



Total Solution Provider in Saw Device

SA06214CV

62.5MHz IF SAW Filter
14.60 MHz Bandwidth
Revision 0: 10. July. 2009



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- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
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□ Electrical Characteristics

Maximum Ratings

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|------------|---------|
| Operation Temperature Range | °C | - | 25 | - |
| Storage Temperature Range | °C | -40 | - | 85 |
| Maximum DC Voltage | V | - | - | 10 |
| Maximum Input Power | dBm | - | - | 10 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | V | | | |
| Length x Width | mm ² | - | 13.3 x 6.5 | - |
| Height | mm | - | - | 1.8 |

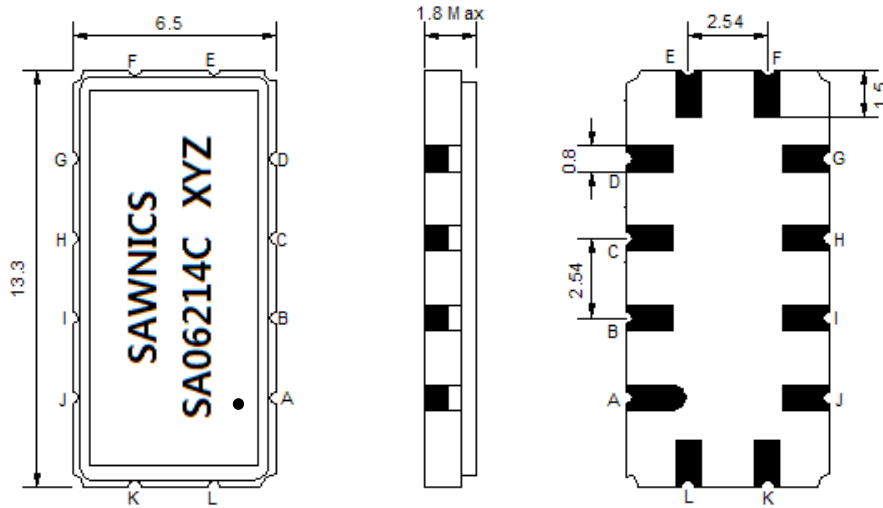
Electrical Specification

| | | | | |
|------------------------------------|--------|-------|-------|-------|
| Center Frequency (Fo) | MHz | - | 62.5 | - |
| Insertion Loss at Fo | dB | - | 23.8 | 25.0 |
| Group Delay Variation (Fo±6.82MHz) | ns | - | 30 | 80 |
| Absolute Delay Time at Fo | us | - | 1.7 | - |
| Temperature Coefficient | ppm/°C | - | -72 | - |
| Amplitude Ripple (Fo±6.82MHz) | dB | - | 0.5 | 1.0 |
| Bandwidth at -1dB | MHz | 14.40 | 14.60 | - |
| Bandwidth at -3dB | MHz | - | 15.10 | - |
| Bandwidth at -40dB | MHz | - | 17.10 | 17.30 |
| Relative Attenuation | | | | |
| Fo±8.5MHz | dB | 28 | 33 | - |
| Lower sidelobe | dB | 40 | 46 | - |
| Upper sidelobe | dB | 40 | 46 | - |

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

Those impedances could be modified with different impedance values and/or structures, if necessary.

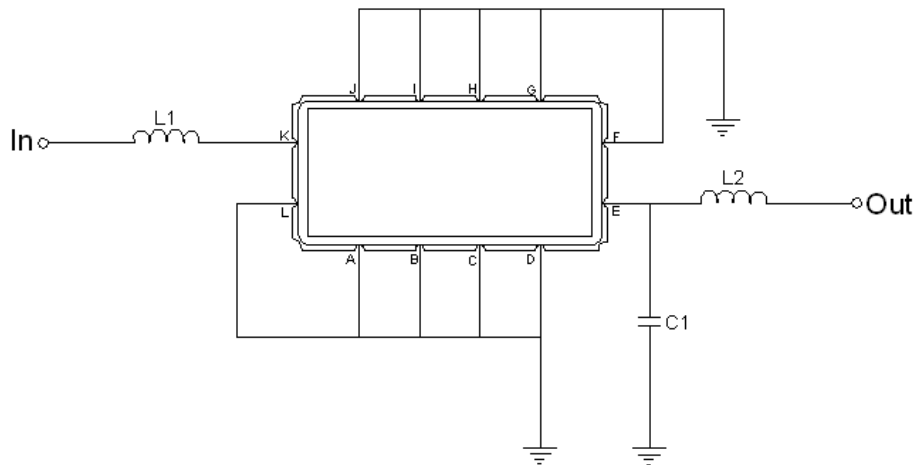
Package Dimensions



- ① SAWNICS: Brand
- ② SA06214C: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

| Pin Description | |
|------------------------------|--------|
| A, B, C, D, F, G, H, I, J, L | Ground |
| K | Input |
| E | Output |

Testing Environment



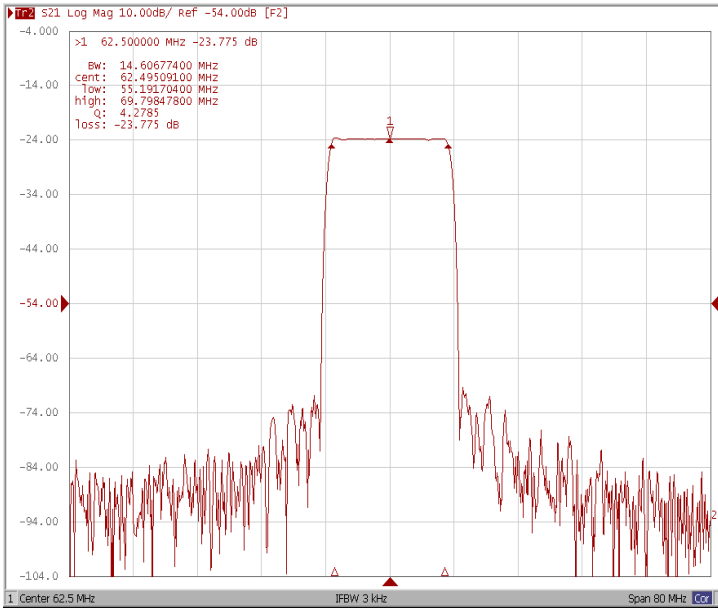
| Test Fixture & Values | |
|-----------------------|--------------------|
| Input | L1=220 nH |
| Output | L2=220 nH, C1=16pF |
| Source/Load Impedance | 50 Ω |



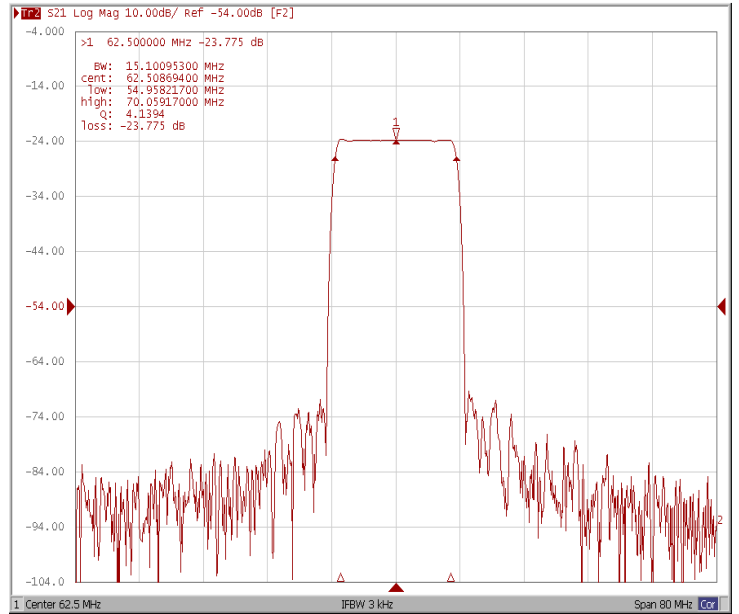
Frequency Characteristics

Frequency Response

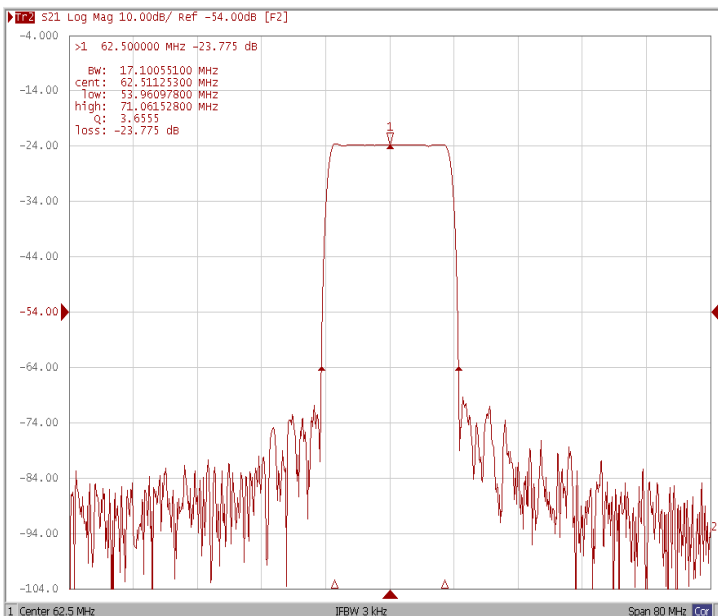
Bandwidth at -1.0 dB



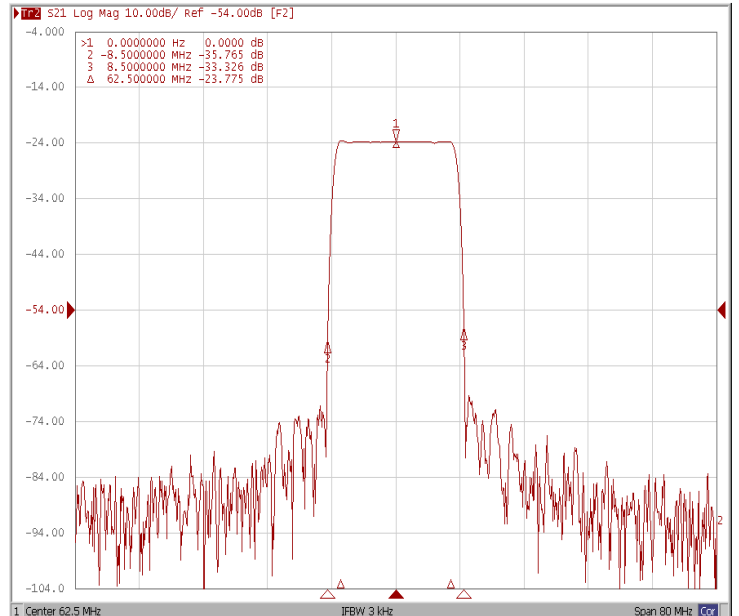
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Attenuation Fo ±8.5MHz

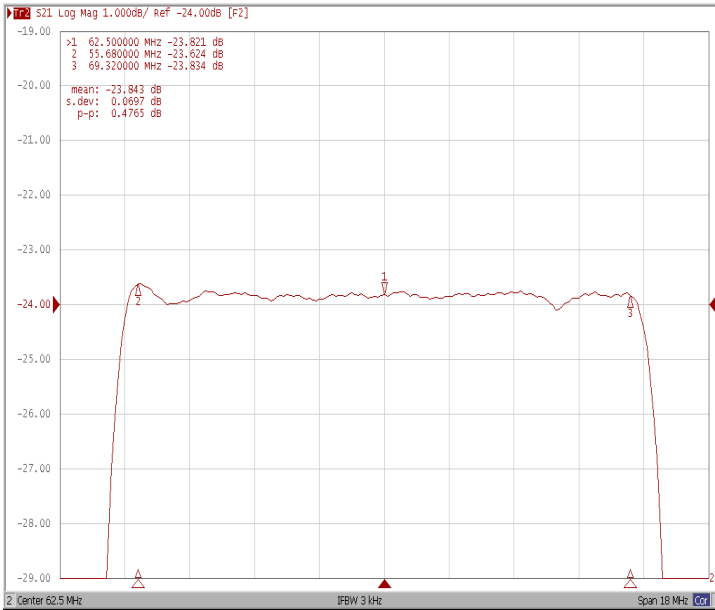




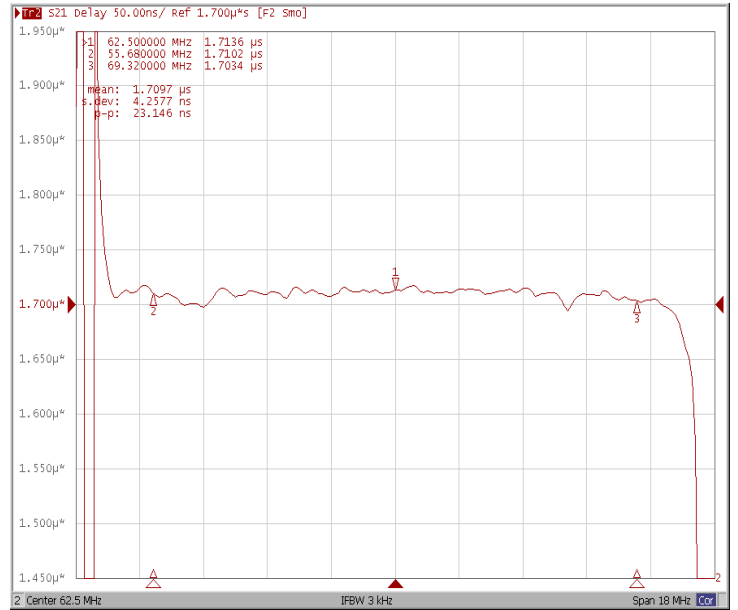
□ Frequency Characteristics

Frequency Response

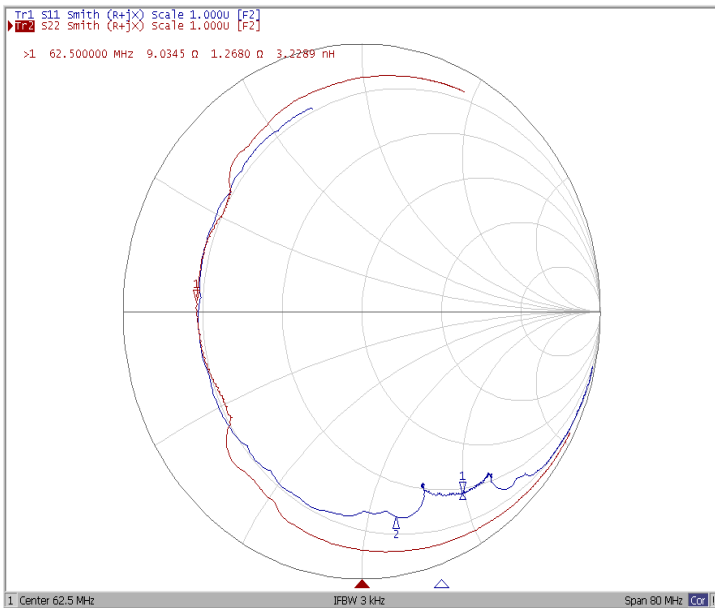
Ripple Variation Fo±6.82MHz



Group Delay Variation Fo±6.82MHz



Smith Chart



VSWR

