

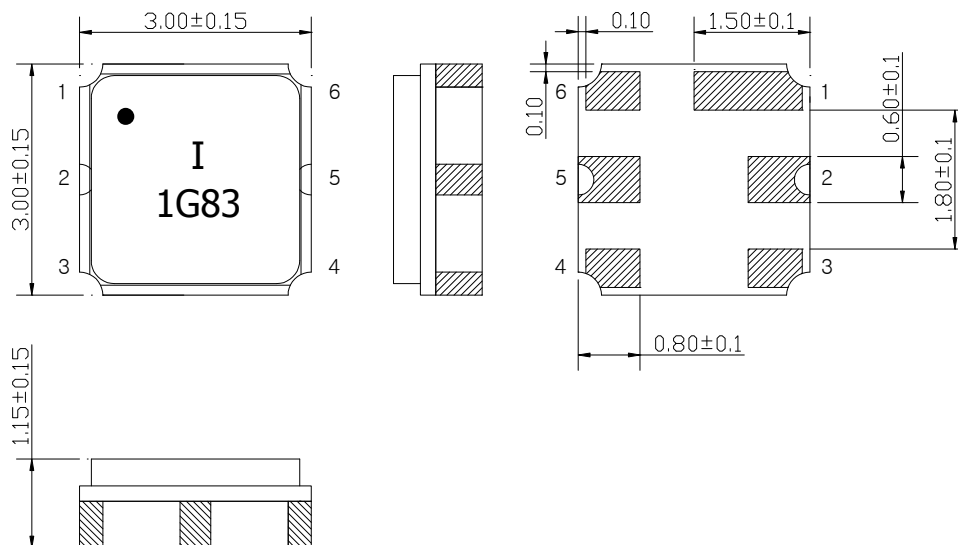
SAW Bandpass Filter F1G83



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 × 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 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	°C	-30	25	85
Storage Temperature Range	°C	-40	-	90
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.	F1G83	
		Rev. Date	2010-10-12	
		Rev.	NCLJ02-AS01	1/7

SAW Bandpass Filter F1G83




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

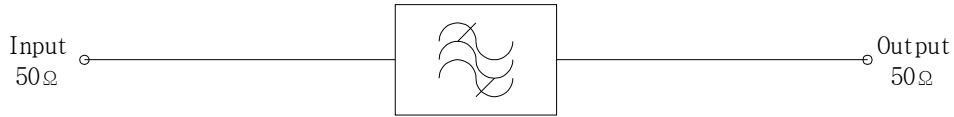
 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G83	
		Rev. Date	2010-10-12	
		Rev.	NCLJ02-AS01	2/7

SAW Bandpass Filter F1G83



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

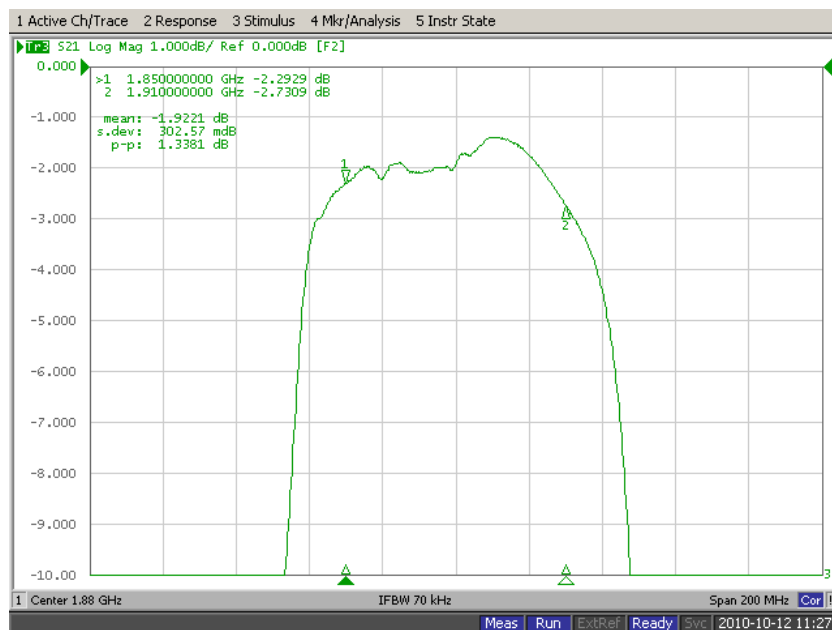
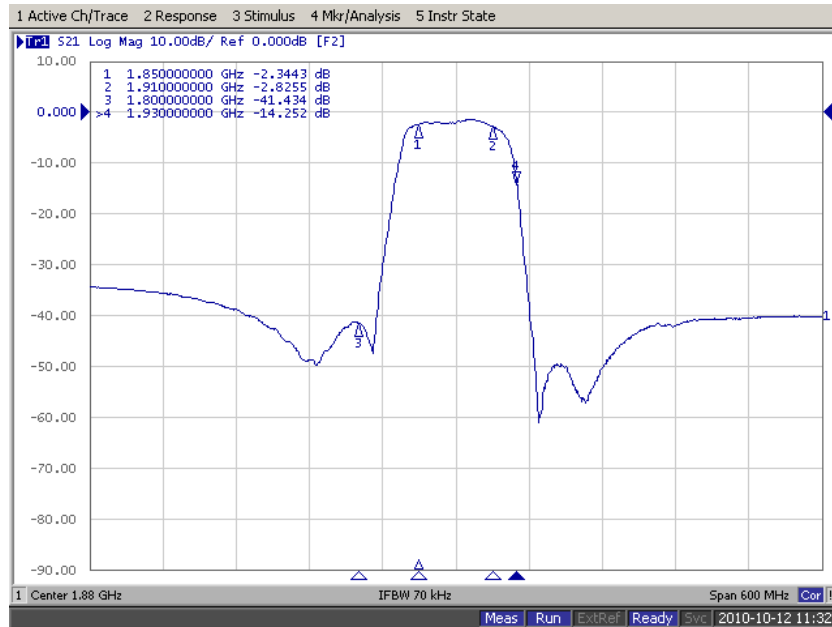
* Ink or Laser Marking available


 Integrated Technology Future	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G83	
		Rev. Date	2010-10-12	
		Rev.	NCLJ02-AS01	3/7

SAW Bandpass Filter F1G83



Typical Performance (at 25°C)

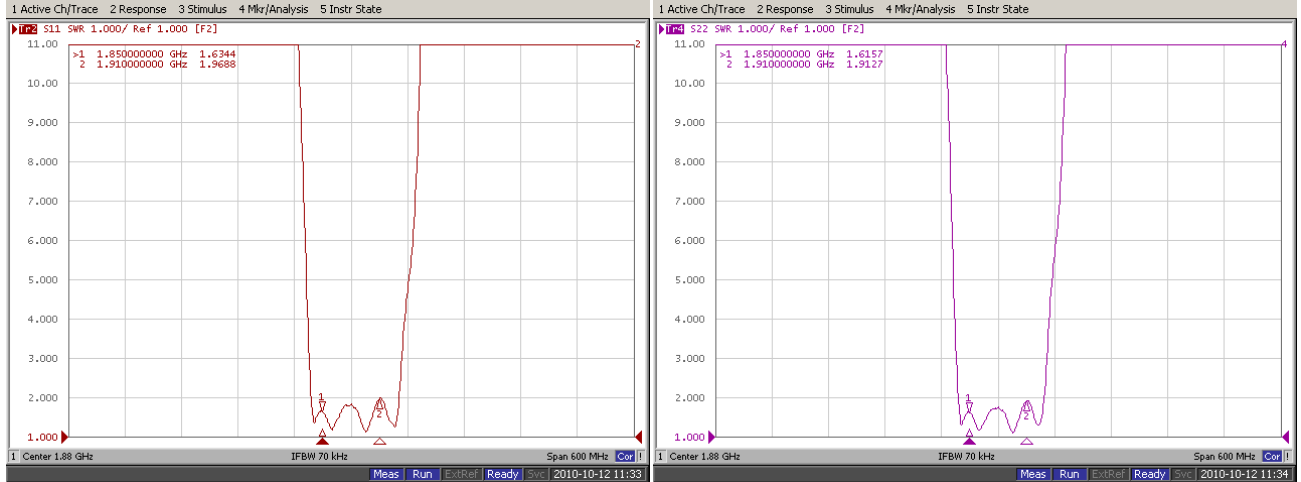


	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G83	
		Rev. Date	2010-10-12	
		Rev.	NCLJ02-AS01	4/7

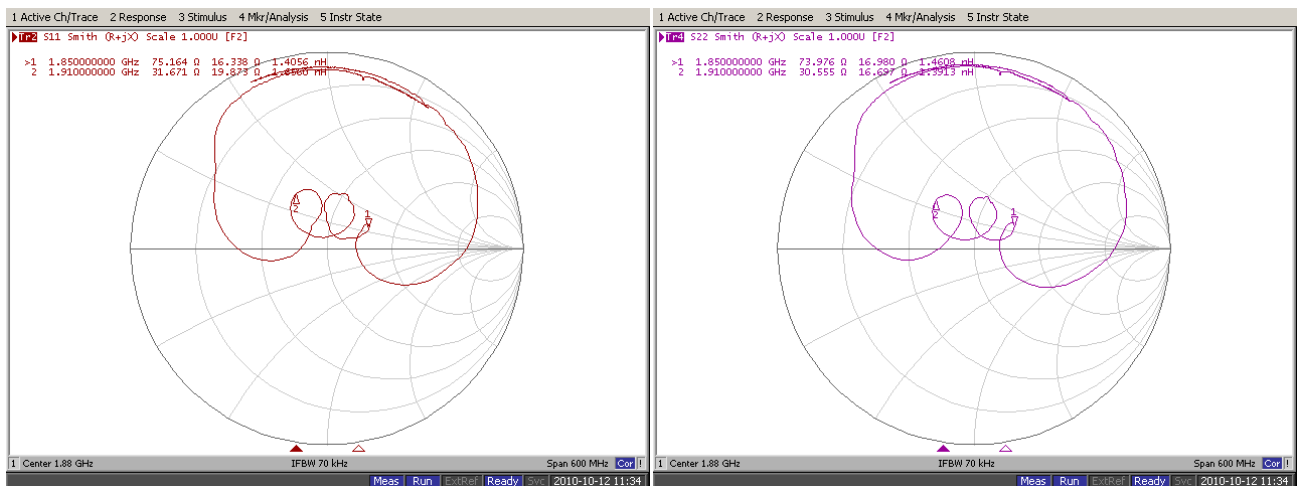
SAW Bandpass Filter F1G83



Input / Output VSWR Charts



Input / Output Smith Charts



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.

F1G83

Rev. Date

2010-10-12

Rev.

NCLJ02-AS01

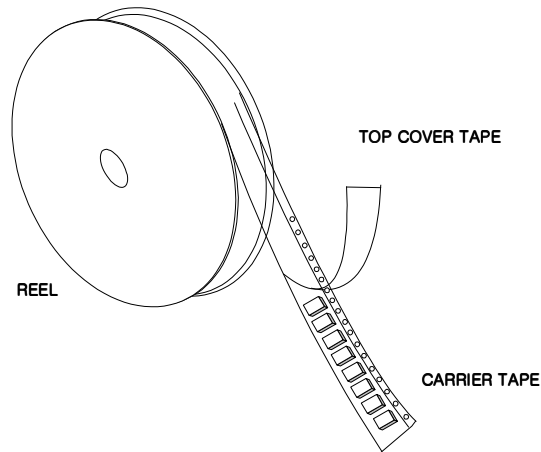
5/7

SAW Bandpass Filter F1G83



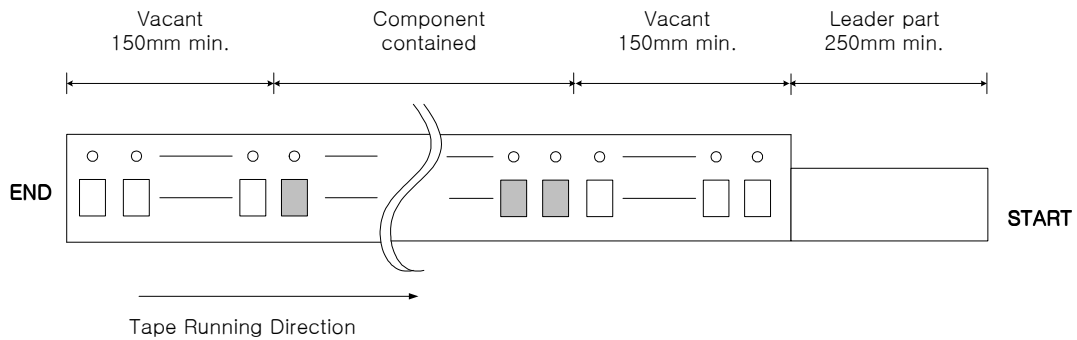
Packing Specification

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

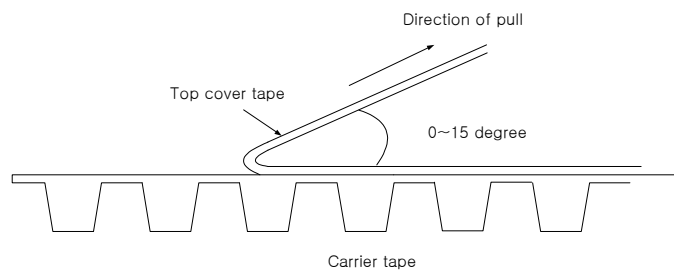


2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

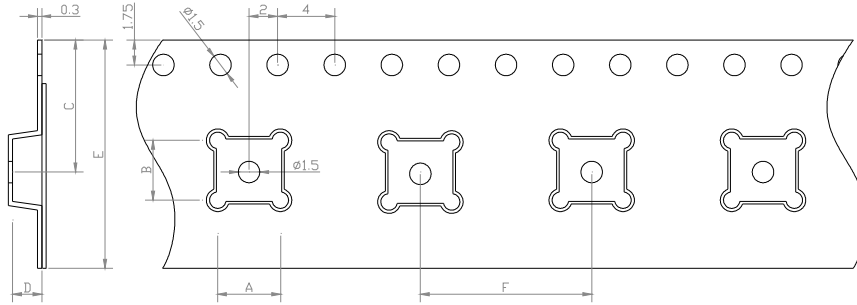


	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G83	
		Rev. Date	2010-10-12	
		Rev.	NCLJ02-AS01	6/7

SAW Bandpass Filter F1G83

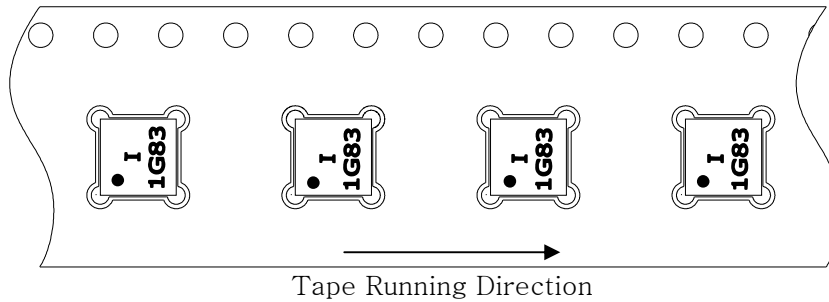


Carrier Tape Dimensions [unit : mm]

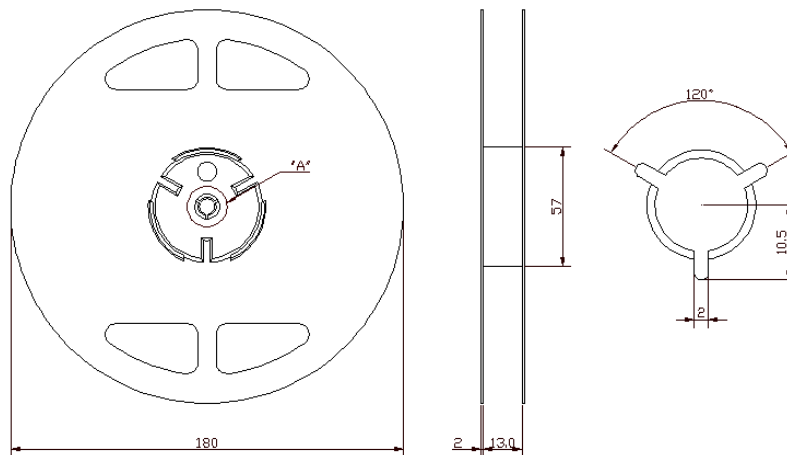



A	3.40 ± 0.1
B	3.40 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]



	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	F1G83	
		Rev. Date	2010-10-12	
		Rev.	NCLJ02-AS01	7/7