

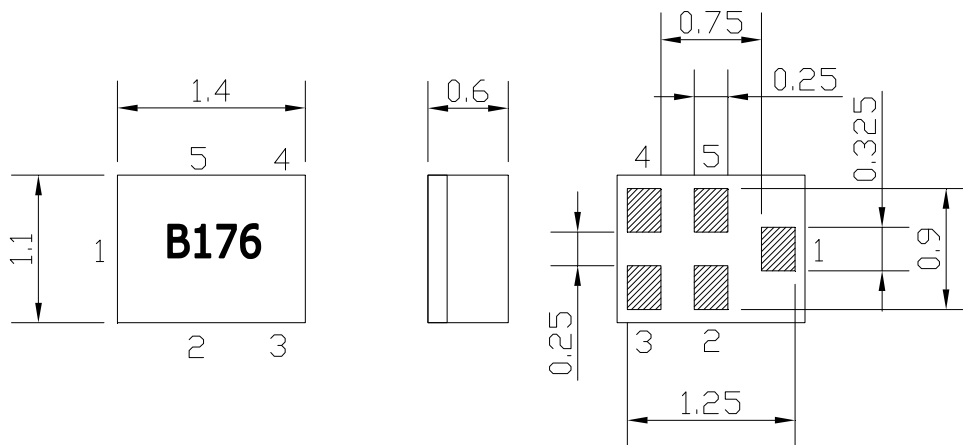
SAW Bandpass Filter F2G48



Features

- RF bandpass filter for Wi-Fi
- Matching 50Ω single-ended operation
- Usable passband 82MHz
- Ceramic Surface Mounted Device Package (1.4 mm × 1.1 mm)
- RoHS Compliant

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um
Ni Plating

| Pin Configuration | |
|-------------------|--------|
| 1 | Input |
| 4 | Output |
| 2, 3, 5 | Ground |

Maximum Ratings

| Parameter | Unit | Minimum | Typical | Maximum |
|-----------------------------|------|---------|---------|---------|
| Operating Temperature Range | ℃ | -30 | 25 | 85 |
| Storage Temperature Range | ℃ | -40 | 25 | 85 |
| Power Handling Capability | dBm | - | - | 24 |

Electrostatics Sensitive Device (ESD)

| | | | | |
|--|---|-----------|------------|-----|
| | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | F2G48 | |
| | | Rev. Date | 2017-09-05 | |
| | | Rev. | AS01 | 1/6 |

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Specifications

Fc = 2442 MHz

| | Minimum | Typical | Maximum | Unit |
|--------------------------------------|---------|---------|---------|--------|
| Center Frequency (Fc) | - | 2442 | - | MHz |
| Insertion Loss | | | | |
| 2402.5 ~ 2421.5 MHz | - | 2.5 | 2.8 | dB |
| 2407.5 ~ 2426.5 MHz | - | 2.2 | 2.5 | |
| 2412.5 ~ 2471.5 MHz | - | 1.8 | 2.1 | |
| 2457.5 ~ 2476.5 MHz | - | 1.8 | 2.1 | |
| 245625 ~ 2481.5 MHz | - | 2.2 | 2.5 | |
| Amplitude Ripple (2401 ~ 2483 MHz) | - | 1.5 | 2.0 | dB p-p |
| VSWR (2401 ~ 2483 MHz) | - | 1.7 | 2.1 | |
| Attenuation | | | | |
| 800 ~ 2300 MHz | 25 | 30 | - | dB |
| 2300 ~ 2370 MHz | 35 | 38 | - | |
| 2370 ~ 2380 MHz | 38 | 43 | - | |
| @ 2390MHz | 6 | 8 | - | |
| 2500 ~2510 MHz | 20 | 25 | - | |
| 2510 ~ 2570 MHz | 37 | 40 | - | |
| 2555~ 2605 MHz | 32 | 35 | - | |
| 2605 ~ 2655 MHz | 30 | 32 | - | |
| 2690 ~ 4000 MHz | 20 | 30 | - | |
| 4000 ~ 5000 MHz | 20 | 30 | - | |

Notes :

- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

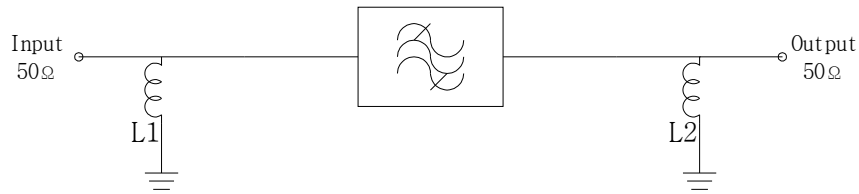
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| | | Rev. | AS01 | 2/6 |

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Matching Schematic

(Actual matching values may vary due to PCB layout and parasitics)



L1, L2 = 10 nH

Marking Configuration

B¹⁾ 176²⁾

1) Series Number

2) Date Code

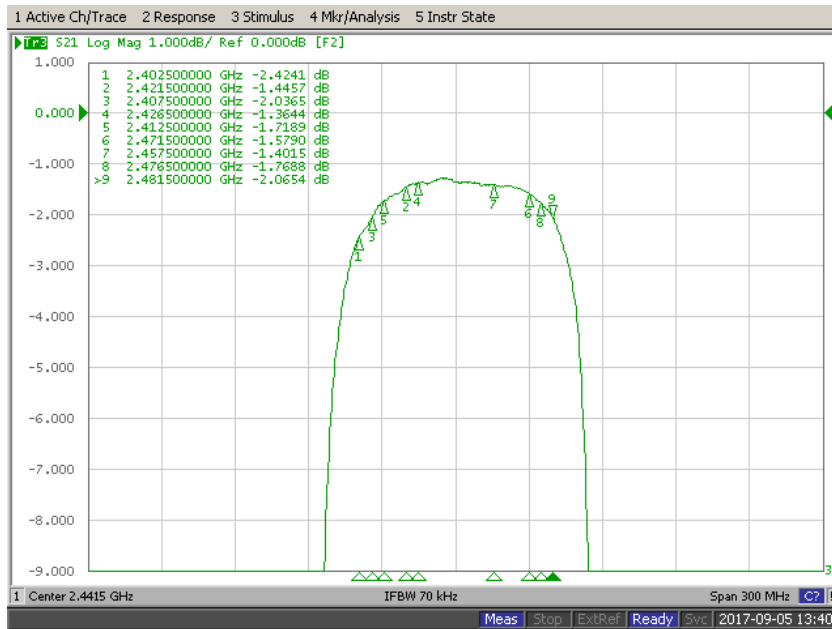
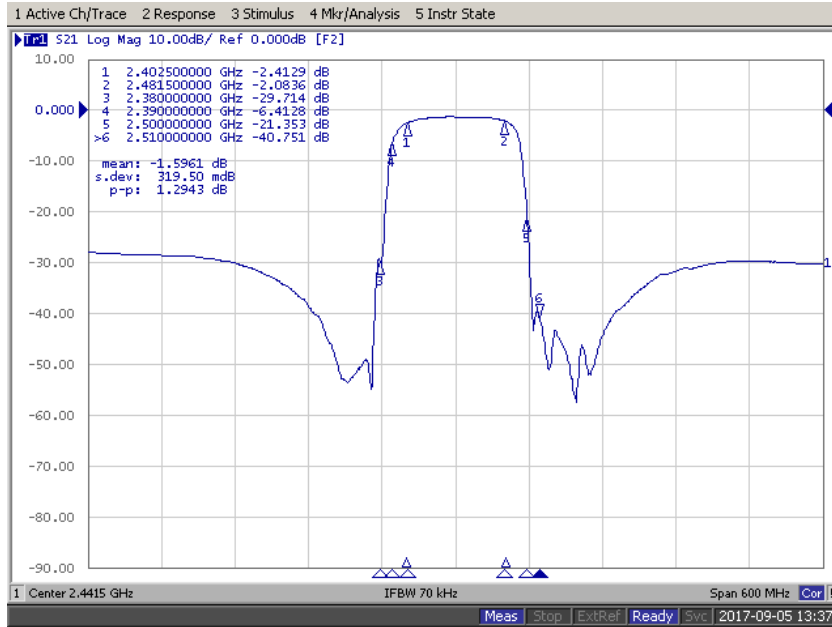
* Ink or Laser Marking available

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| | | Rev. | AS01 | 3/6 |

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Typical Performance (at 25 °C)

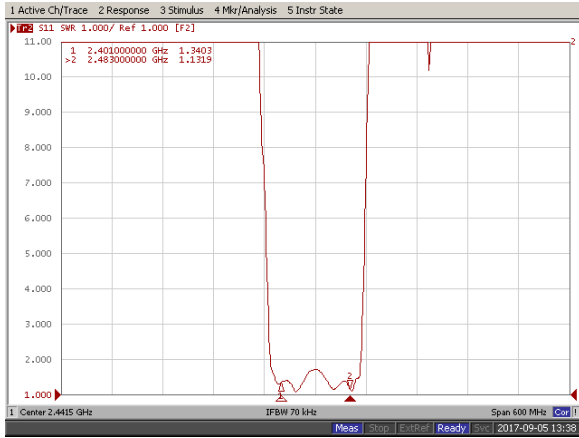


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| | | Rev. | AS01 | 4/6 |

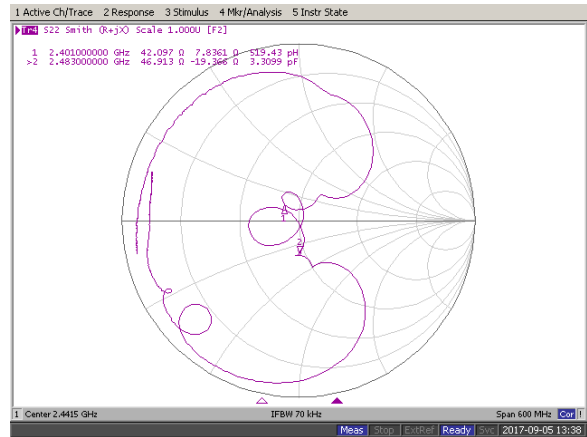
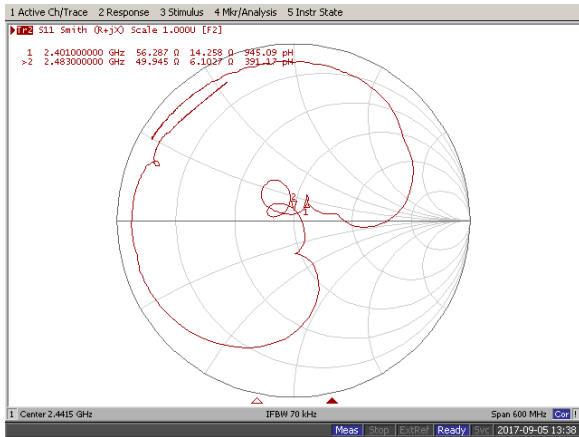
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Input / Output VSWR Charts



Input / Output Smith Charts



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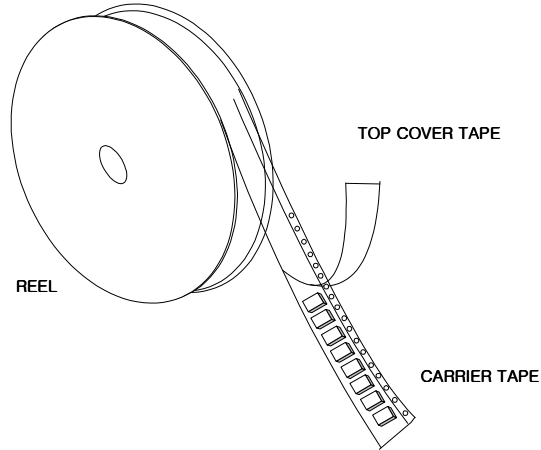
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| Rev. Date | 2017-09-05 | |
| Rev. | AS01 | 5/6 |

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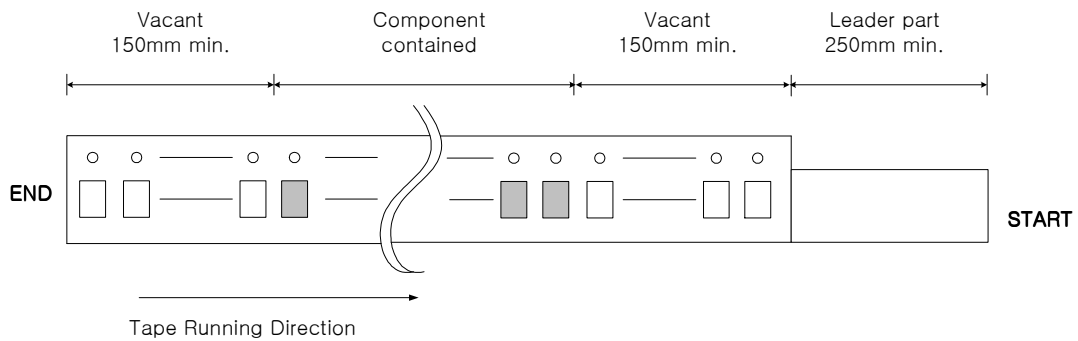
Packing Specification

1. Reeling Quantity : 3000 pcs / 7" reel
2. Taping Structure : The tape shall be wound around the reel in the direction shown below.



Tape Specification

1. Leader part and vacant position specification

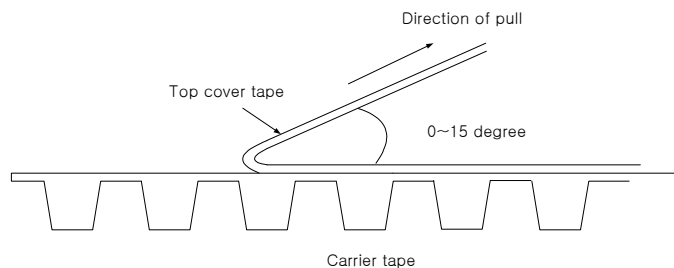


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g



| | | | | |
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