

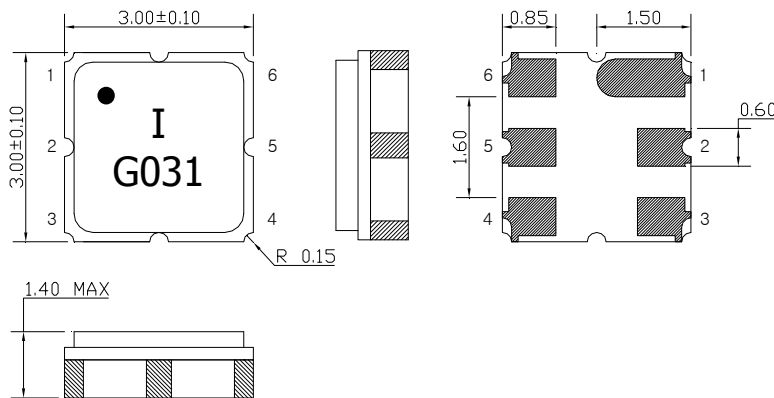
SAW Bandpass Filter FG031



Features

- RF bandpass filter for UCAM
- Usable bandwidth 30MHz (1015.5 ~ 1045.5MHz)
- No matching single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (3.0mm × 3.0mm)
- RoHS Compliant

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 Configuration

Pin Configuration	
2	Input
5	Output
1, 3, 4, 6	Ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	25	85
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	23

Electrostatics Sensitive Device (ESD)

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		Rev. Date	2019-05-22	
		Rev.	NR4011-AS02	1/7

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Specifications

Fc = 1030.5 MHz

		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	-	1030.5	-
Insertion Loss (Fc ± 15 MHz)	dB	-	3.5	4.0
Amplitude Ripple (Fc ± 15 MHz)	dB	-	0.5	1.5
VSWR (Fc ± 15 MHz)		-	1.8	2.1
Absolute attenuation				
0.3 ~ 550.0 MHz	dB	-	40	-
550.0 ~ 750.0 MHz		-	40	-
750.0 ~ 986.5 MHz		25	30	-
1074.5 ~ 1200.0 MHz		18	21	-
Input/Output impedance	Ohm	-	50	-

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

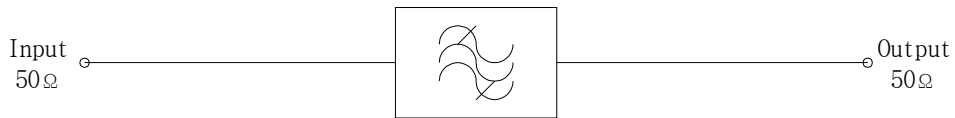
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Matching Schematic

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



Marking Configuration


- ¹⁾
- I ²⁾
- G031 ³⁾

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

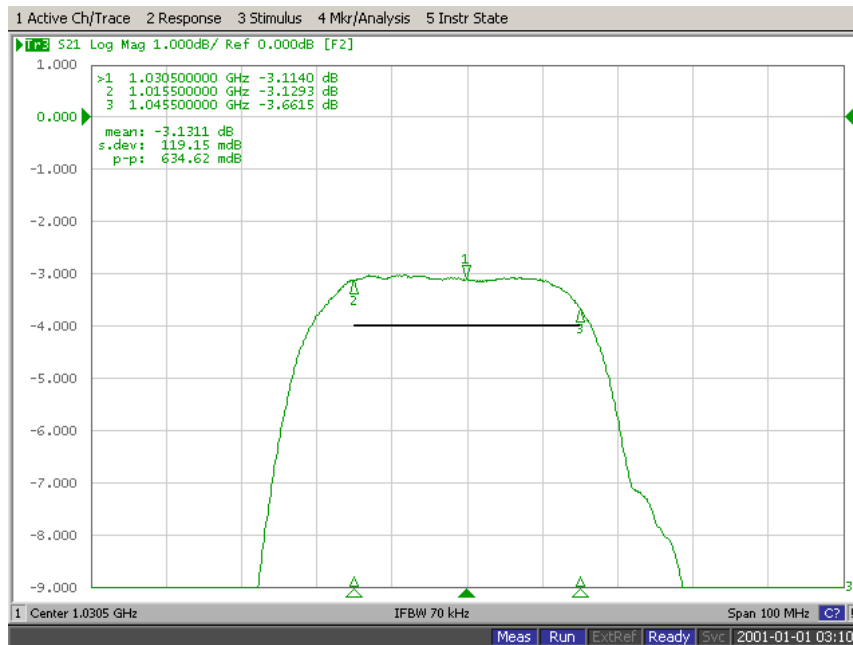
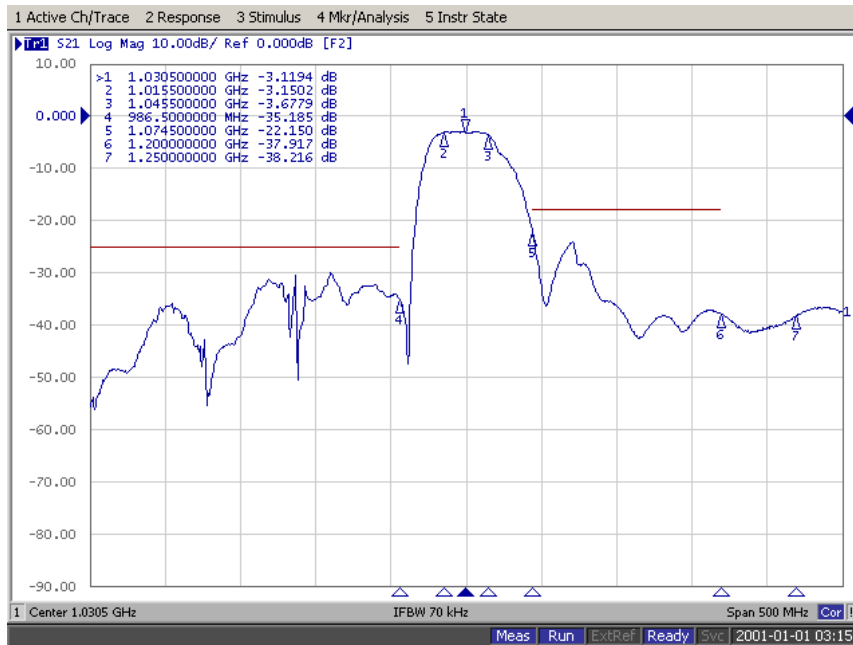
* Ink or Laser Marking available

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Typical Performance (at 25°C)



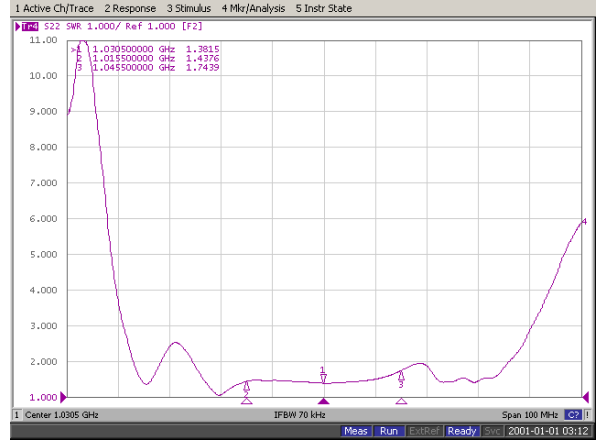
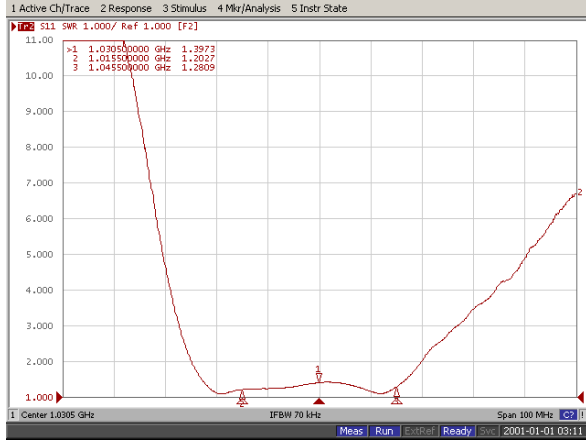
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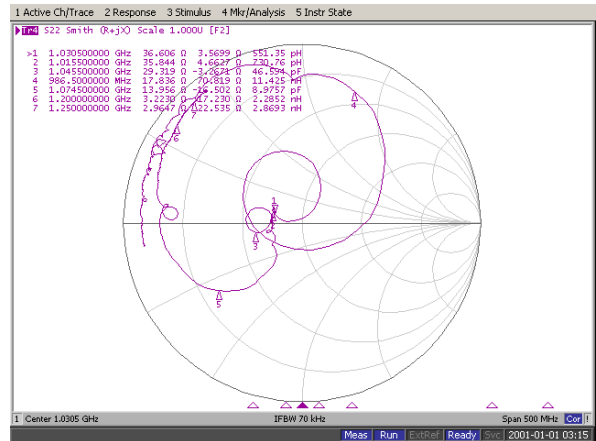
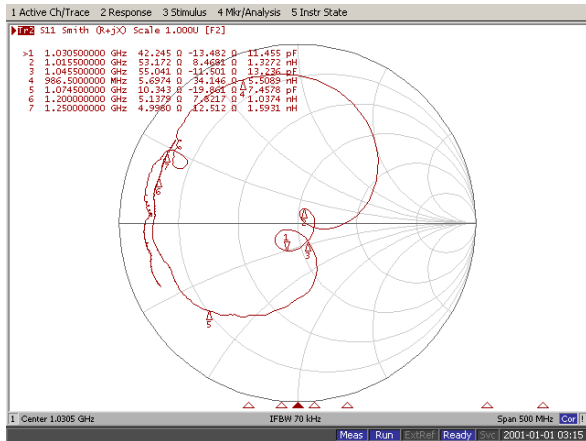
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Input / Output VSWR Charts



Input / Output Smith Charts



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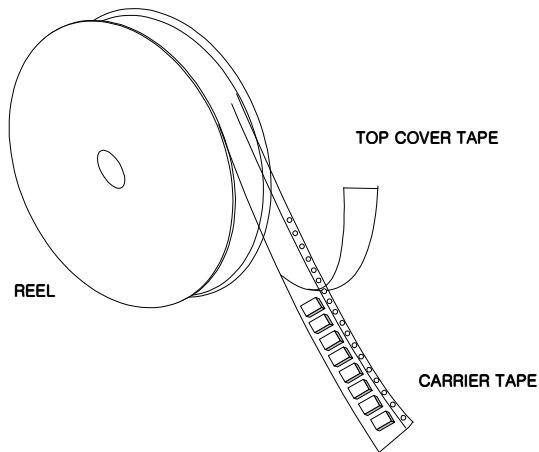
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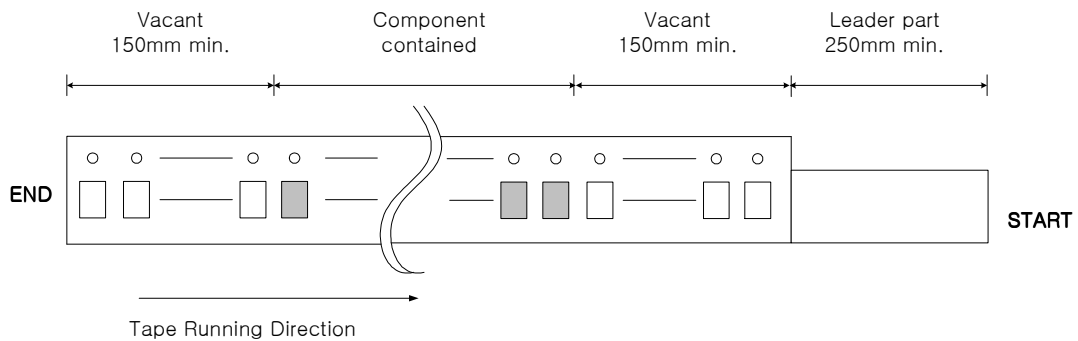
Packing Specification

1. Reeling Quantity : 1000 pcs / reel or 3000 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

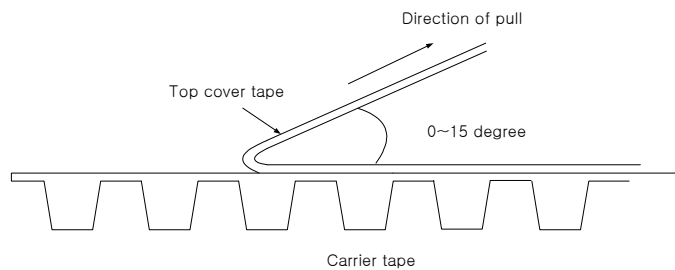


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

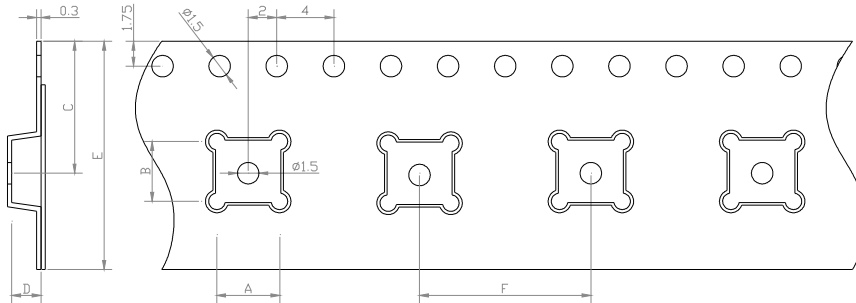


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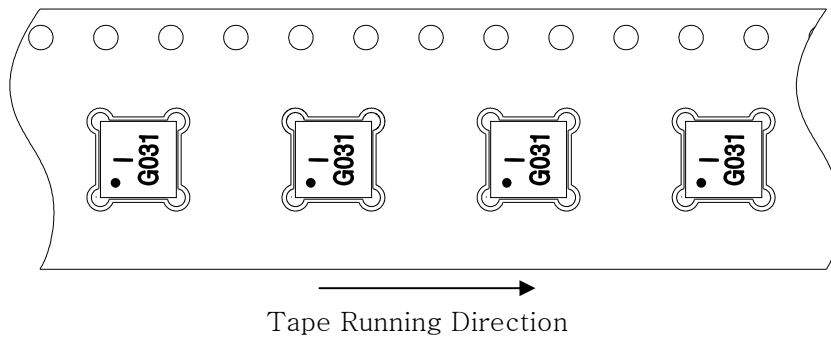


Carrier Tape Dimensions [unit : mm]

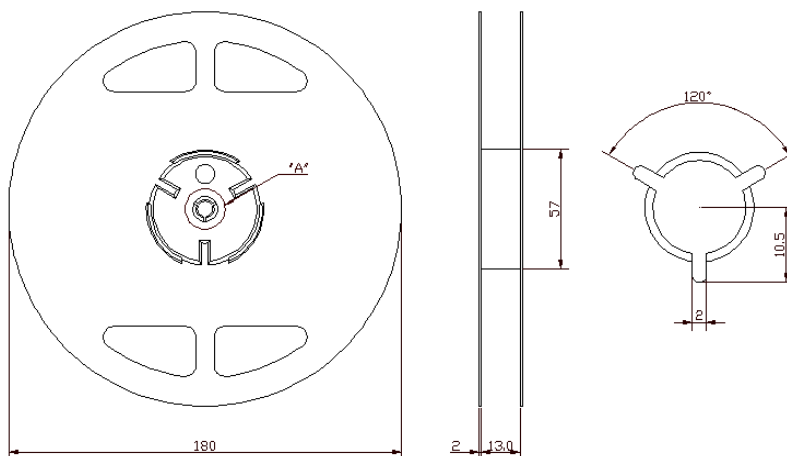



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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