

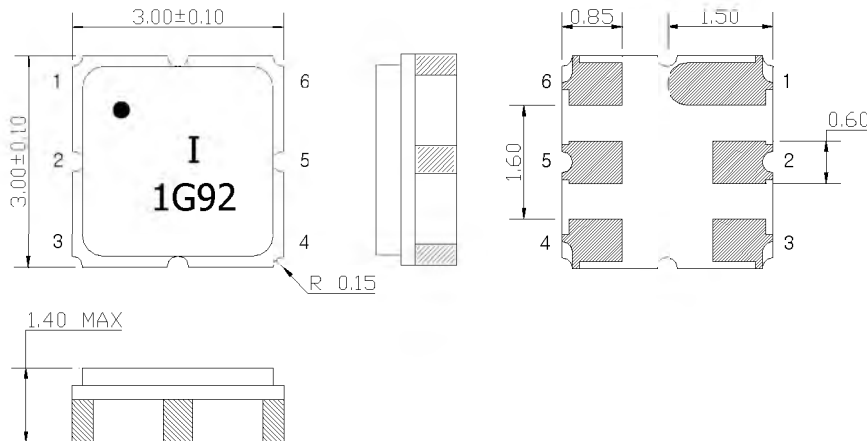
# SAW Bandpass Filter F1G92



## Features

- W-CDMA applications
- Usable bandwidth of 60 MHz
- No impedance matching require for operation at 50  $\Omega$
- 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 : Al<sub>2</sub>O<sub>3</sub> Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0  $\mu$ m, Over a 1.27 ~ 8.89  $\mu$ m  
Ni Plating

### Pin Configurations

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

## Maximum Ratings

| Parameters                  | Unit | Minimum | Typical | Maximum |
|-----------------------------|------|---------|---------|---------|
| Operating Temperature Range | °C   | -30     | 25      | 85      |
| Storage Temperature Range   | °C   | -40     | -       | 85      |
| Power Handling Capability   | dBm  | -       | -       | 13      |

Electrostatics Sensitive Device (ESD)

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## Specifications

|                                       | Minimum | Typical | Maximum | Unit  |
|---------------------------------------|---------|---------|---------|-------|
| Center Frequency ( Fc )               | -       | 1950.0  | -       | MHz   |
| Insertion Loss (In Fc +/- 30.0 MHz)   | -       | 2.8     | 4.0     | dB    |
| Amplitude Ripple (In Fc +/- 30.0 MHz) | -       | 1.4     | 2.4     | dBp-p |
| VSWR (In Fc +/- 30.0 MHz)             | -       | 1.8     | 2.4     |       |
| Relative Attenuation                  |         |         |         |       |
| 0.3 MHz ~ 1840.0 MHz                  | 20.0    | 32.0    | -       | dB    |
| 1850.0 MHz ~ 1900.0 MHz               | 10.0    | 21.0    | -       |       |
| 2000.0 MHz ~ 2030.0 MHz               | 4.5     | 10.0    | -       |       |
| 2030.0 MHz ~ 2060.0 MHz               | 20.0    | 47.0    | -       |       |
| 2060.0 MHz ~ 3000.0 MHz               | 22.0    | 29.0    | -       |       |
| Temperature Range (Operational)       | -30     | 25      | 85      | °C    |
| Input RF Power (In Fc +/- 30.0 MHz)   |         |         | 13      | dBm   |
| 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

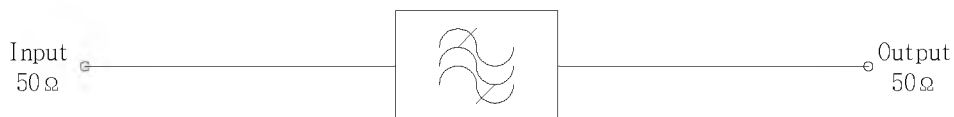
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## Matching Schematic

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



## Marking Configuration

1)  
I<sup>2)</sup>  
1G92<sup>3)</sup>

1) Pad Number 1 Index

2) Manufacturer name

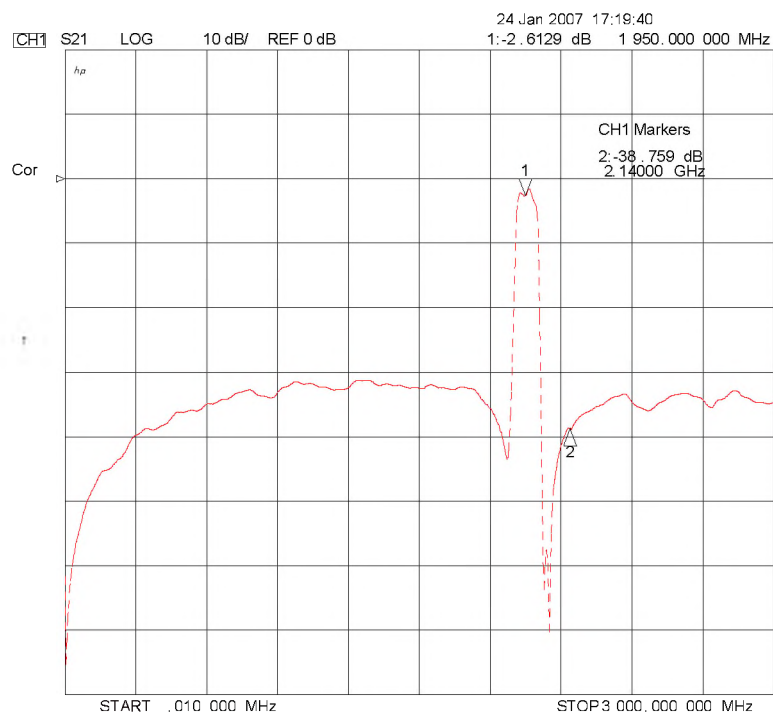
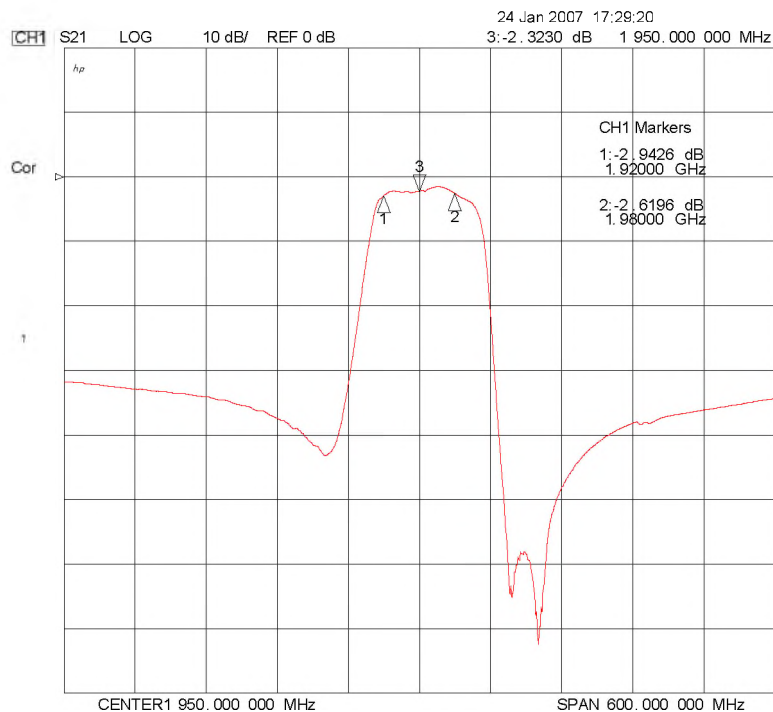
3) Marking Number

\* Ink or Laser Marking available

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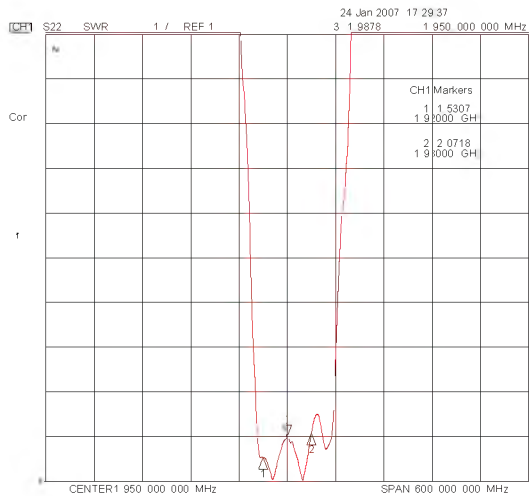
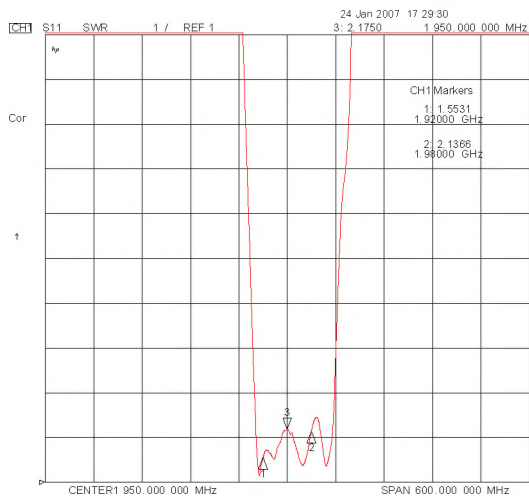
## Typical Performance ( at 25°C )



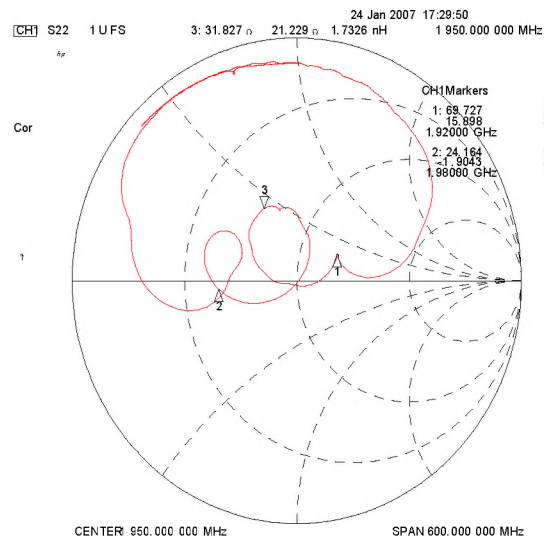
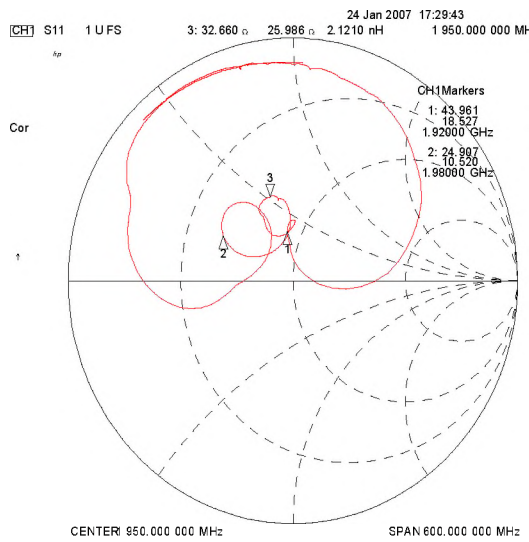
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## Input / Output VSWR Charts



## Input / Output Smith Charts

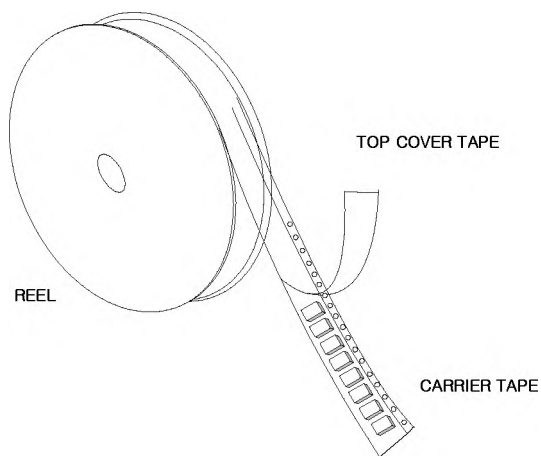


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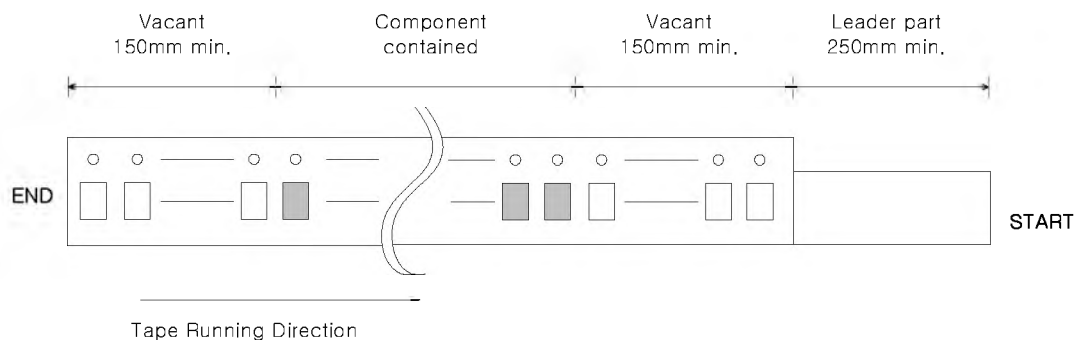
## Packing Specification

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

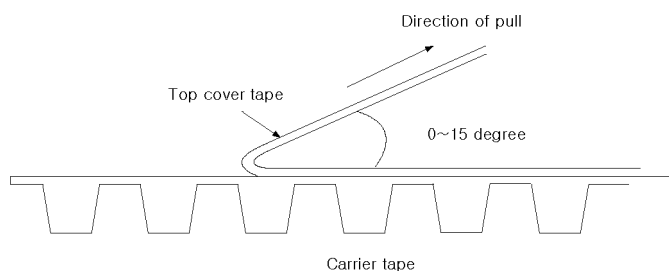
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

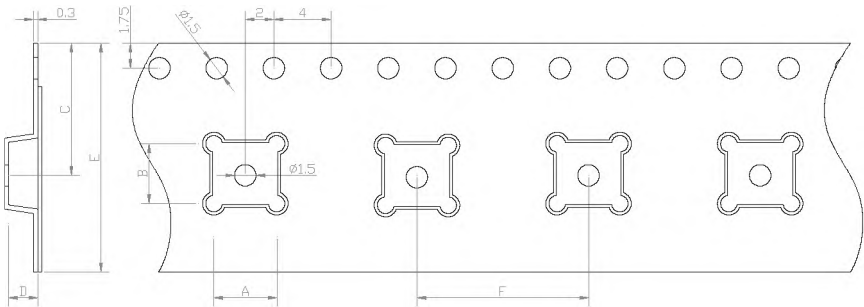
3) force : 20~70g



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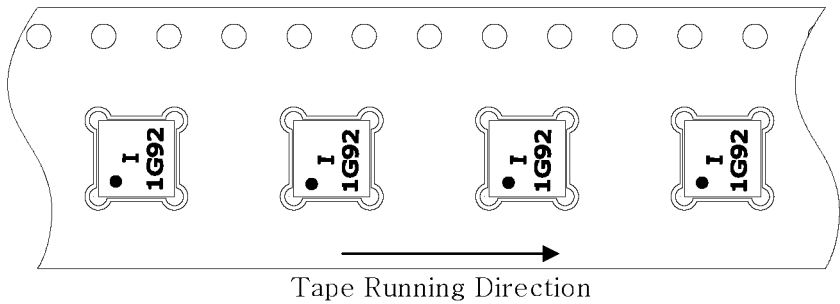


## Carrier Tape Dimensions [unit : mm]



|   |             |
|---|-------------|
| 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]

