

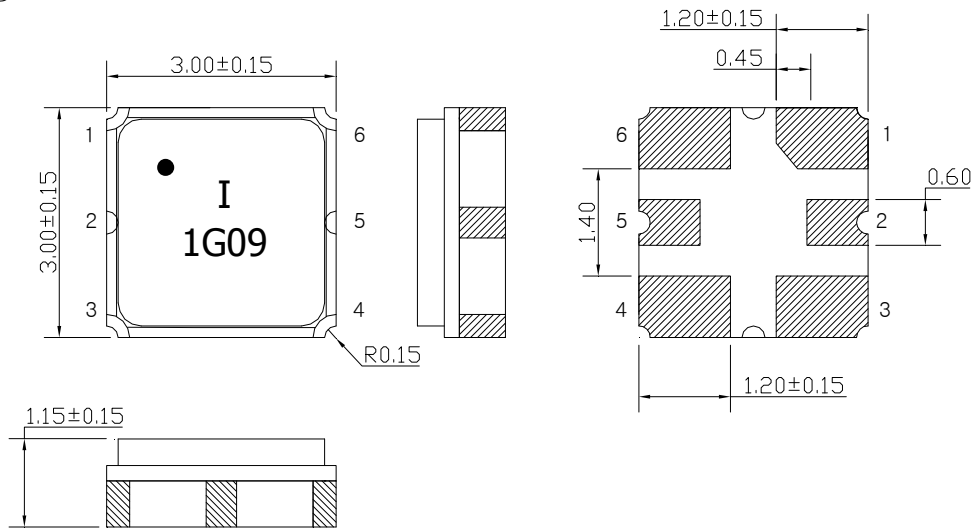
SAW Bandpass Filter F1G09



Features

- RF Bandpass Filter
- No impedance matching require for operation at 50 Ω
- Ceramic Surface Mounted Device Package (3.0 mm * 3.0 mm)
- Single-ended Operation
- 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 Configurations

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

Maximum Ratings

| Parameters | Unit | Minimum | Typical | Maximum |
|-----------------------------|------|---------|---------|---------|
| Operating Temperature Range | ℃ | -40 | 25 | 85 |
| Storage Temperature Range | ℃ | -45 | 25 | 85 |
| Power Handling Capability | dBm | - | - | 15 |

Electrostatics Sensitive Device (ESD)

| | | | | |
|--|---|-----------|-------------|-----|
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Specifications

Fc = 1087 MHz

| | Minimum | Typical | Maximum | Unit |
|--|---------|---------|---------|--------|
| Center Frequency (Fc) | - | 1087 | - | MHz |
| Insertion Loss (1062 ~ 1112 MHz) | - | 3.0 | 3.5 | dB |
| Amplitude Ripple (1062 ~ 1112 MHz) | - | 0.7 | 1.5 | dB p-p |
| Absolute Group Delay (1062 ~ 1112 MHz) | - | 6 | 30 | ns |
| Attenuation | | | | |
| 0.3 ~ 960 MHz | 40 | 47 | - | dB |
| 960 ~ 1037 MHz | 5 | 12 | - | |
| 1149 ~ 1240 MHz | 15 | 21 | - | |
| 1240 ~ 1410 MHz | 40 | 48 | - | |
| 1700 ~ 2500 MHz | 30 | 39 | - | |
| 2500 ~ 3000 MHz | 20 | 32 | - | |
| 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
- 3) All attenuation measurements are measured relative to insertion loss

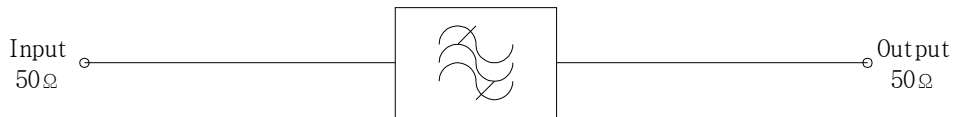
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Matching Schematic

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



Marking Configuration

- ¹⁾
I²⁾
1G09³⁾

- 1) Pad Number 1 Index
- 2) Manufacturer name
- 3) Marking Number

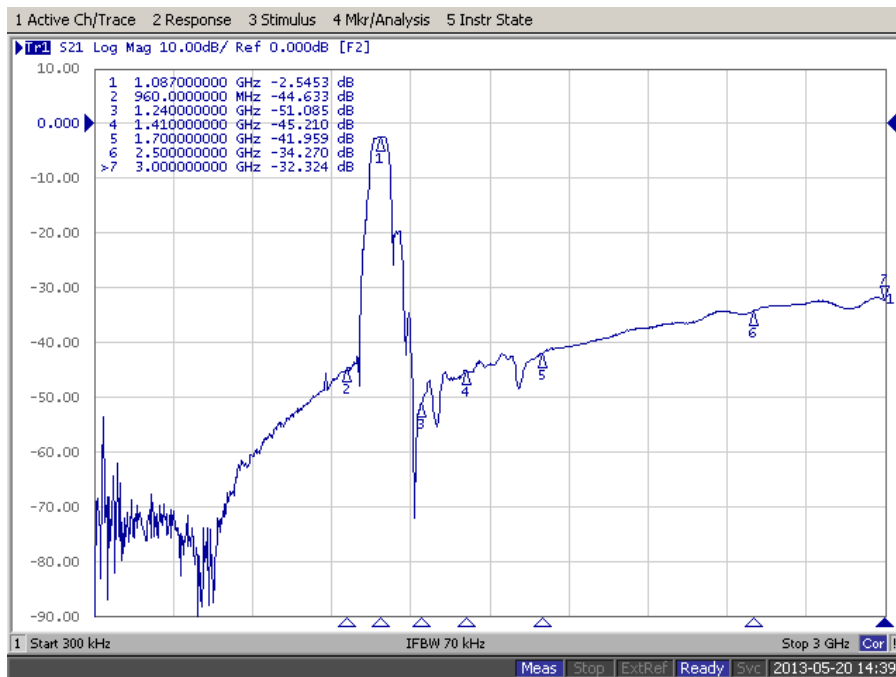
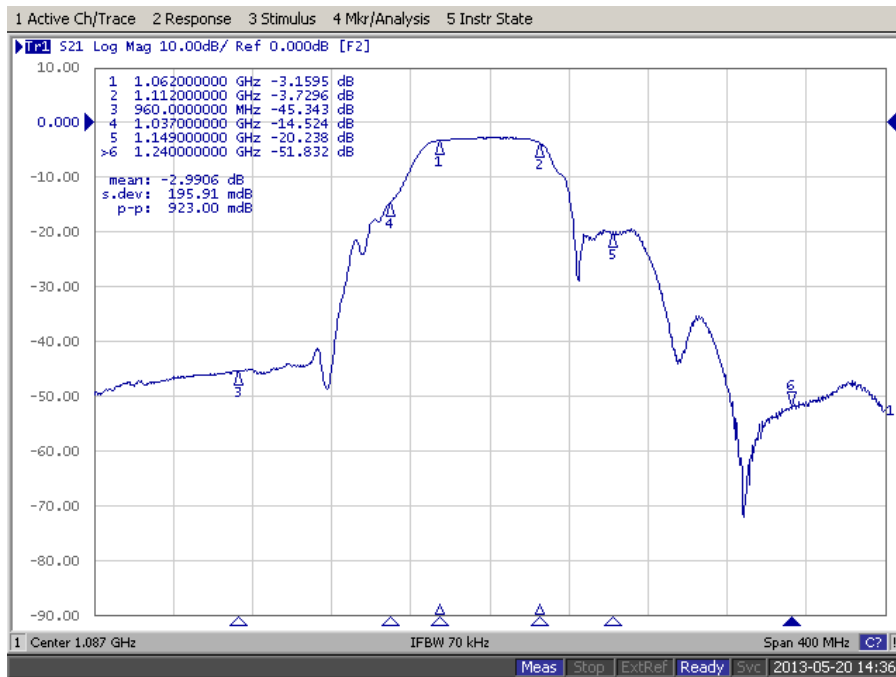
* Ink or Laser Marking available


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Typical Performance (at 25°C)

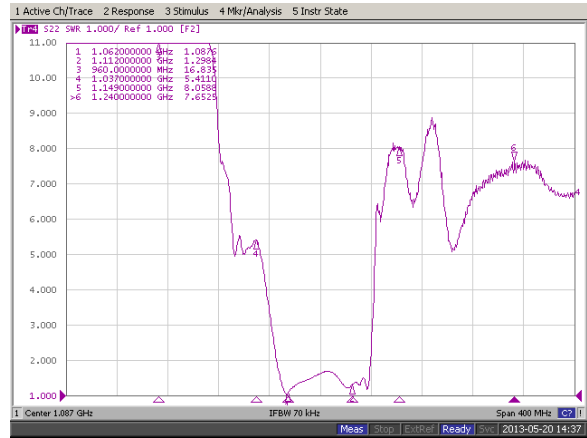
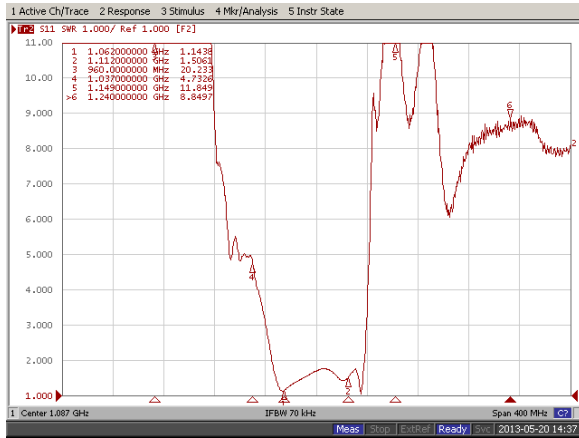


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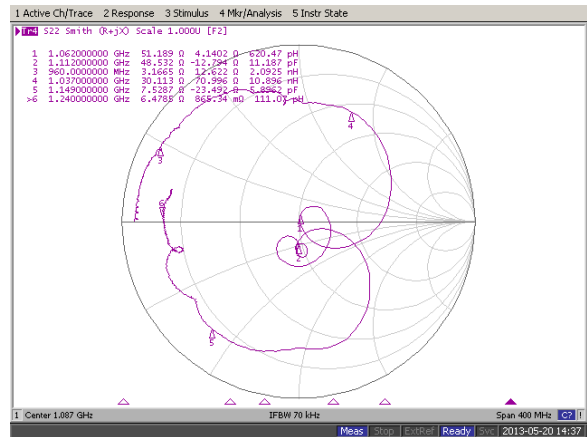
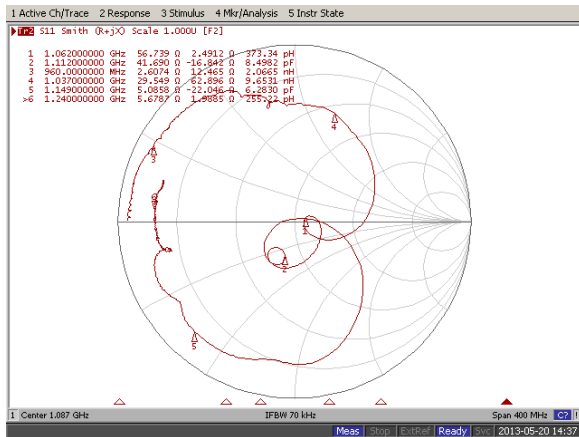
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Input / Output VSWR Charts



Input / Output Smith Charts



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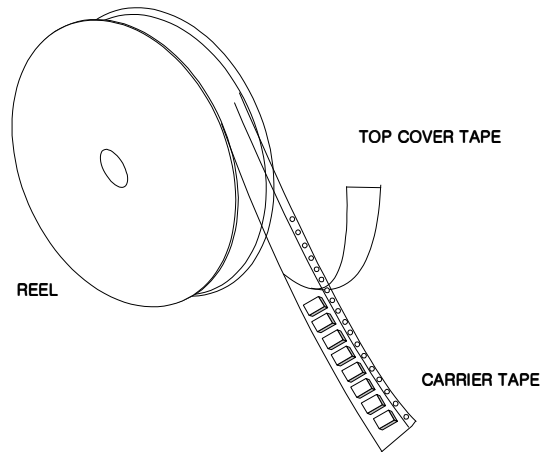
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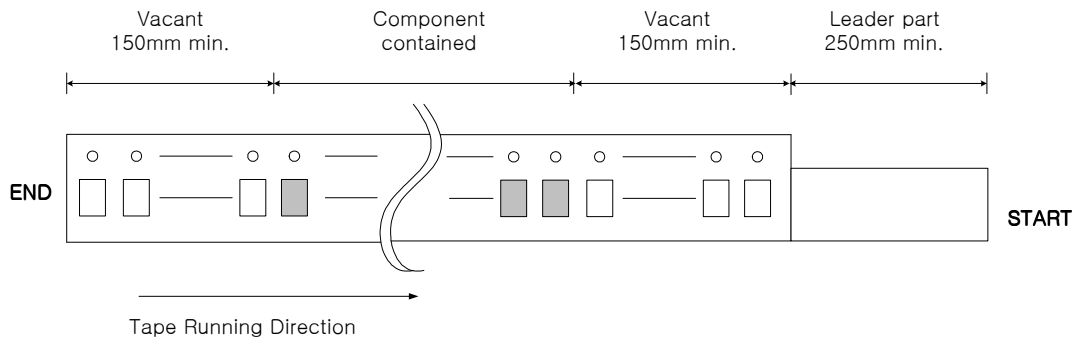
Packing Specifications

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

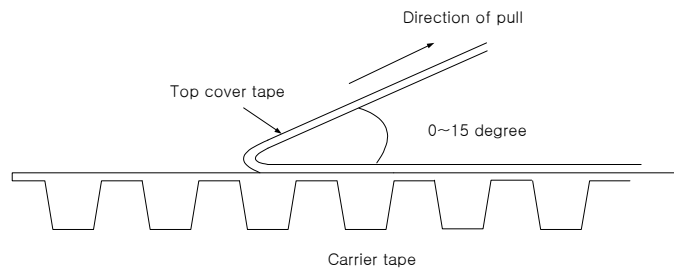


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

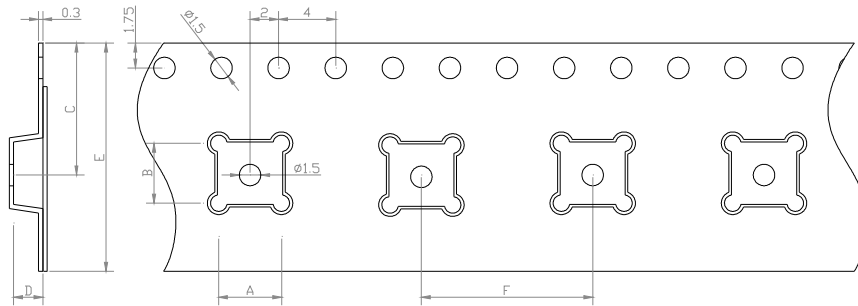


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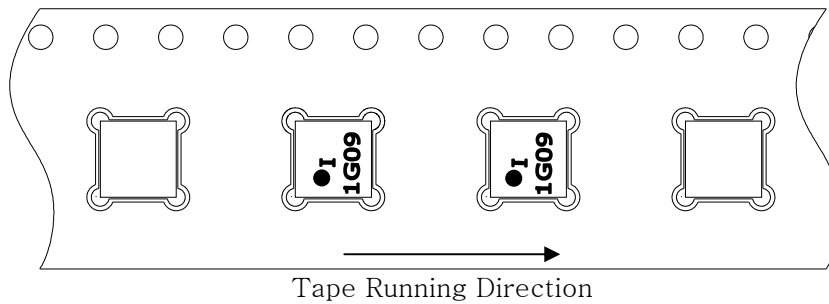


Carrier Tape Dimensions [unit : mm]

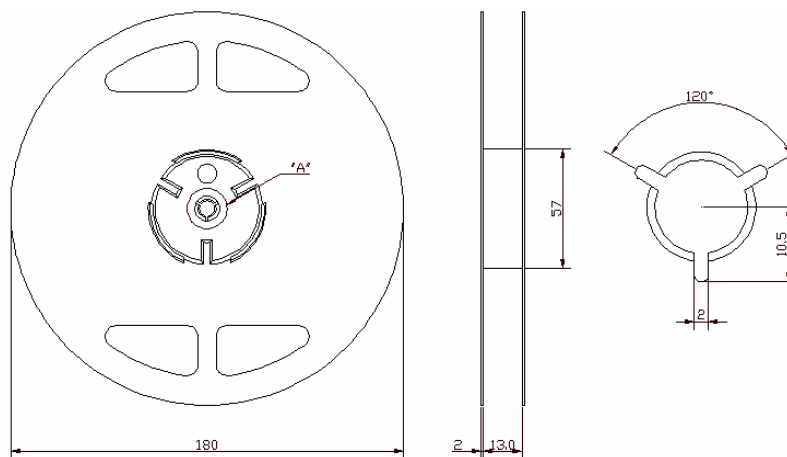



| | |
|---|-------------|
| A | 3.40 ± 0.1 |
| B | 3.40 ± 0.1 |
| C | 7.25 ± 0.1 |
| D | 1.70 ± 0.1 |
| E | 12.00 ± 0.1 |
| F | 8.00 ± 0.1 |

Part Direction



Reel Dimensions [unit : mm]



| | | | | |
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