

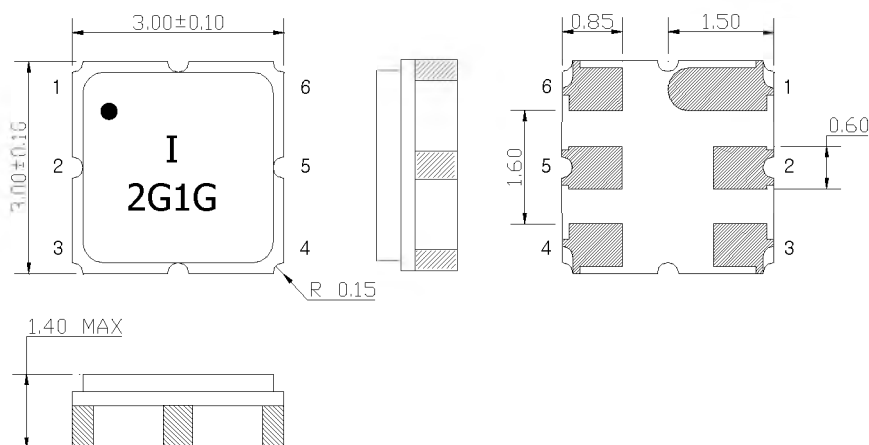
# SAW Bandpass Filter F2G1G



## Features

- RF bandpass filter
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device Package ( 3.0 mm × 3.0 mm )
- RoHS Compliant

## Package Dimension



Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> Ceramic

Lid : Kovar, Ni Plated

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

| Pin Configurations |             |
|--------------------|-------------|
| 2                  | Input       |
| 5                  | Output      |
| 1, 3, 4, 6         | Case ground |

## Maximum Ratings

| Parameter                   | Unit | Minimum | Typical | Maximum |
|-----------------------------|------|---------|---------|---------|
| Operating Temperature Range | ℃    | -20     | 25      | 70      |
| Storage Temperature Range   | ℃    | -40     | 25      | 85      |
| Power Handling Capability   | dBm  | -       | -       | 10      |

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## Specifications

$F_c = 2155 \text{ MHz}$

|                                      | Minimum | Typical | Maximum | Unit   |
|--------------------------------------|---------|---------|---------|--------|
| Center Frequency ( $F_c$ )           | -       | 2155    | -       | MHz    |
| Insertion Loss ( 2110 ~ 2200 MHz )   | -       | 2.7     | 5.0     | dB     |
| Amplitude Ripple ( 2110 ~ 2200 MHz ) | -       | 1.8     | 3.0     | dB p-p |
| VSWR ( 2110 ~ 2200 MHz )             | -       | 1.8     | 2.5     |        |
| Attenuation                          |         |         |         |        |
| 10 ~ 2060 MHz                        | 25      | 26      | -       | dB     |
| 2250 ~ 3200 MHz                      | 25      | 33      | -       |        |
| Input/Output Impedance               |         | 50      |         | Ohms   |

### Notes :

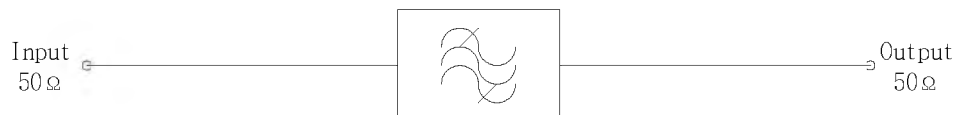
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

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## Matching Schematic

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



## Marking Configuration

1)  
●  
I<sup>2)</sup>  
2G1G<sup>3)</sup>

1) Pad Number 1 Index

2) Manufacturer name

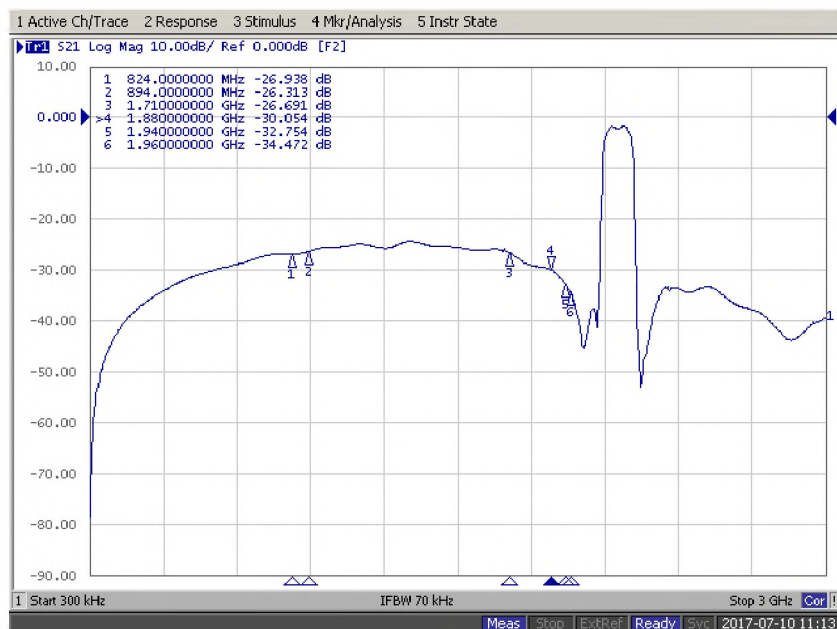
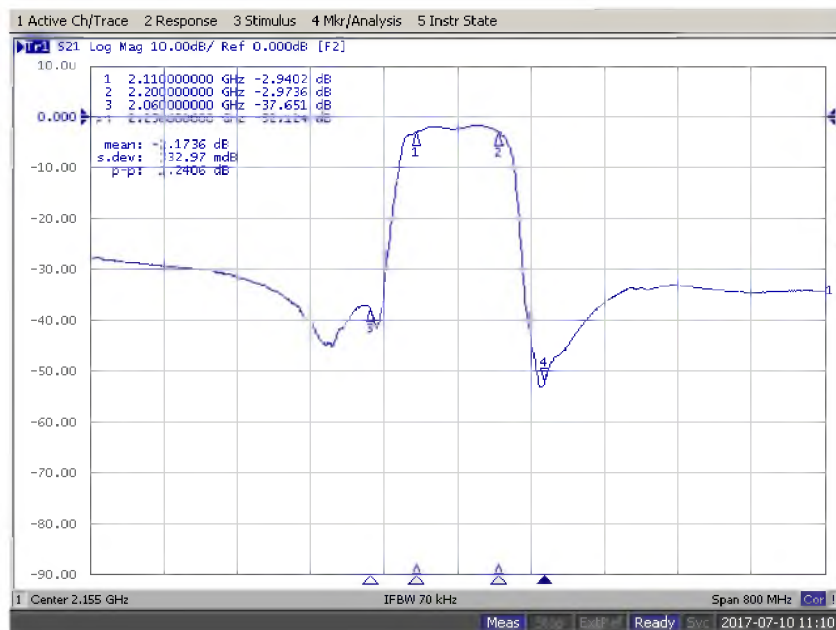
3) Marking Number

\* Ink or Laser Marking available

# SAW Bandpass Filter F2G1G



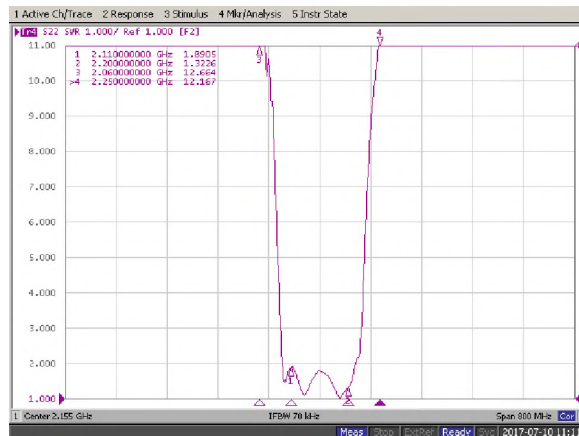
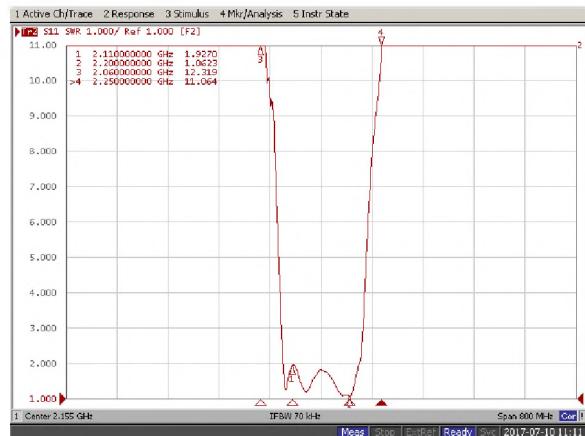
## Typical Performance ( at 25°C )



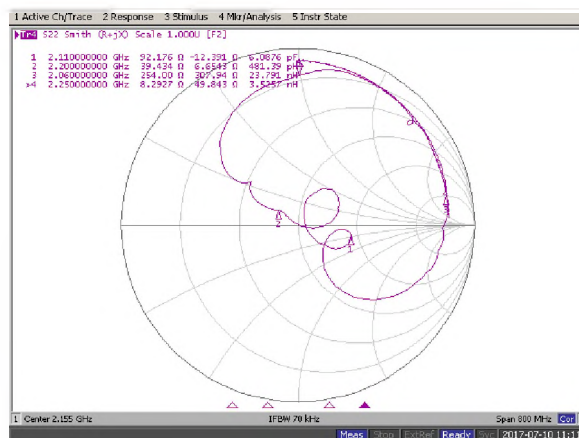
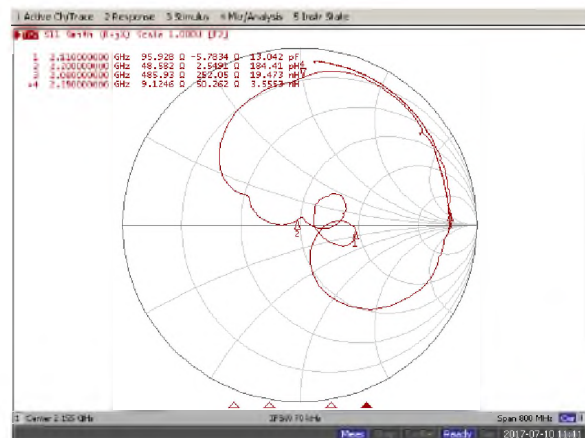
# SAW Bandpass Filter F2G1G



## Input / Output VSWR



## Input / Output Smith Charts

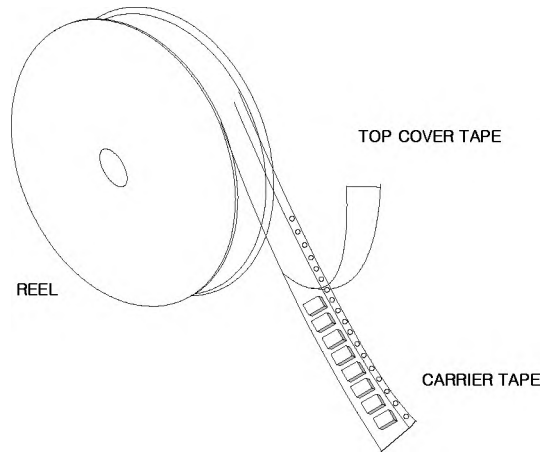


# SAW Bandpass Filter F2G1G



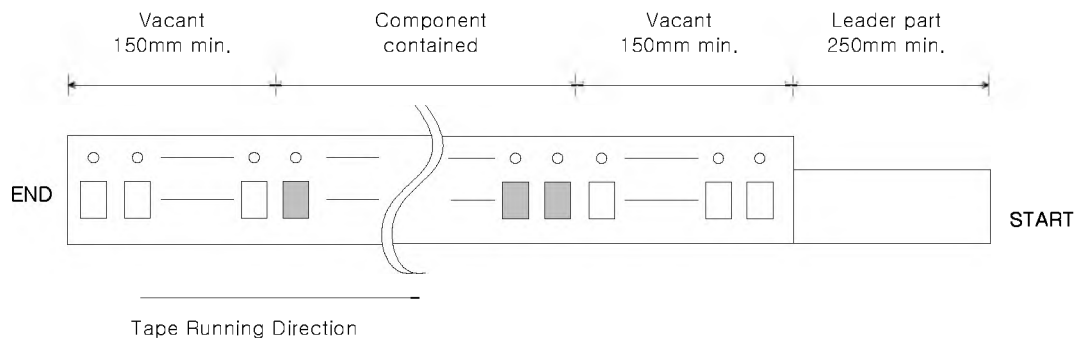
## Packing Specifications

1. Reeling Quantity : 3000 pcs / 13" reel ( or 1000 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

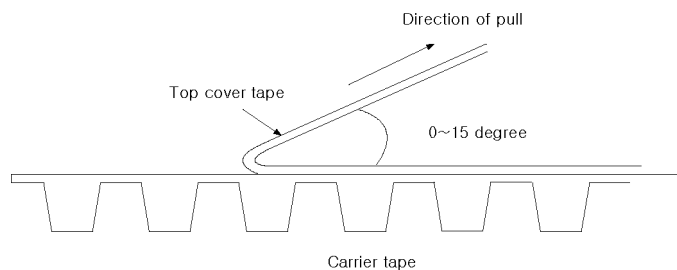


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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





**SAW**  
DEVICE

Technical drawing of a mechanical part, showing a side view and a top view. The side view (left) shows a profile with dimensions: 0.3 (width of the top flange), 1.75 (height of the top flange), C (height of the main body), E (total height), and D (width of the base). The top view (right) shows a rectangular plate with a series of circular holes. The first hole has a diameter of  $\phi 1.5$ . The distance between the first and second hole is 2, and the distance between the second and third hole is 4. The distance between the first and second square hole is A, and the distance between the second and third square hole is F. The distance between the first and second square hole is also labeled B. The distance between the first and second square hole is also labeled  $\phi 1.5$ .

|   |                 |
|---|-----------------|
| A | $3.40 \pm 0.1$  |
| B | $3.40 \pm 0.1$  |
| C | $7.25 \pm 0.1$  |
| D | $1.70 \pm 0.1$  |
| E | $12.00 \pm 0.1$ |
| F | $8.00 \pm 0.1$  |

A diagram showing a horizontal tape with a series of circular holes along its top edge. The tape is divided into four rectangular sections by vertical lines. The second and third sections from the left contain a square frame with rounded corners. Inside the second frame, there is a black dot labeled 'I' and the text '2G1G' below it. Similarly, the third frame also contains a black dot labeled 'I' and the text '2G1G' below it. Below the tape, a long horizontal arrow points to the right, with the text 'Tape Running Direction' centered underneath it.