

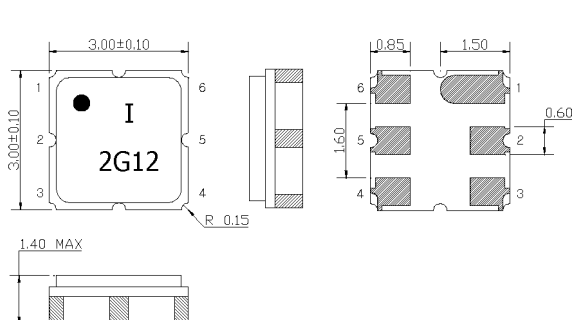
SAW Bandpass Filter F2G12



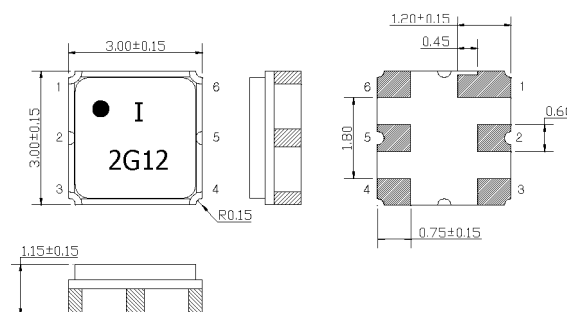
Features

- W-CDMA applications
- Usable bandwidth of 60 MHz
- 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



Package A



Package B

Both packages A and B are applicable

Dimensions shown are nominal in millimeters

Body : Al_2O_3 Ceramic

Lid : Kovar, Ni Plated

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

Pin Configurations

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

Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	$^{\circ}\text{C}$	-30	25	85
Storage Temperature Range	$^{\circ}\text{C}$	-40	-	85
Power Handling Capability	dBm	-	-	13

Electrostatics Sensitive Device (ESD)

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Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	2140.0	-	MHz
Insertion Loss (In Fc +/- 30.0 MHz)	-	2.2	3.5	dB
Amplitude Ripple (In Fc +/- 30.0 MHz)	-	0.8	1.5	dBp-p
VSWR (In Fc +/- 30.0 MHz)	-	1.8	2.4	
Group Delay (In Fc +/- 30.0 MHz)		8.6	15	ns
Group Delay Variation (In Fc +/- 30.0 MHz)		4.6	8	ns
Relative Attenuation 0.3 MHz ~ 500.0 MHz 500.0 MHz ~ 1900.0 MHz 1900.0 MHz ~ 2050.0 MHz 2215.0 MHz ~ 2300.0 MHz 2300.0 MHz ~ 3000.0 MHz	21.0 20.0 25.0 20.0 25.0	33.0 28.0 30.0 32.0 32.0	- - - - -	dB
Temperature Range (Operational)	-30	25	85	°C
Input RF Power (In Fc +/- 30.0 MHz)			13	dBm
Input/Output Impedance		50		Ohms

Notes :

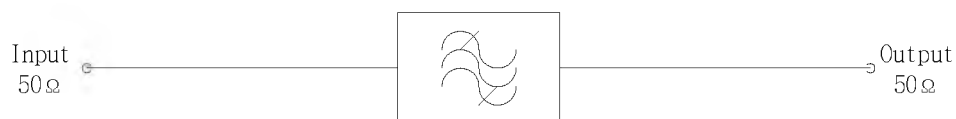
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 3) All attenuation measurements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

I²⁾

2G12³⁾

1) Pad Number 1 Index

2) Manufacturer name

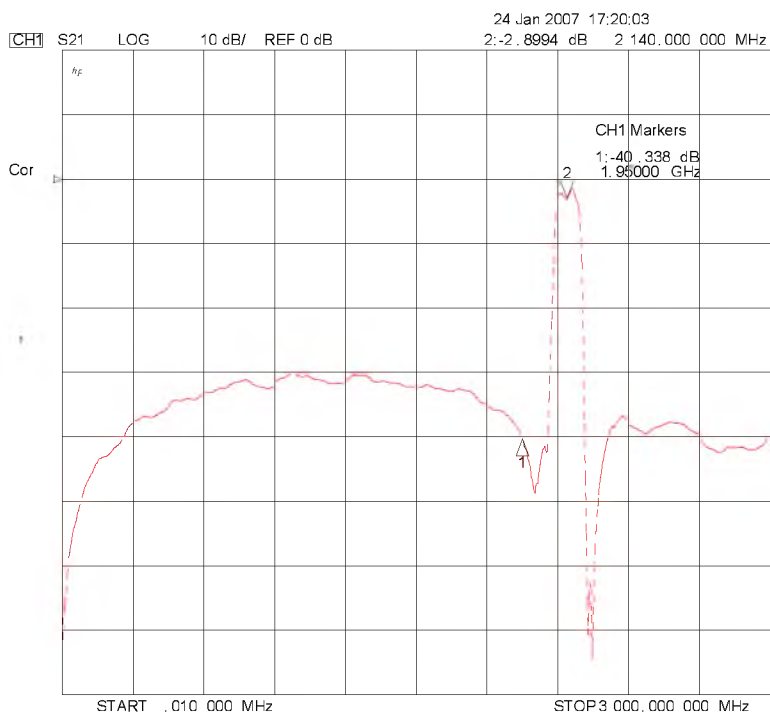
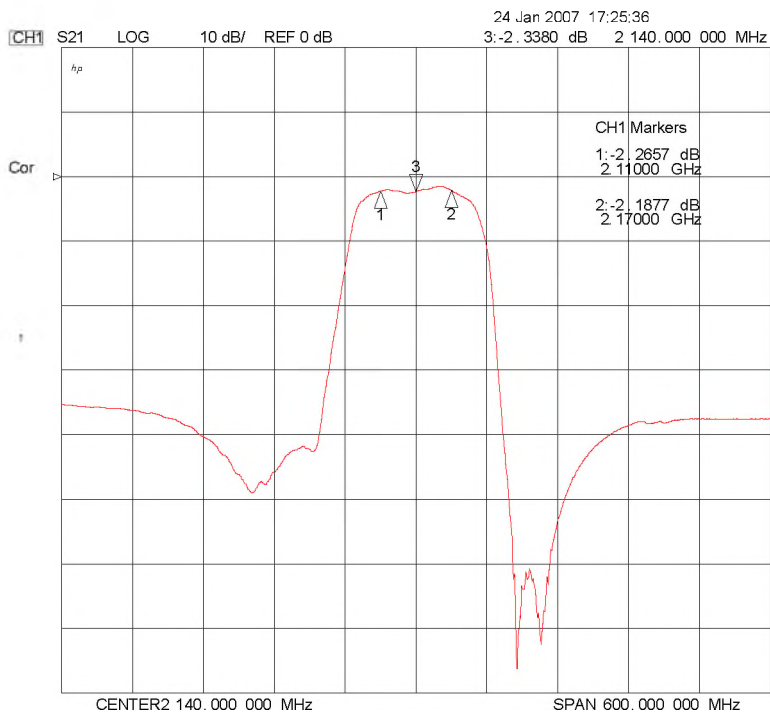
3) Marking Number

* Ink or Laser Marking available

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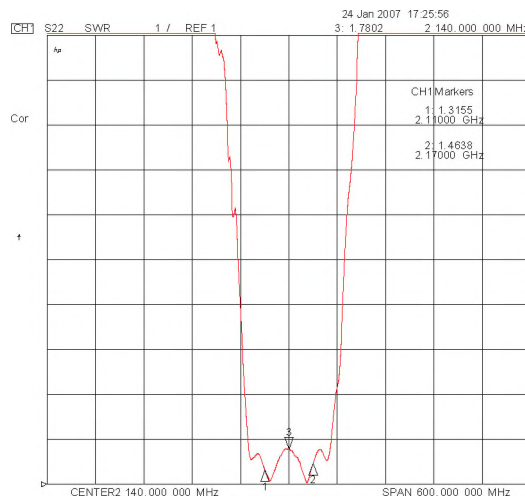
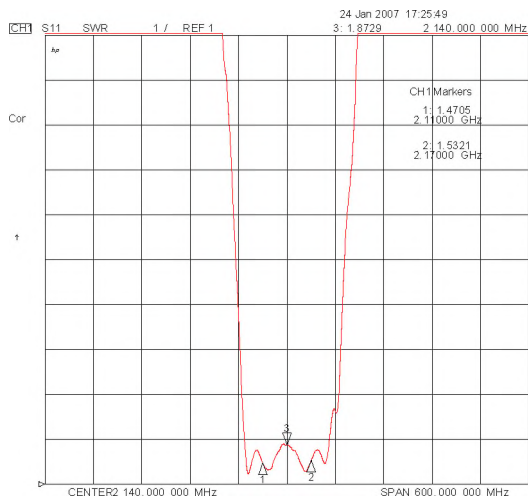
Typical Performance (at 25°C)



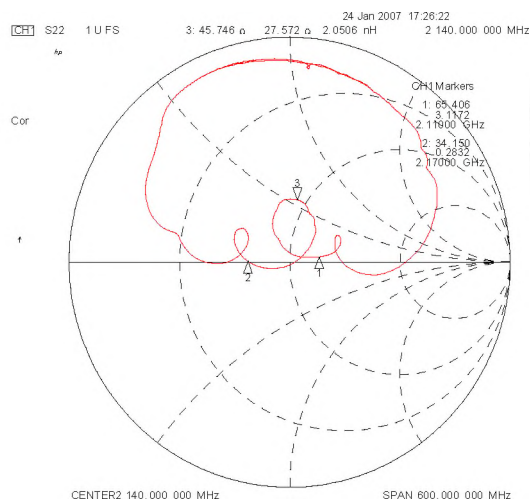
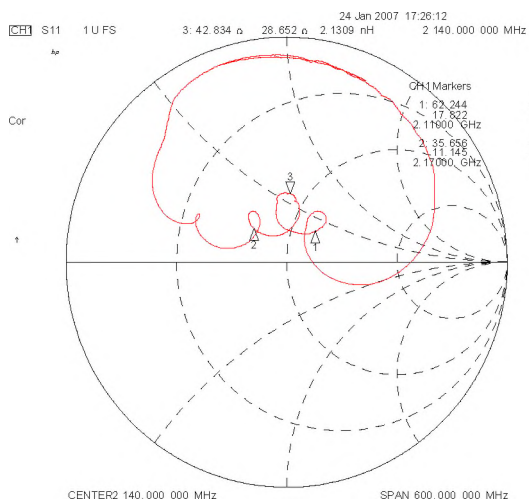
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Input / Output VSWR Charts



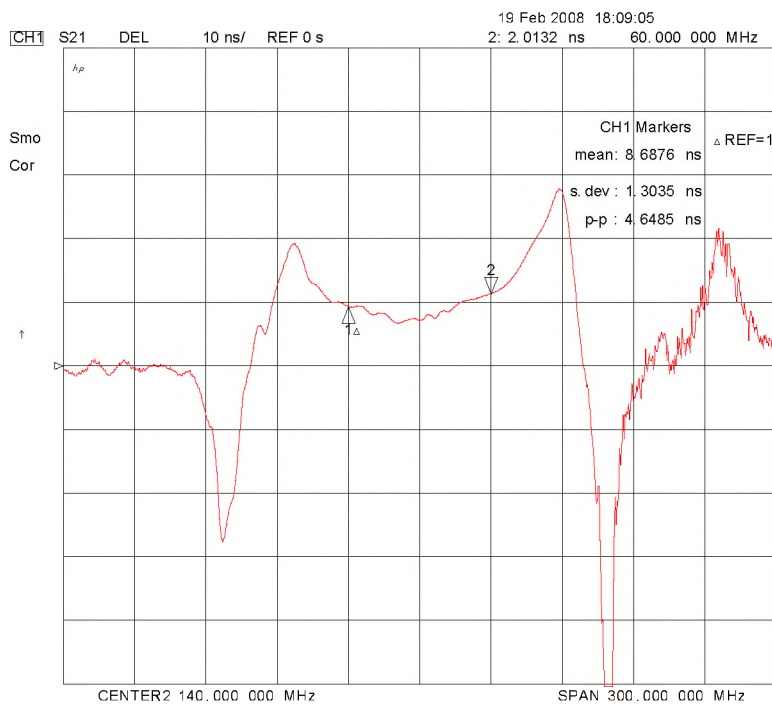
Input / Output Smith Charts



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Group Delay Variation

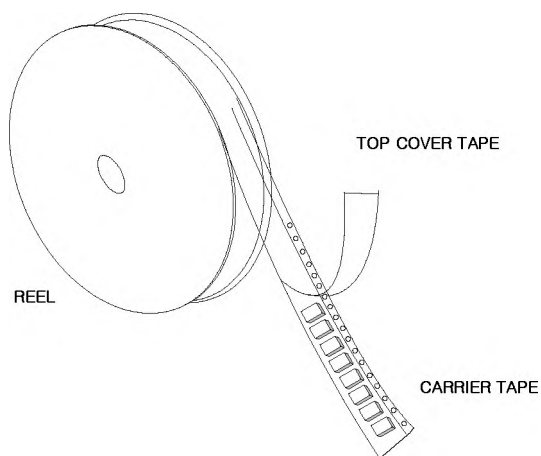


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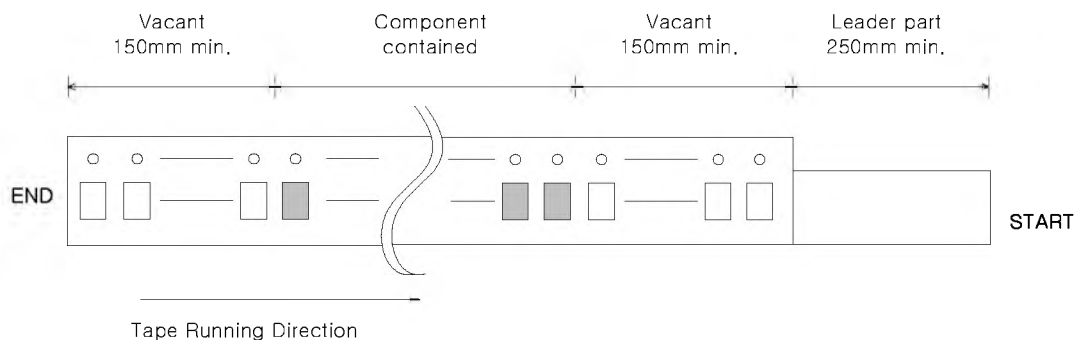
Packing Specification

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

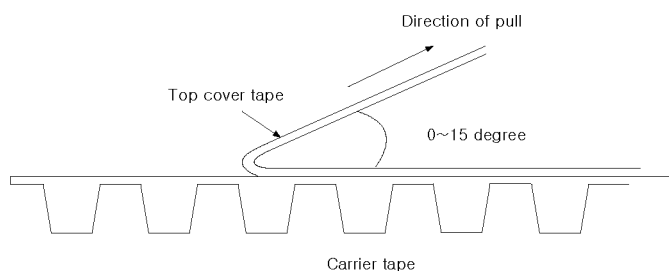
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

3) force : 20~70g



Technical drawing of a mechanical part showing dimensions and a table of values.

Dimensions and features:

- Top left: 0.3
- Top left: 1.75
- Top left: $\phi 1.5$
- Top left: 2
- Top left: 4
- Top left: C
- Top left: E
- Bottom left: B
- Bottom left: A
- Bottom left: $\phi 1.5$
- Bottom left: F

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

Diagram illustrating a tape with four 2G12 tape heads. Each head is labeled 'I' and '2G12'. An arrow below the heads indicates the 'Tape Running Direction'.

Technical drawing of a circular mechanical part, showing three views: front, side, and top.

- Front View (Left):** A circular disc with a central hole. The outer diameter is 180. The central hole has a diameter of 10.5. There are three radial slots, each with a width of 10.5. A section line 'A-A' is indicated.
- Side View (Middle):** A cross-section showing the thickness of the disc, which is 57. The central hole has a diameter of 10.5. The outer diameter is 180.
- Top View (Right):** A circular disc with a central hole. The outer diameter is 180. The central hole has a diameter of 10.5. There are three radial slots, each with a width of 10.5. The angle between the slots is 120°.