

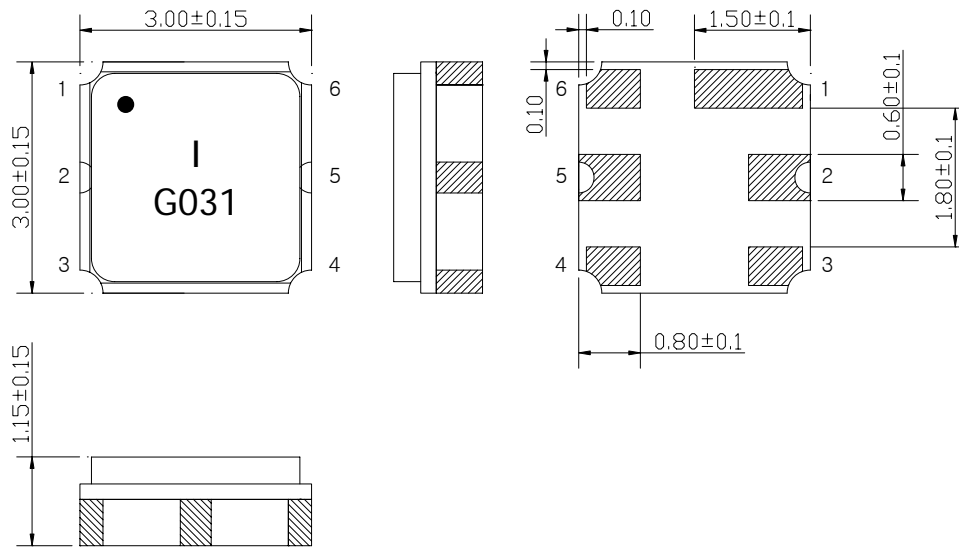
SAW Bandpass Filter FG031



Features

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

Package Dimensions



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	-	-	23

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.	FG031	
		Rev. Date	2005-12-08	
		Rev.	NR4011-AS01	1/7

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Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	1030.5	-	MHz
Insertion Loss (In Fc +/- 15 MHz)	-	3.2	4.0	dB
Amplitude Ripple (In Fc +/- 15 MHz)	-	0.5	1.5	dB
VSWR (In Fc +/- 15 MHz)	-	1.8	2.1	
Relative Attenuation				
0.3 MHz ~ 550.0 MHz	-	40	-	dB
550.0 MHz ~ 750.0 MHz	-	40	-	
750.0 MHz ~ 986.5 MHz	25	30	-	
1074.5 MHz ~ 1200 MHz	21	25	-	
Temperature Range (Operational)	-30	25	85	°C
Input RF Power (In Fc +/- 15 MHz)		-	23	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

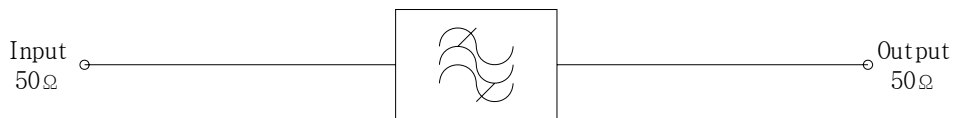
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Matching Schematic

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



Marking Configuration

- ¹⁾
I²⁾
G031³⁾

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

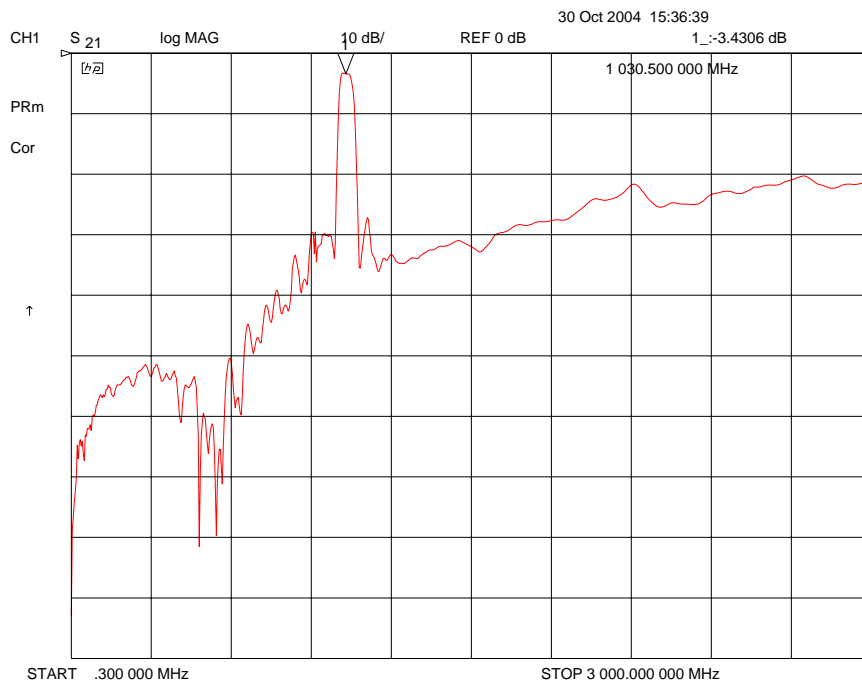
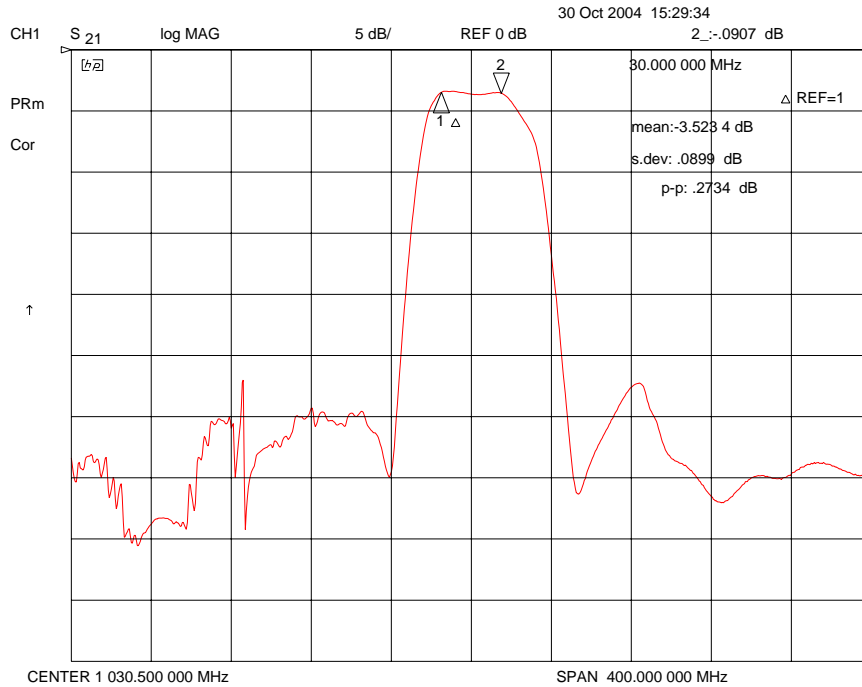
* Ink or Laser Marking available

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Typical Performance (at 25°C)

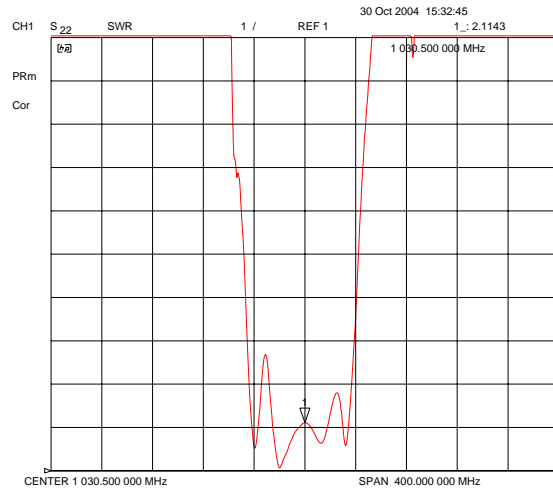
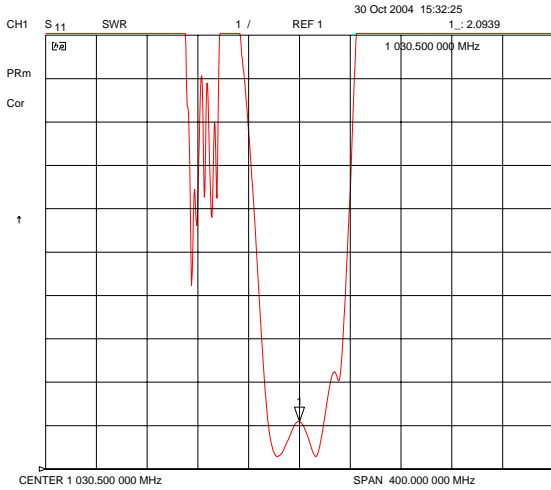


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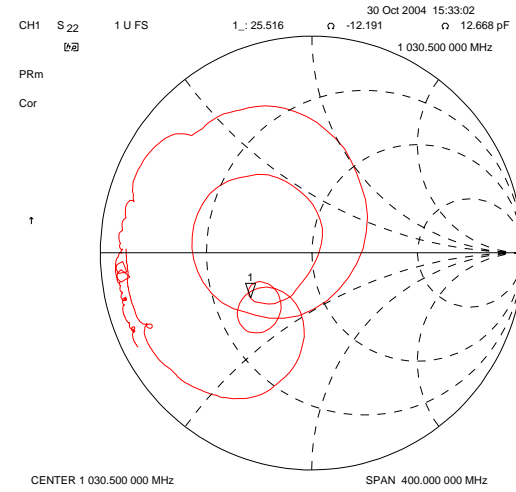
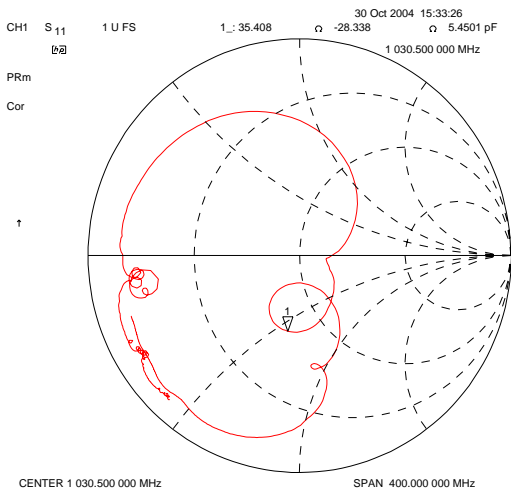
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Input / Output VSWR Charts



Input / Output Smith Charts



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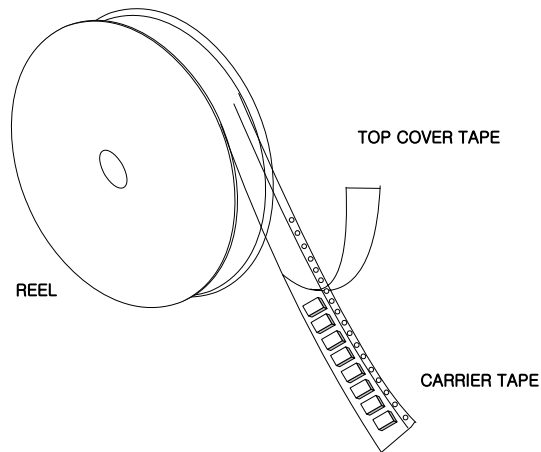
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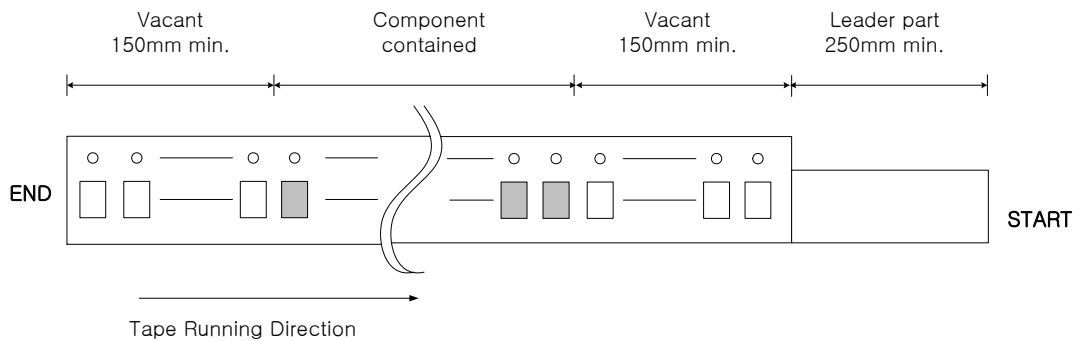
Packing Specification

1. Reeling Quantity : 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

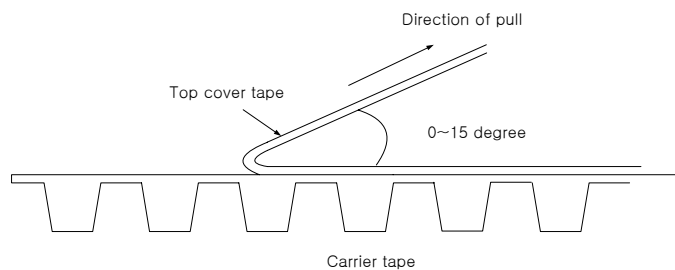


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

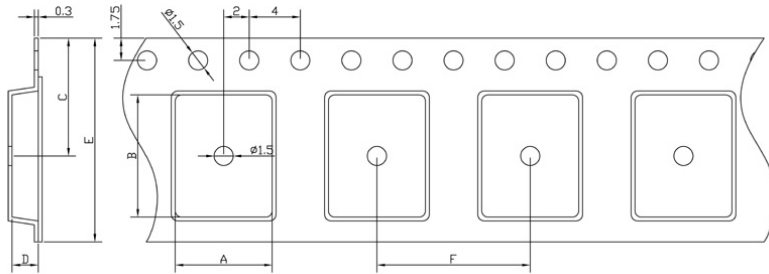


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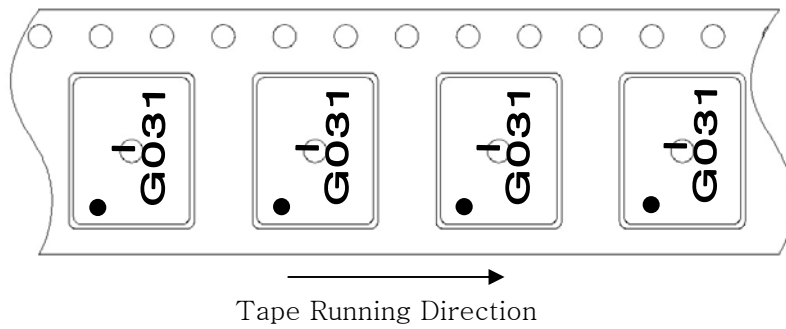


Carrier Tape Dimensions [unit : mm]

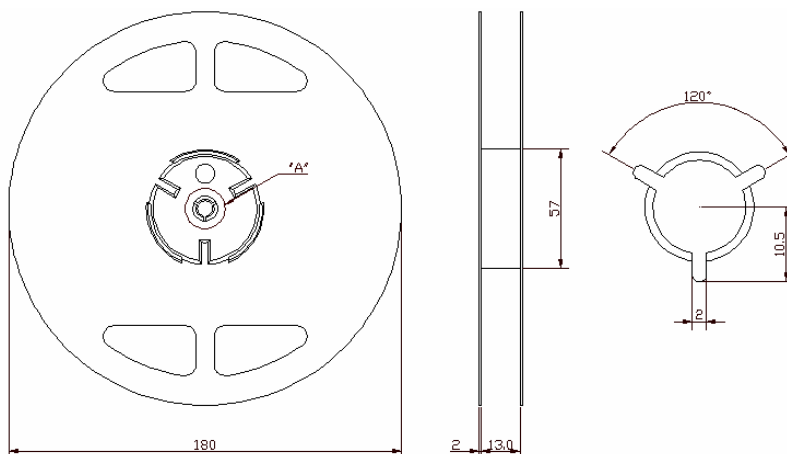


A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.60 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



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