

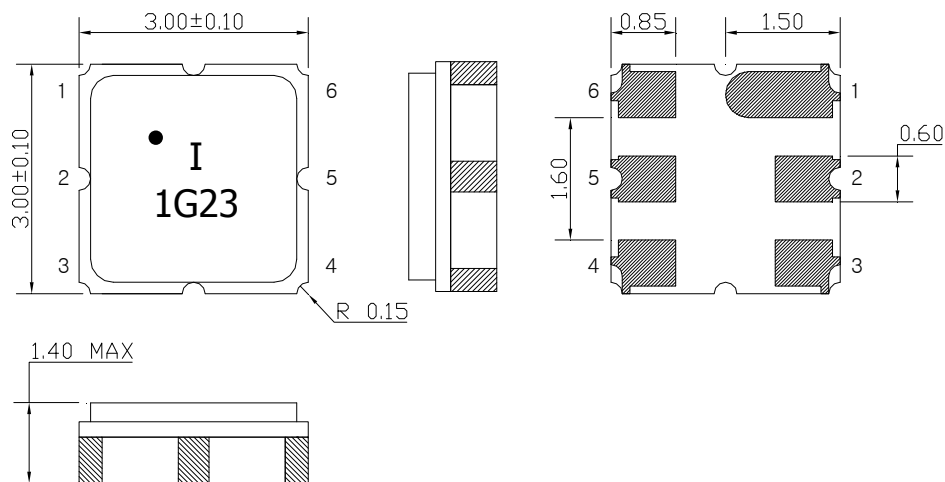
SAW Bandpass Filter F1G23



Features

- RF Bandpass Filter
- High attenuation
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (3.0 mm * 3.0 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 μm, Over a 1.27 ~ 8.89 μm Ni Plating

Pin Configuration

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

Maximum Ratings

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

Electrostatics Sensitive Device (ESD)

| | | | | |
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Specifications

Fc = 1268.52 MHz


Terminating source impedance : 50Ω

Terminating load impedance : 50Ω

| | Minimum | Typical | Maximum | Unit |
|-------------------------------------|---------|---------|---------|-------|
| Center Frequency (Fc) | - | 1268.52 | - | MHz |
| Insertion Loss (In Fc +/- 10 MHz) | - | 1.7 | 2.0 | dB |
| Amplitude Ripple (In Fc +/- 10 MHz) | - | 0.5 | 1.5 | dBp-p |
| VSWR (In Fc +/- 10 MHz) | - | 1.3 | 1.8 | |
| Relative Attenuation | | | | |
| At 1227.52 MHz | 37 | 42 | - | dB |
| At 1309.52 MHz | 50 | 60 | - | |
| 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⁾
I²⁾
1G23³⁾

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

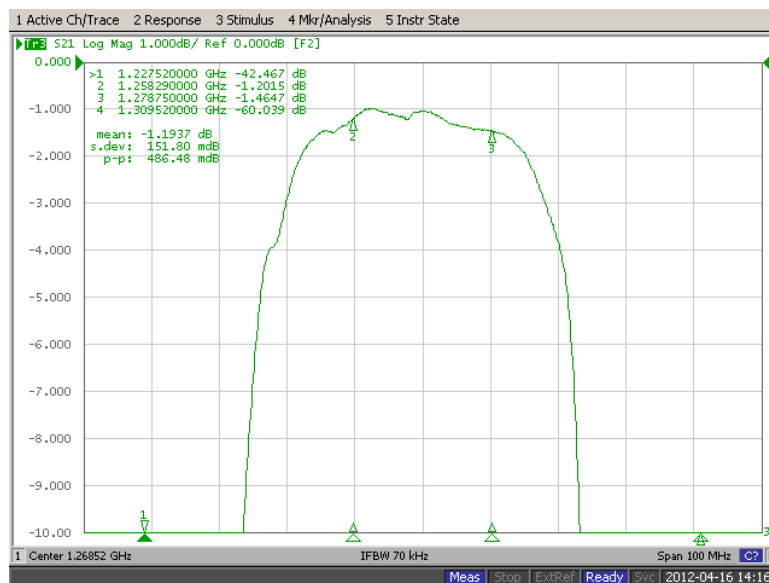
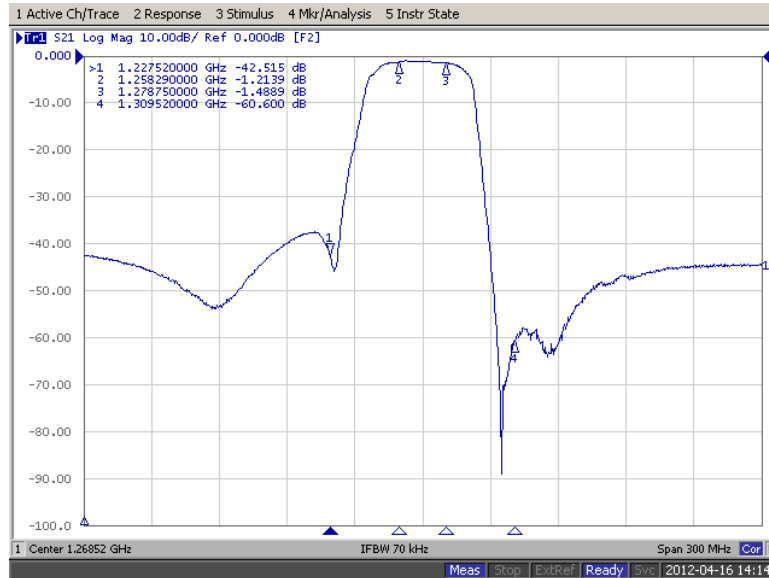
* Ink or Laser Marking available

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Typical Performance (at 25°C)



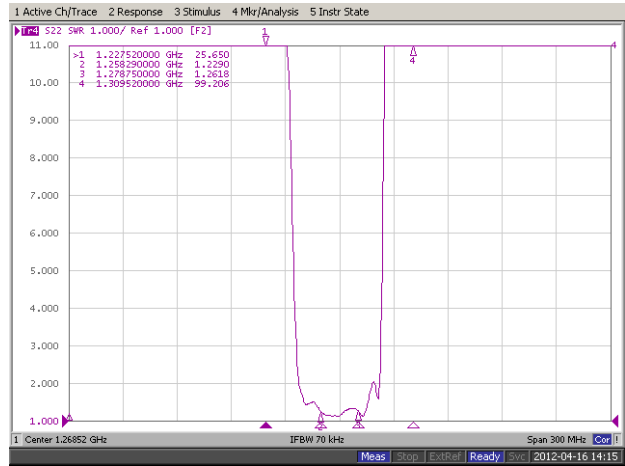
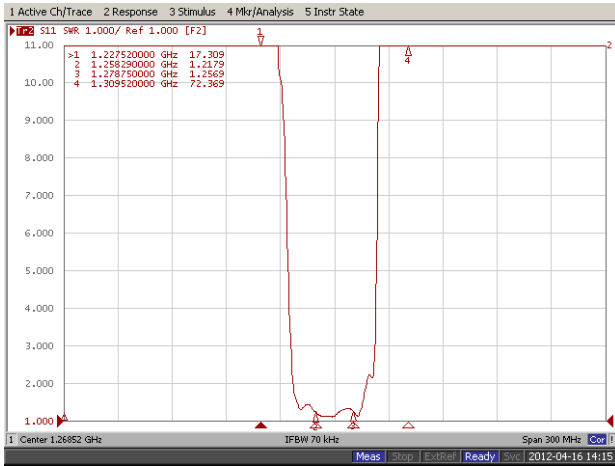
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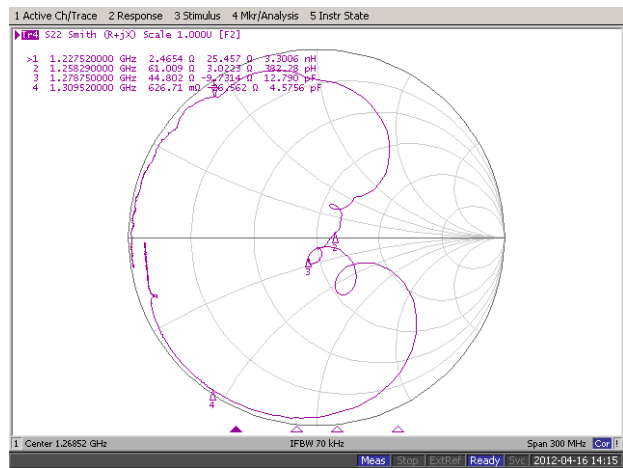
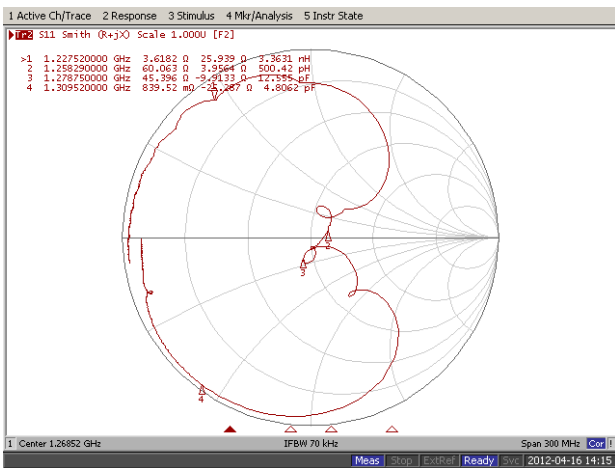
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Input / Output VSWR Charts



Input / Output Smith Charts



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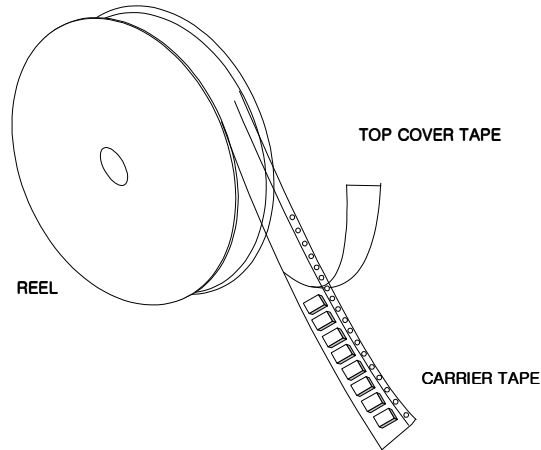
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| Part No. | FIG23 | |
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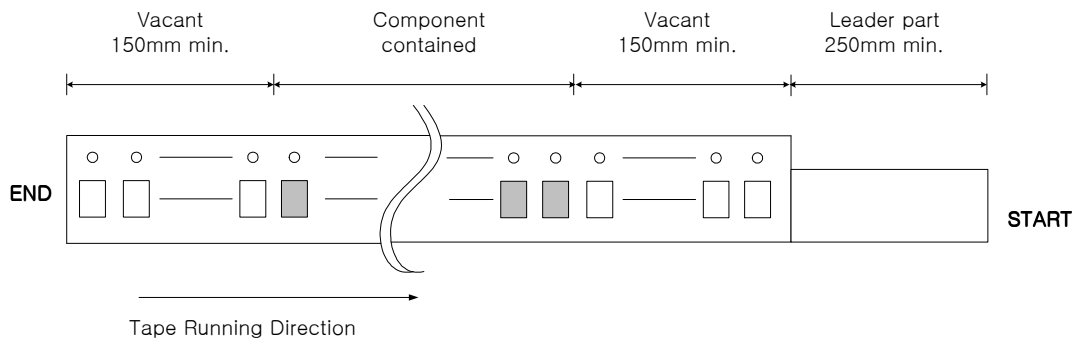
Packing Specification

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

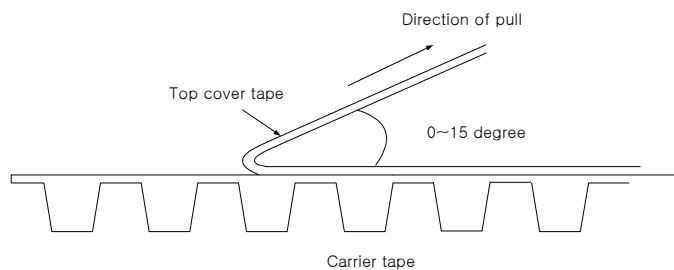


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

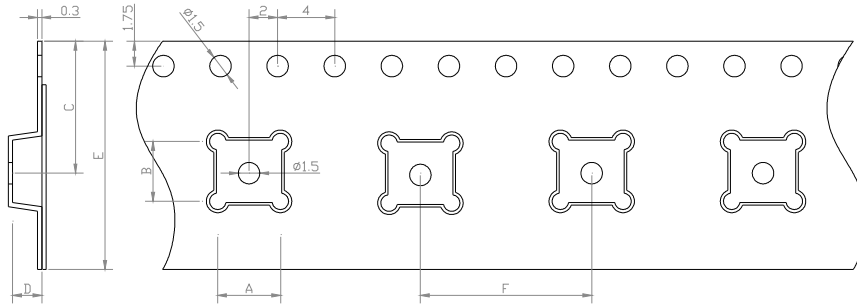


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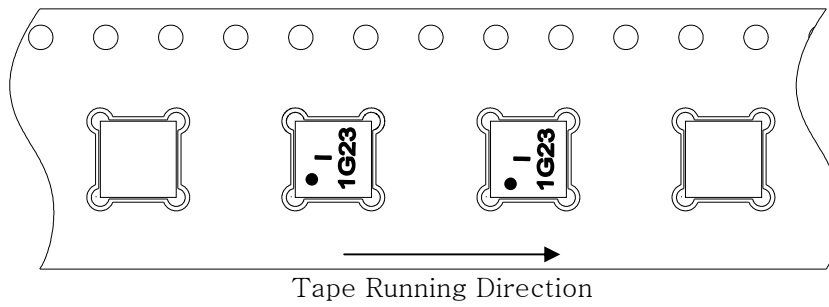


Carrier Tape Dimensions [unit : mm]

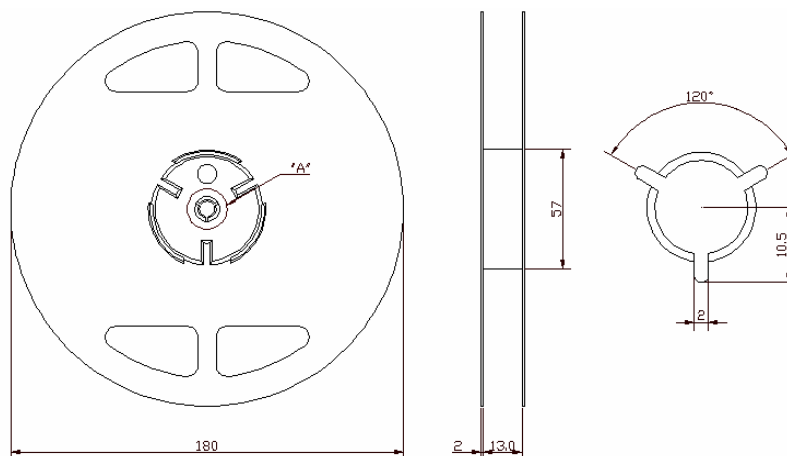


| | |
|---|-------------|
| A | 3.40 ± 0.1 |
| B | 3.40 ± 0.1 |
| C | 7.25 ± 0.1 |
| D | 1.70 ± 0.1 |
| E | 12.00 ± 0.1 |
| F | 8.00 ± 0.1 |

Part Direction



Reel Dimensions [unit : mm]



| | | | | |
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