



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

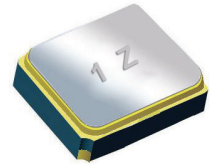


Surface Mount 1575.42MHz SAW Filter

AFS20A42-1575.42-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:

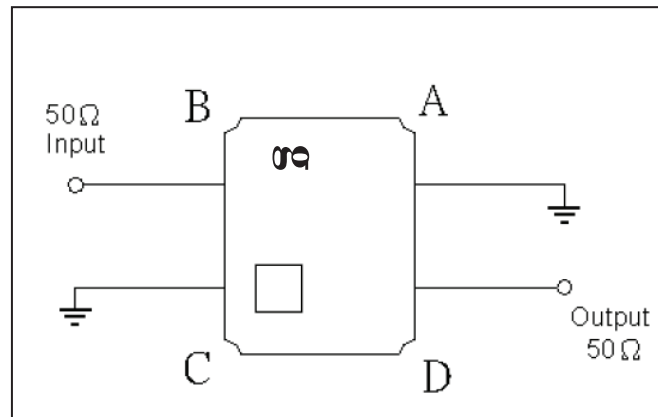
Maximum Ratings

| Item | Value |
|-----------------------------|-----------------|
| Input Power Level | +10 dBm max. |
| DC Permissive Voltage | 7.5V DC max. |
| Operating Temperature Range | -40°C to + 85°C |
| Storage Temperature Range | -40°C to + 95°C |

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|---|---------|---------|---------|----------|----------------------|
| Center Frequency (f_c) | | 1575.42 | | MHz | |
| Insertion Loss (IL) | | 1.20 | 1.60 | dB | 1574.42 ~ 1576.42MHz |
| 3-dB Bandwidth | | 42 | | MHz | |
| Amplitude Ripple | | 0.1 | 0.8 | dB | 1574.42 ~ 1576.42MHz |
| Worst-Case Input / Output Return Loss | | 20 | 10 | dB | 1574.42 ~ 1576.42MHz |
| Stop-band Attenuation (Referenced to 0.0 dB) | 20 | 34 | | dB | DC ~ 1000MHz |
| | 30 | 39 | | | 1625MHz ~ 1635MHz |
| | 25 | 32 | | | 1800MHz ~ 3000MHz |
| Source Impedance (Z_S) | | 50 | | Ω | See note # 1 |
| Load Impedance (Z_L) | | 50 | | Ω | See note # 1 |

Note #1: No matching network required for operation into 50 Ω 's

TEST CIRCUIT:

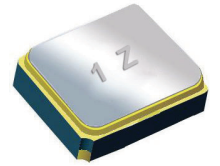


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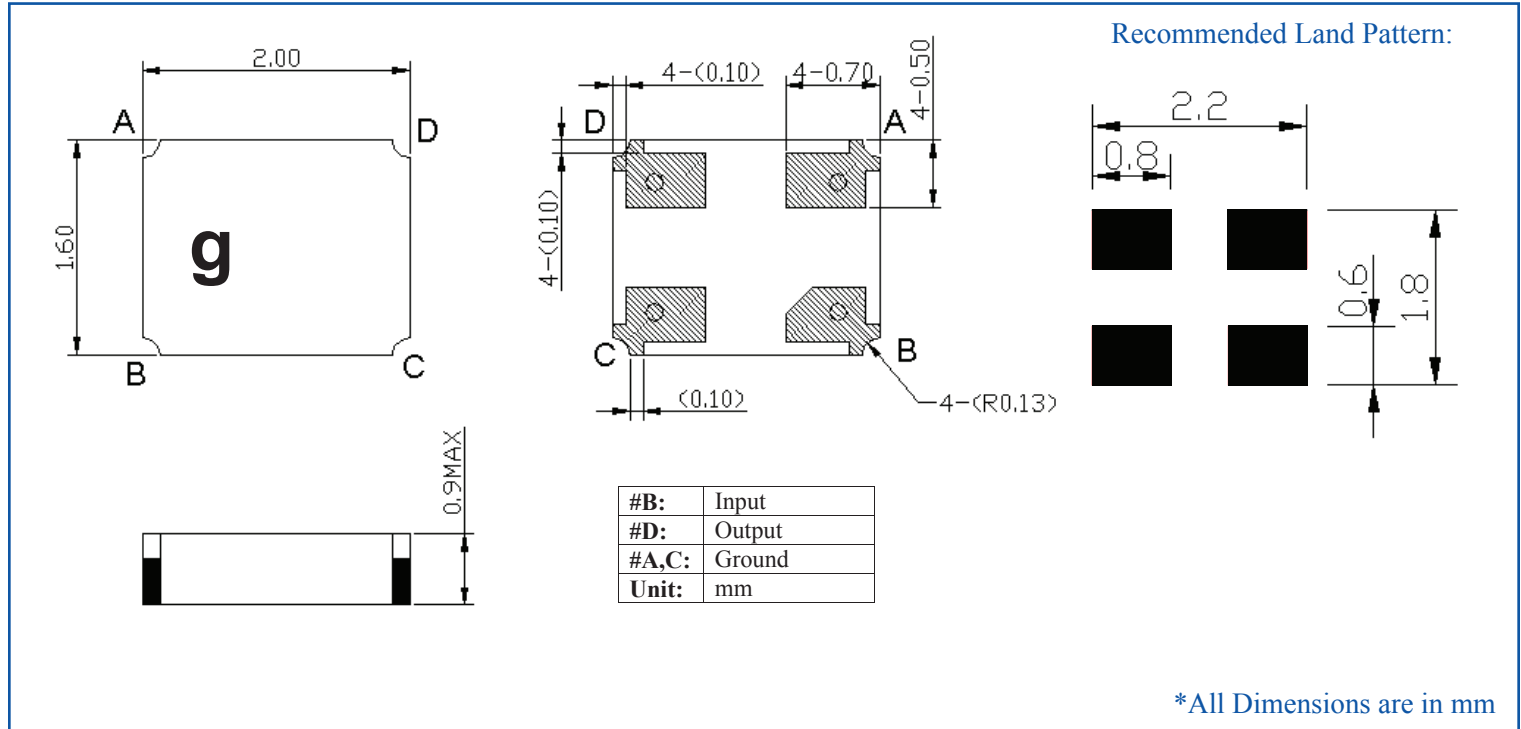


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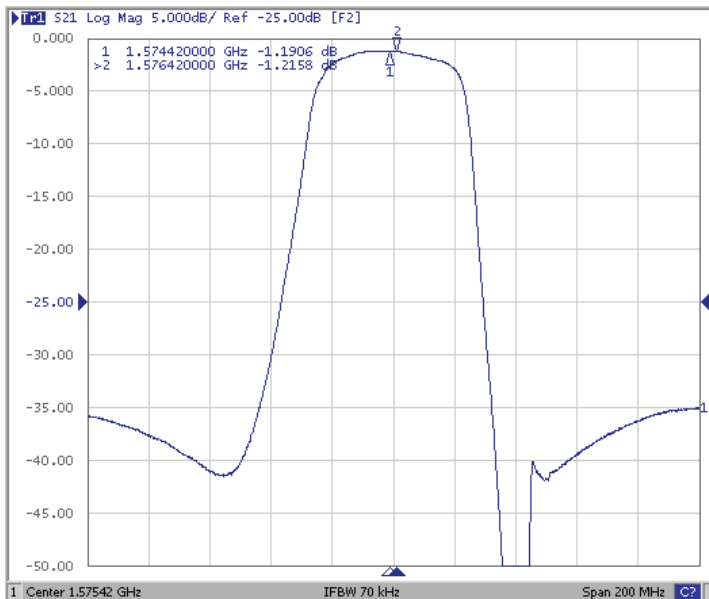
2.0 x 1.6 x 0.9 mm

OUTLINE DIMENSIONS:

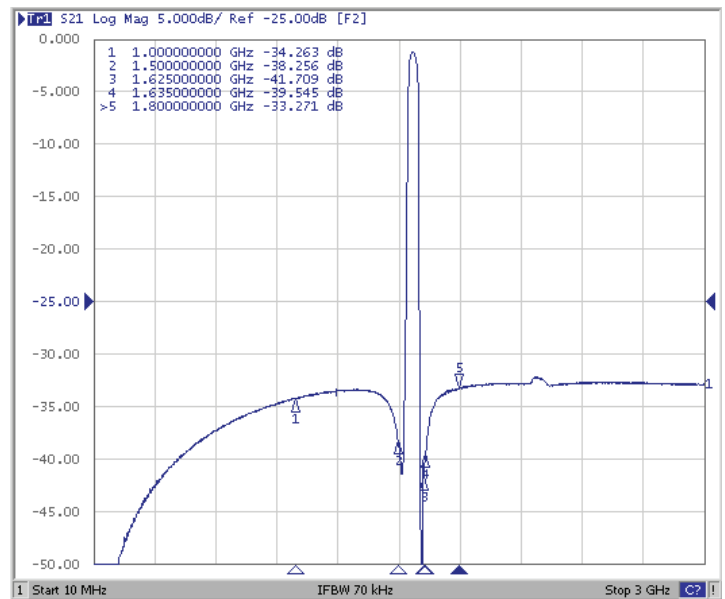


FREQUENCY CHARACTERISTICS:

Filter Frequency Response (Narrowband)



Filter Frequency Response (Wideband)

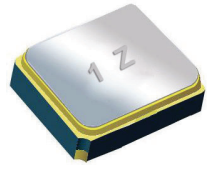


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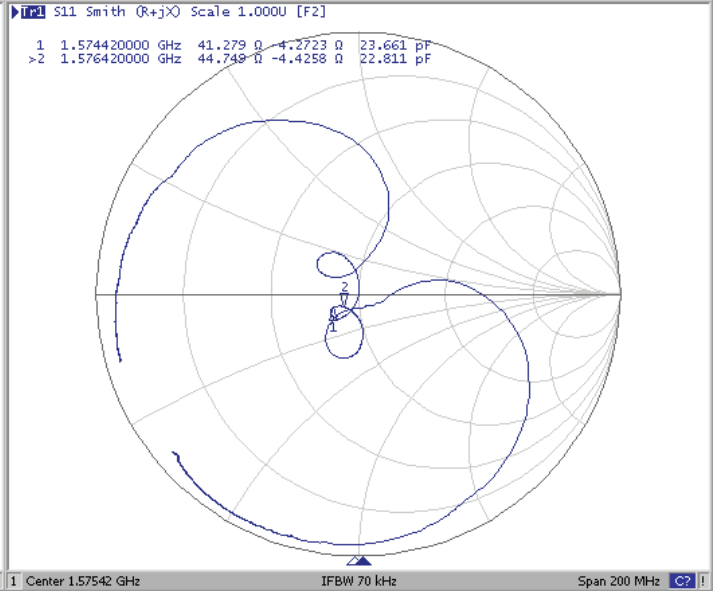
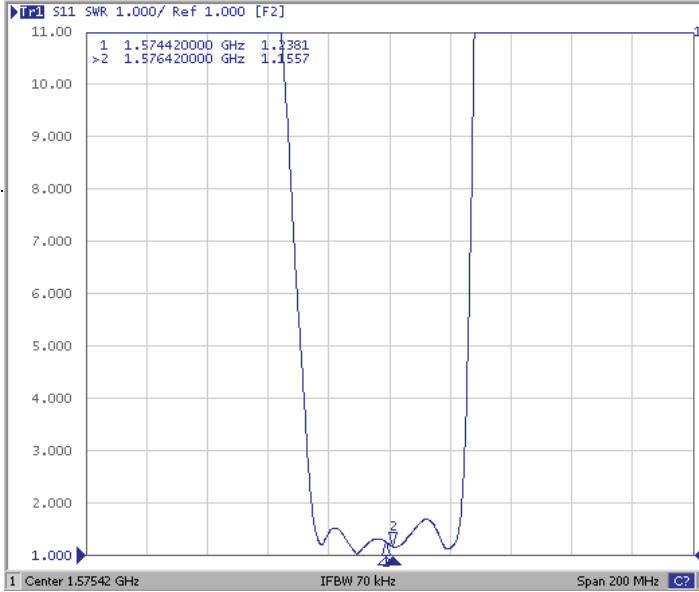
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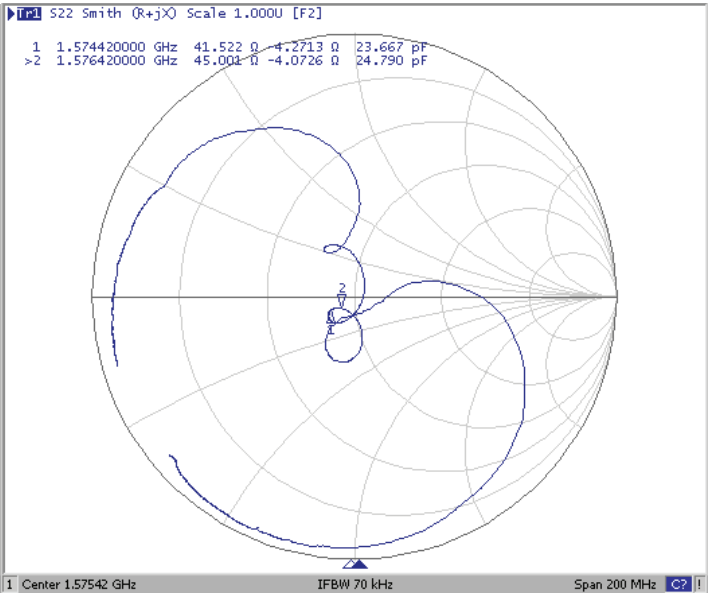
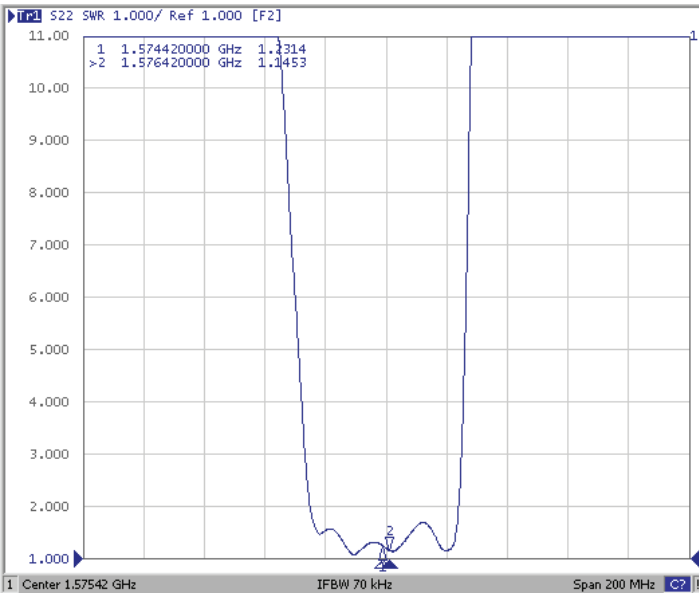
2.0 x 1.6 x 0.9 mm

REFLECTION FUNCTIONS

S11



S22



Note # 2: Detail S parameter information (.s2p file) available upon request

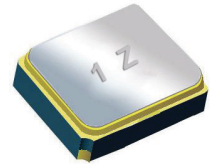


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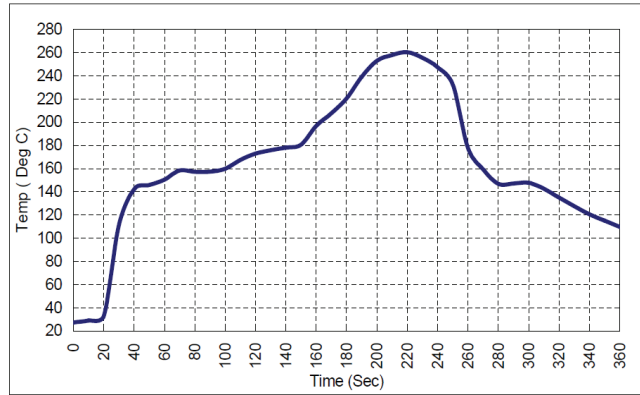


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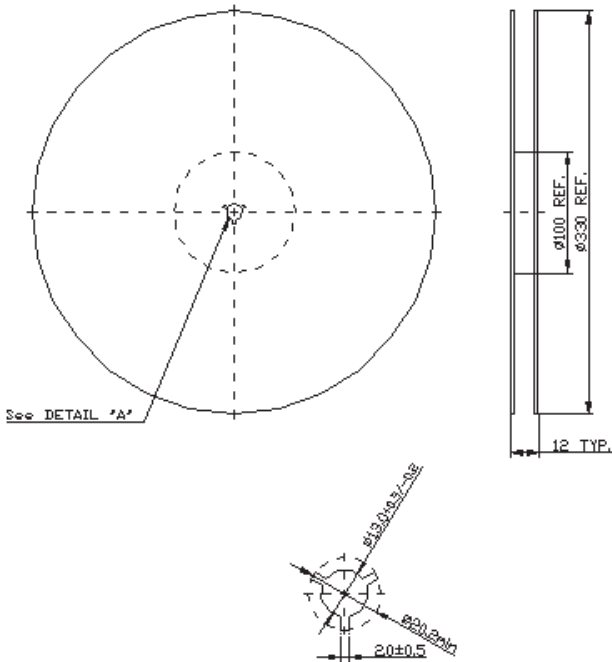
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REFLOW PROFILE:

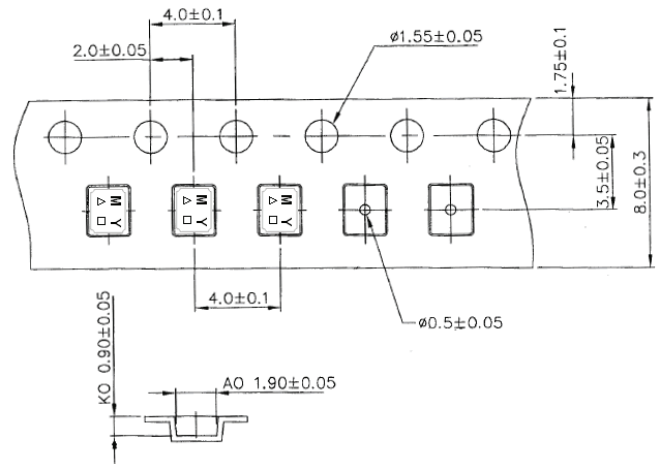


PACKAGING: 2000 Units/Reel

Reel Dimensions



Tape Dimensions



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