

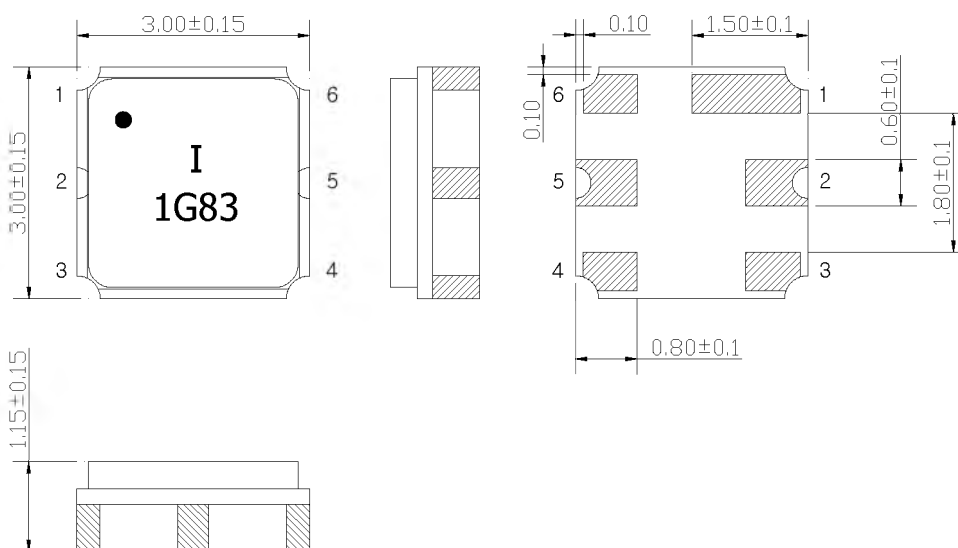
SAW Bandpass Filter F1G83



Features

- US-PCS applications
- Usable bandwidth of 60 MHz
- No impedance matching require for operation at 50 Ω
- Ceramic Surface Mounted Device Package (3.0 mm $\times$ 3.0 mm)
- Single-ended Operation
- RoHS Compliant

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al₂O₃ Ceramic

Lid : Kovar, Ni Plated

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

Pin Configurations

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

Maximum Ratings

Parameters	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	25	85
Storage Temperature Range	°C	-40	-	90
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

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Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	1880.0	-	MHz
Insertion Loss (In Fc +/- 30.0 MHz)	-	2.6	4.2	dB
Amplitude Ripple (In Fc +/- 30.0 MHz)	-	1.3	2.5	dBp-p
VSWR (In Fc +/- 30.0 MHz)	-	1.9	2.5	
Relative Attenuation				
DC ~ 1500.0 MHz	15.0	20.0	-	dB
1500.0 MHz ~ 1750.0 MHz	18.0	24.0	-	
1930.0 MHz ~ 1990.0 MHz	10.0	21.0	-	
1990.0 MHz ~ 2300.0 MHz	20.0	26.0	-	
2300.0 MHz ~ 2500.0 MHz	18.0	27.0	-	
Temperature Range (Operational)	-30	25	85	°C
Input RF Power	-	10	-	dBm
Input/Output Impedance		50		Ohms

Notes :

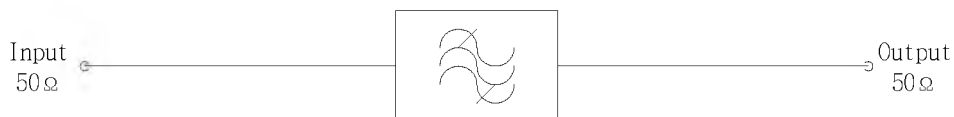
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 3) All attenuation measurements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

1G83³⁾

1) Pad Number 1 Index

2) Manufacturer name

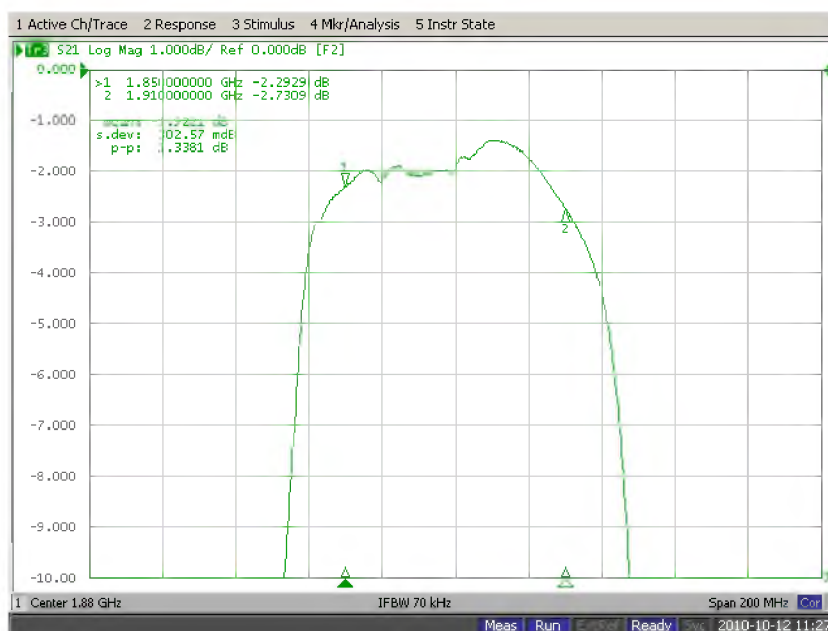
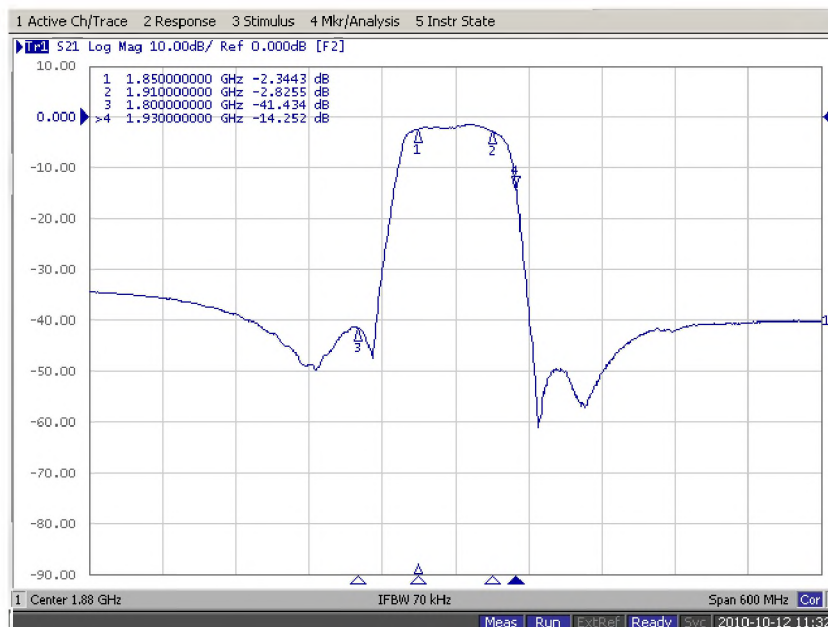
3) Marking Number

* Ink or Laser Marking available

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Typical Performance (at 25°C)



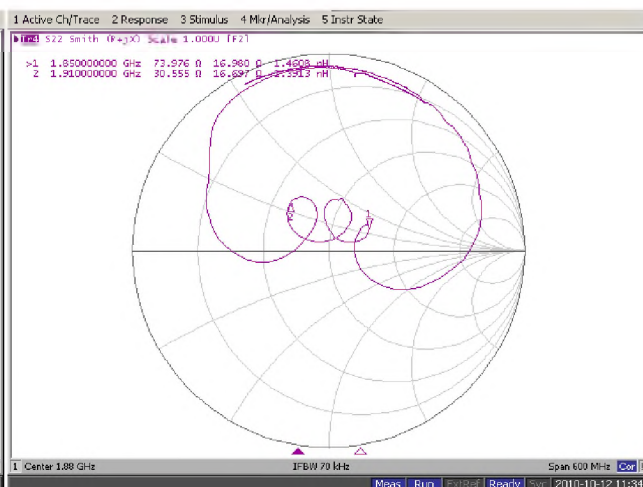
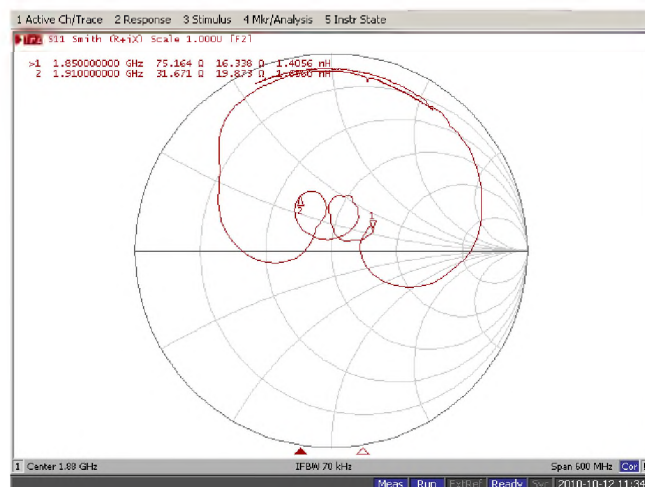
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Input / Output VSWR Charts



Input / Output Smith Charts

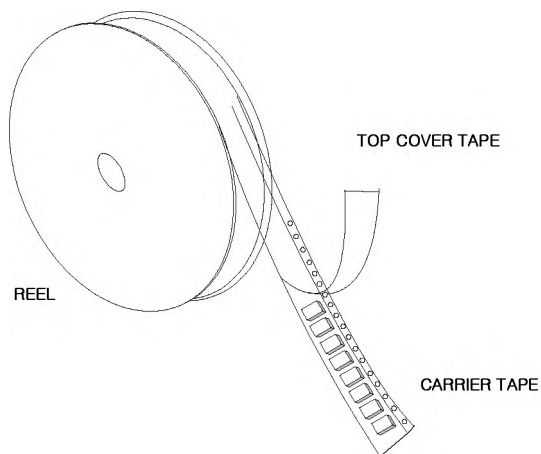


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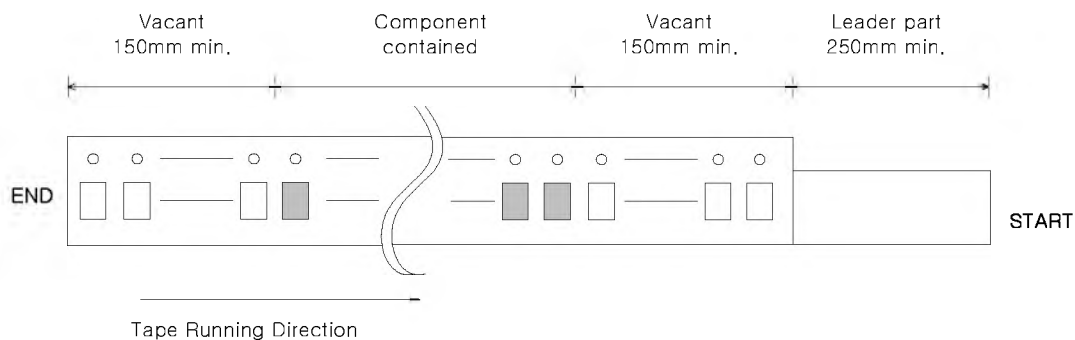
Packing Specification

1. Reeling Quantity : 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

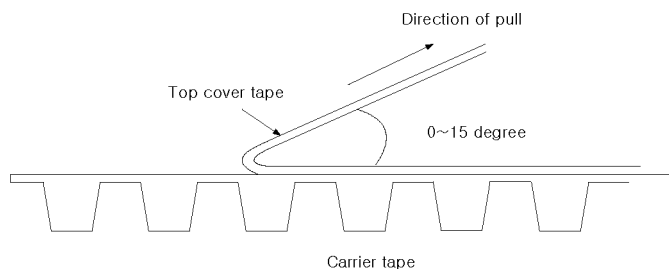


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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



SAW
DEVICE

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

The drawing shows a side view of a component with a flange on the left and a series of holes along its length. Dimensions are indicated by arrows and labels:

- A**: Distance from the center of the first square hole to the center of the next square hole.
- B**: Distance from the center of the first square hole to the center of the next square hole.
- C**: Distance from the center of the first square hole to the center of the next square hole.
- D**: Distance from the center of the first square hole to the center of the next square hole.
- E**: Distance from the center of the first square hole to the center of the next square hole.
- F**: Distance from the center of the first square hole to the center of the next square hole.
- G**: Distance from the center of the first square hole to the center of the next square hole.
- H**: Distance from the center of the first square hole to the center of the next square hole.
- I**: Distance from the center of the first square hole to the center of the next square hole.
- J**: Distance from the center of the first square hole to the center of the next square hole.
- K**: Distance from the center of the first square hole to the center of the next square hole.
- L**: Distance from the center of the first square hole to the center of the next square hole.
- M**: Distance from the center of the first square hole to the center of the next square hole.
- N**: Distance from the center of the first square hole to the center of the next square hole.
- O**: Distance from the center of the first square hole to the center of the next square hole.
- P**: Distance from the center of the first square hole to the center of the next square hole.
- Q**: Distance from the center of the first square hole to the center of the next square hole.
- R**: Distance from the center of the first square hole to the center of the next square hole.
- S**: Distance from the center of the first square hole to the center of the next square hole.
- T**: Distance from the center of the first square hole to the center of the next square hole.
- U**: Distance from the center of the first square hole to the center of the next square hole.
- V**: Distance from the center of the first square hole to the center of the next square hole.
- W**: Distance from the center of the first square hole to the center of the next square hole.
- X**: Distance from the center of the first square hole to the center of the next square hole.
- Y**: Distance from the center of the first square hole to the center of the next square hole.
- Z**: Distance from the center of the first square hole to the center of the next square hole.

The table on the right provides the values for these dimensions:

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 frames, each containing a black dot, a '1', and 'G83'. An arrow below indicates the 'Tape Running Direction' from left to right.