

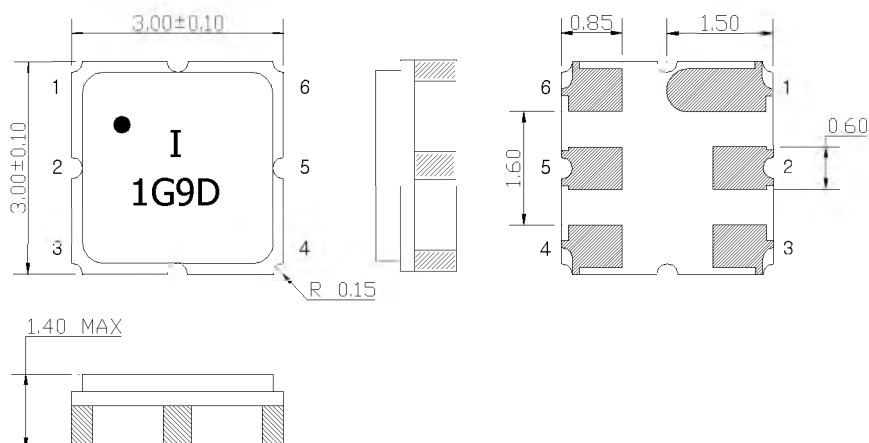
SAW Bandpass Filter F1G9D



Features

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

Package Dimension – SMD 3.0 × 3.0



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 Configuration

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

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	℃	-30	25	80
Storage Temperature Range	℃	-40	25	85
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

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Specifications

$F_c = 1970 \text{ MHz}$

	Minimum	Typical	Maximum	Unit
Center Frequency (F_c)	-	1970	-	MHz
Insertion Loss (In $F_c \pm 10 \text{ MHz}$)	-	1.7	3.5	dB
Amplitude Ripple (In $F_c \pm 10 \text{ MHz}$)	-	0.4	2.0	dBp-p
VSWR (In $F_c \pm 10 \text{ MHz}$)	-	1.3	2.3	
Relative Attenuation				
DC ~ 500 MHz	25	38	-	dB
500 ~ 1900 MHz	28	35	-	
2050 ~ 2110 MHz	30	45	-	
2110 ~ 3000 MHz	22	30	-	
Input/Output Impedance		50		Ohms

Notes :

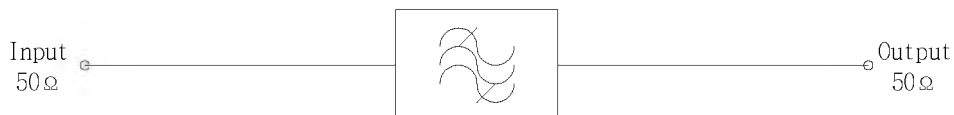
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

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Matching Schematic

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



Marking Configuration

1)
●

I²⁾

1G9D³⁾

1) Pad Number 1 Index

2) Manufacturer name

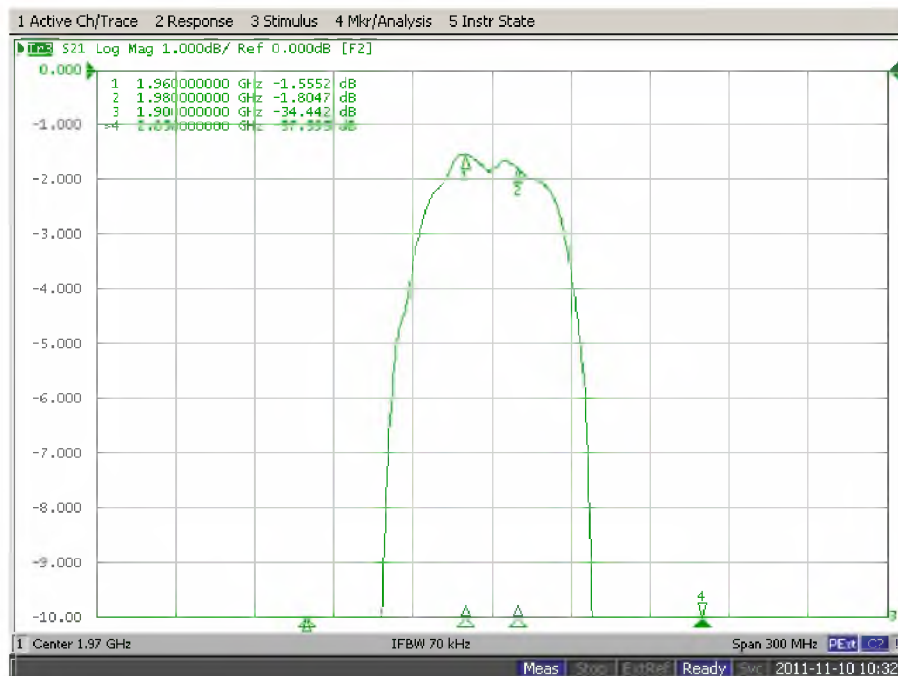
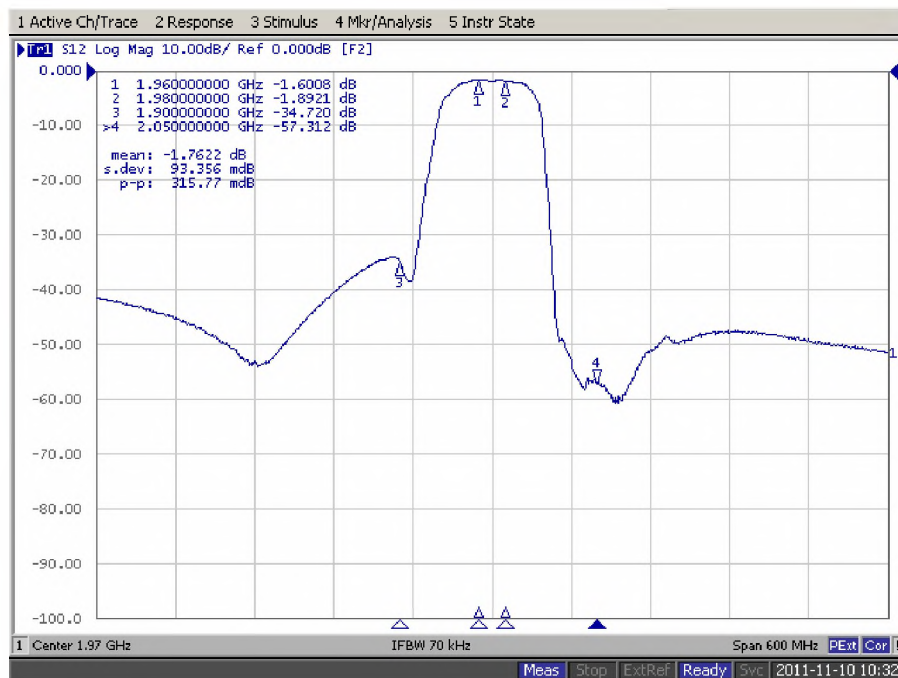
3) Marking Number

* Ink or Laser Marking available

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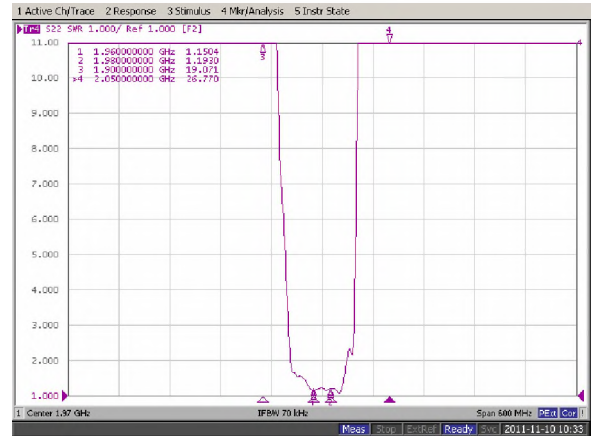
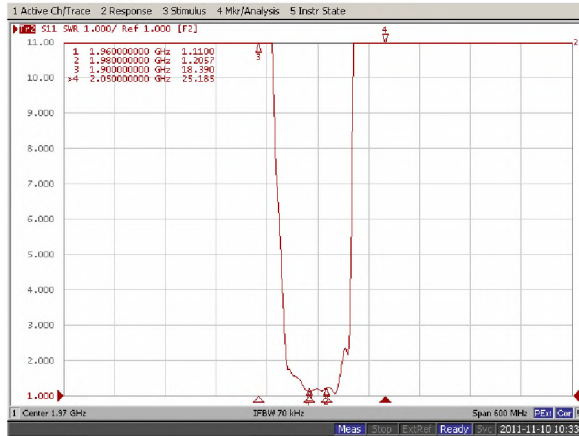
Typical Performance (at 25°C)



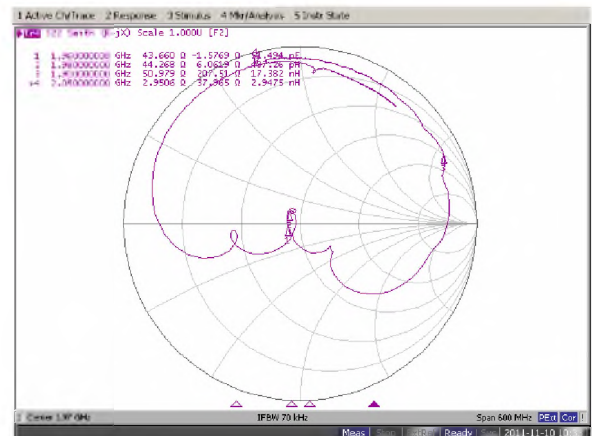
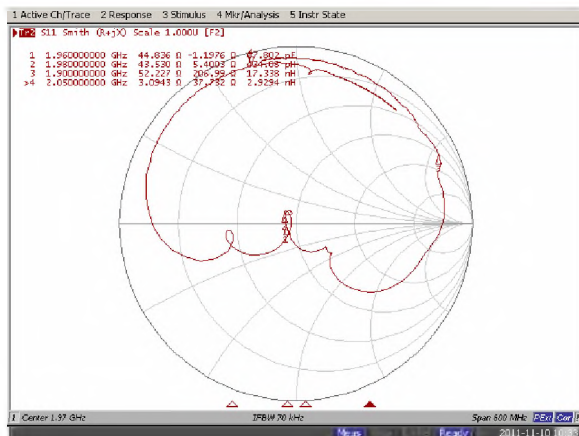
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Input / Output VSWR Charts



Input / Output Smith Charts

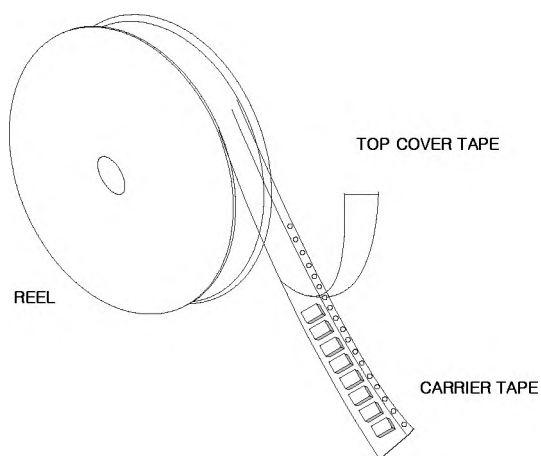


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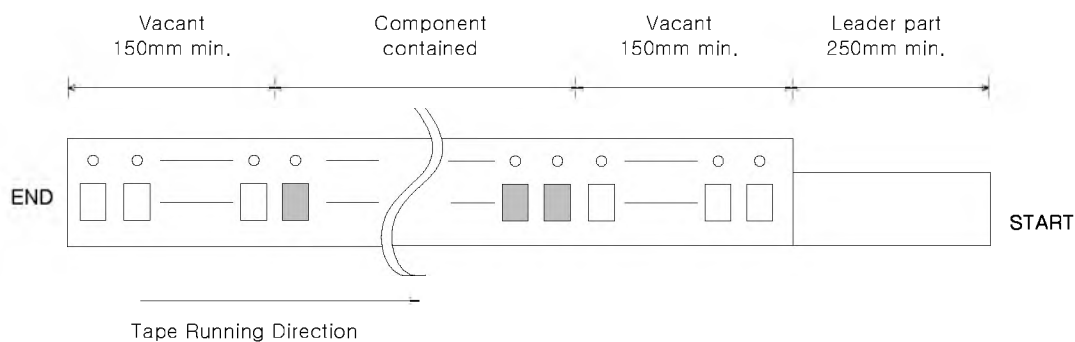
Packing Specification

1. Reeling Quantity : 1000 pcs / 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

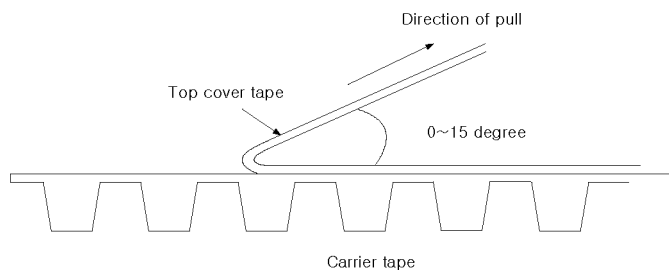


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

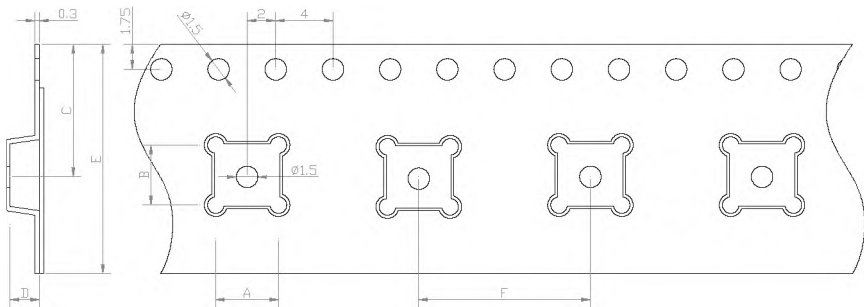
- 1) pull off angle : 0~15°
- 2) speed : 300mm/min
- 3) force : 20~70g



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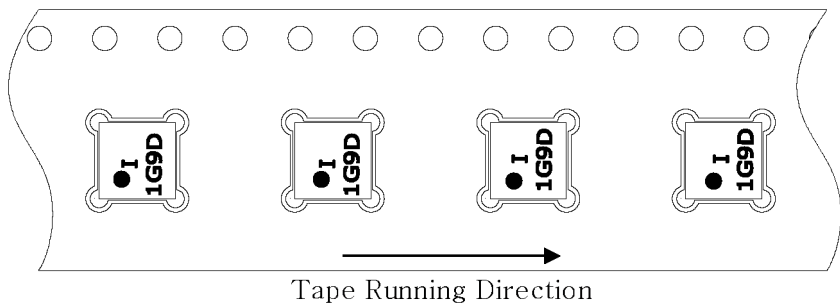


Carrier Tape Dimensions [unit : mm]



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]

