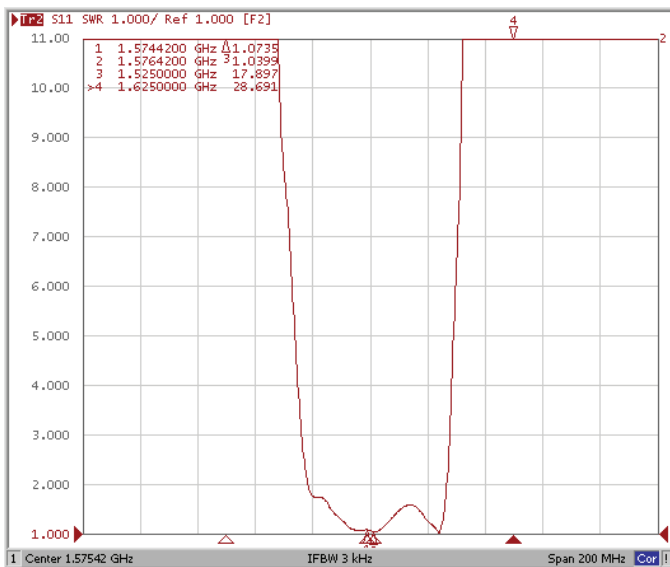


Filter Frequency Response (Wideband)



## REFLECTION FUNCTIONS:

S11



S22

