

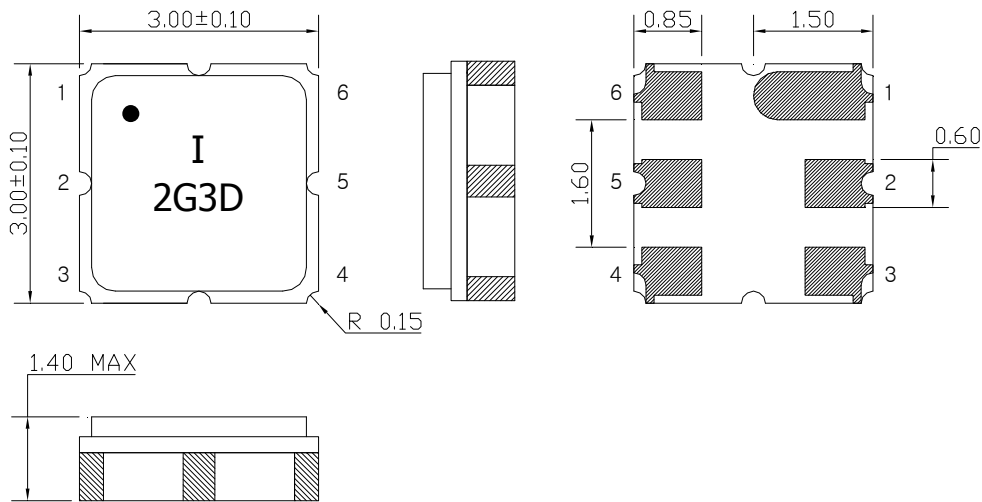
SAW Bandpass Filter F2G3D



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
- This part is compliant with AEC-Q200

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	105
Storage Temperature Range	℃	-45	25	125
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F2G3D	
		Rev. Date	2016-12-1	
		Rev.	AS02	1/7

SAW Bandpass Filter F2G3D



Specifications

Fc = 2332.5 MHz

Room Temperature : +25℃	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	2332.5	-	MHz
Insertion Loss (2320 ~ 2345 MHz)	-	0.6	1.2	dB
Amplitude Ripple (2320 ~ 2345 MHz)	-	0.3	0.8	dB p-p
VSWR (2320 ~ 2345 MHz)	-	1.5	2.0	
Attenuation				
0.3 ~ 2085 MHz	20	25	-	dB
2097 ~ 2235 MHz	25	35	-	
@ 2100 MHz	30	40	-	
2235 ~ 2256 MHz	10	20	-	
@ 2400 MHz	20	33	-	
Input/Output Impedance		50		Ohms

Operating Temperature : -40℃ ~ +105℃	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	2332.5	-	MHz
Insertion Loss (2320 ~ 2345 MHz)	-	0.6	1.5	dB
Amplitude Ripple (2320 ~ 2345 MHz)	-	0.3	1.2	dB p-p
VSWR (2320 ~ 2345 MHz)	-	1.5	2.6	
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

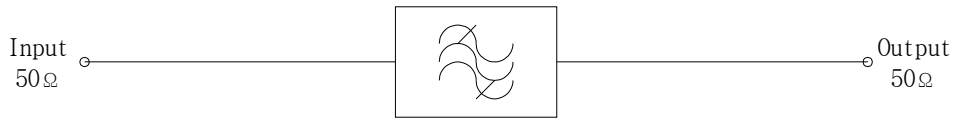
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Matching Schematic

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



Marking Configuration

- 1)
●
- I²⁾
- 2G3D³⁾

1) Pad Number 1 Index

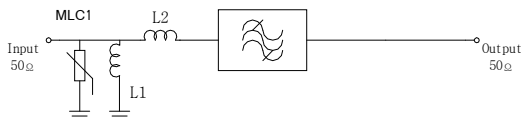
2) Manufacturer name

3) Marking Number

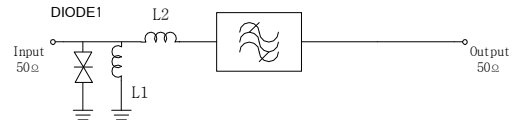
* Ink or Laser Marking available

ESD protection of SAW filters

1. SAW filters are weak to Electric Static Discharge
2. Generally, to overcome damages of ESD, recommend suitable matching structure. (Depending input impedance)

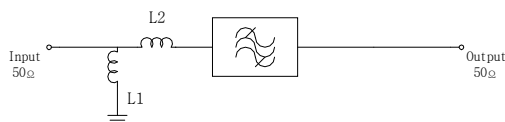


(Case A : MLC varistor used ESD matching structure)

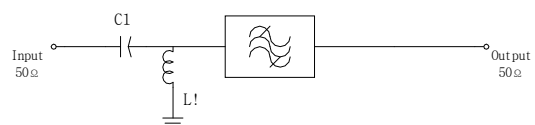


(Case B : Diode used ESD matching structure)

3. In case weak ESD used simple L-C component matching structure. (Depending input impedance)



(Case C : Shunt L // Series L matching structure)



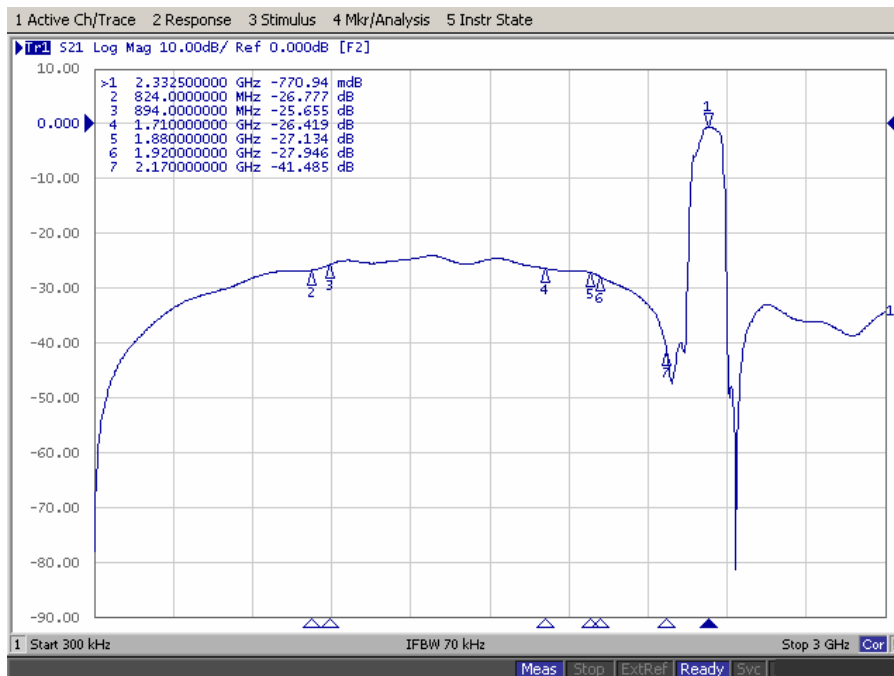
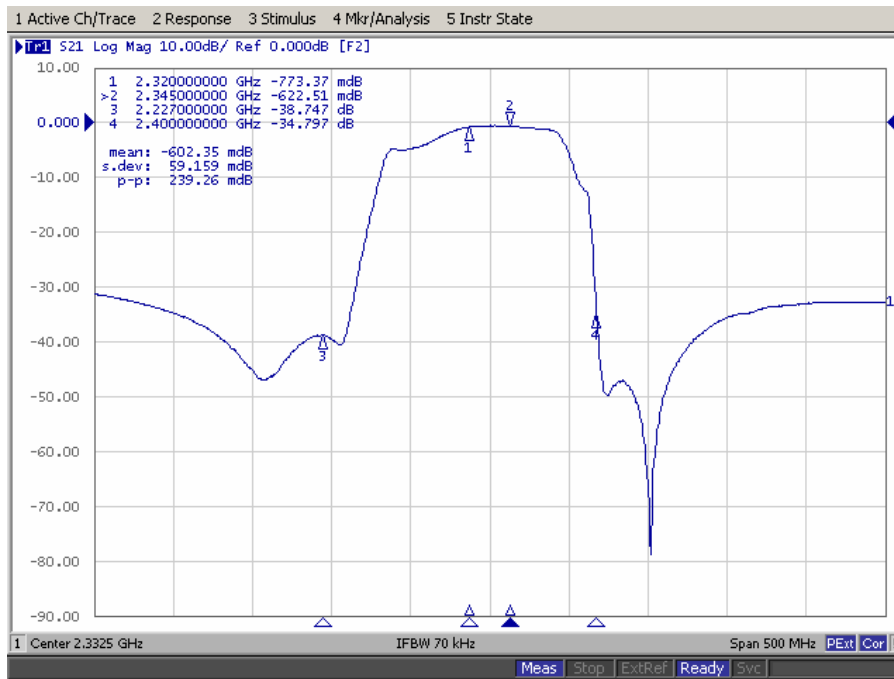
(Case D : Series C // Shunt L matching structure)


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Typical Performance (at 25°C)

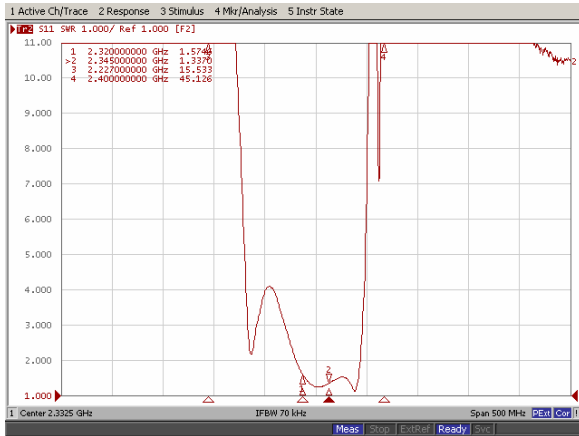


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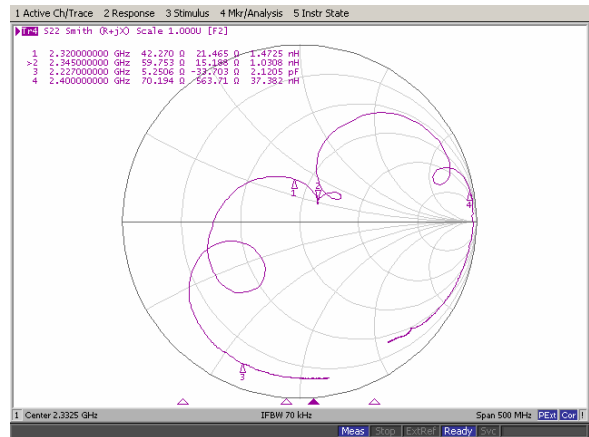
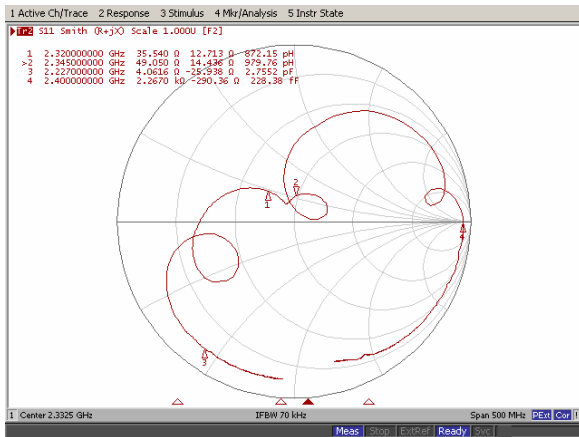
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Input / Output VSWR



Input / Output Smith Charts

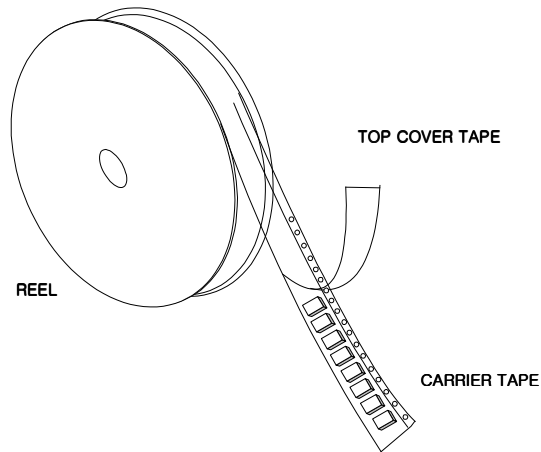


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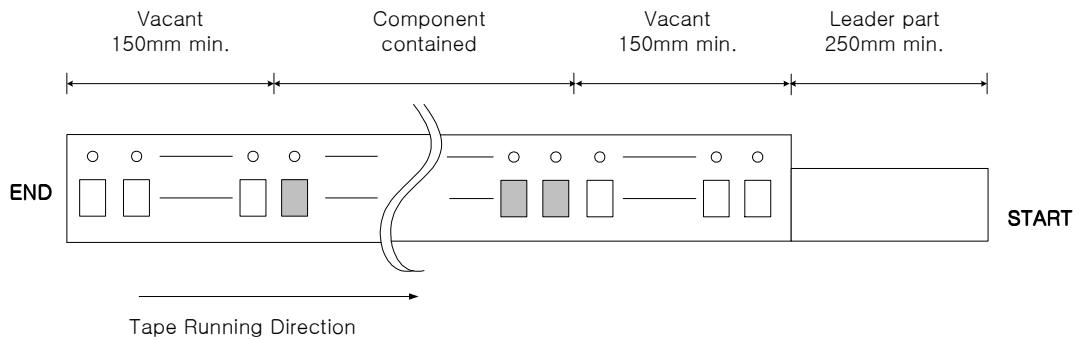
Packing Specifications

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

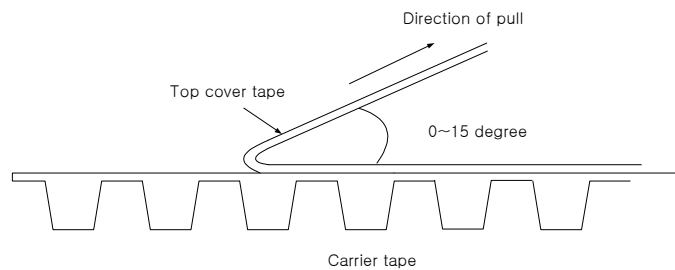



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

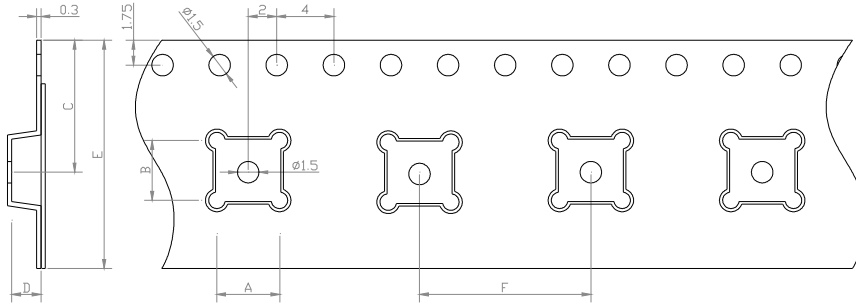


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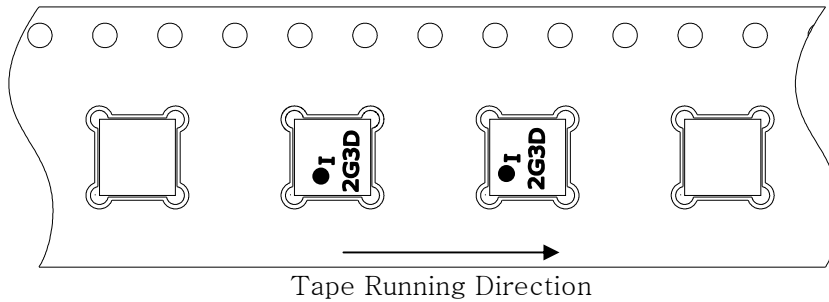


Carrier Tape Dimensions [unit : mm]

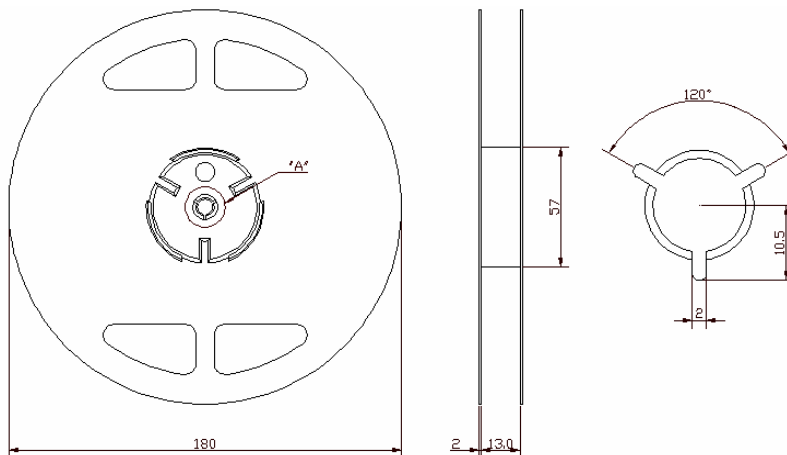


A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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