

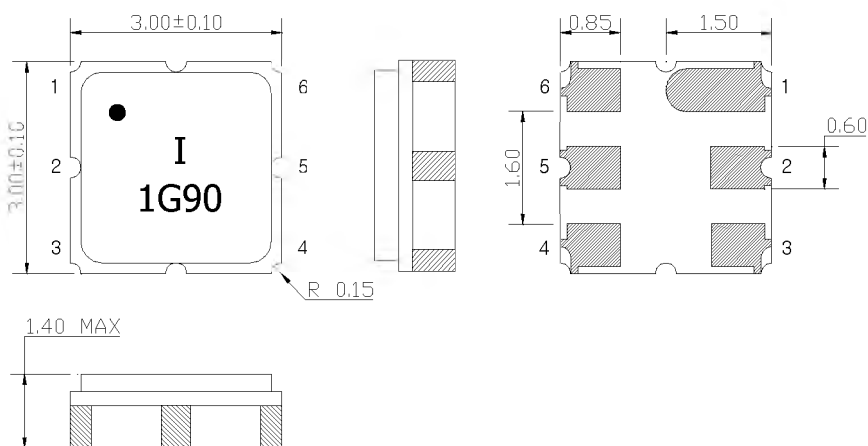
SAW Bandpass Filter F1G90



Features

- RF bandpass filter
- High attenuation
- No matching single-ended operation
- Ceramic Surface Mounted Device Package (3.0 mm × 3.0 mm)
- RoHS Compliant

Package Dimension



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	-20	25	70
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	10

Electrostatics Sensitive Device (ESD)

SAW Bandpass Filter F1G90



Specifications

$F_0 = 1900.0 \text{ MHz}$

	Minimum	Typical	Maximum	Unit
Center Frequency (F_c)	-	1900.0	-	MHz
Insertion Loss (In $F_c \pm 20.0 \text{ MHz}$)	-	2.7	3.5	dB
Amplitude Ripple (In $F_c \pm 20.0 \text{ MHz}$)	-	0.8	1.5	dB
VSWR (In $F_c \pm 20.0 \text{ MHz}$)	-	1.5	2.0	
Relative Attenuation				
0.3 MHz ~ 1000.0 MHz	30	35	-	dB
1000.0 MHz ~ 1700.0 MHz	30	35	-	
1700.0 MHz ~ 1830.0 MHz	32	38	-	
1970.0 MHz ~ 2400.0 MHz	38	45	-	
2400.0 MHz ~ 3000.0 MHz	30	40	-	
Input/Output Impedance		50		Ohm

Notes :

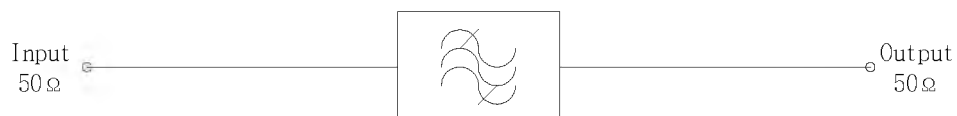
- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

SAW Bandpass Filter F1G90



Matching Schematic

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



Marking Configuration

1)
●
I²⁾
1G90³⁾

1) Pad Number 1 Index

2) Manufacturer name

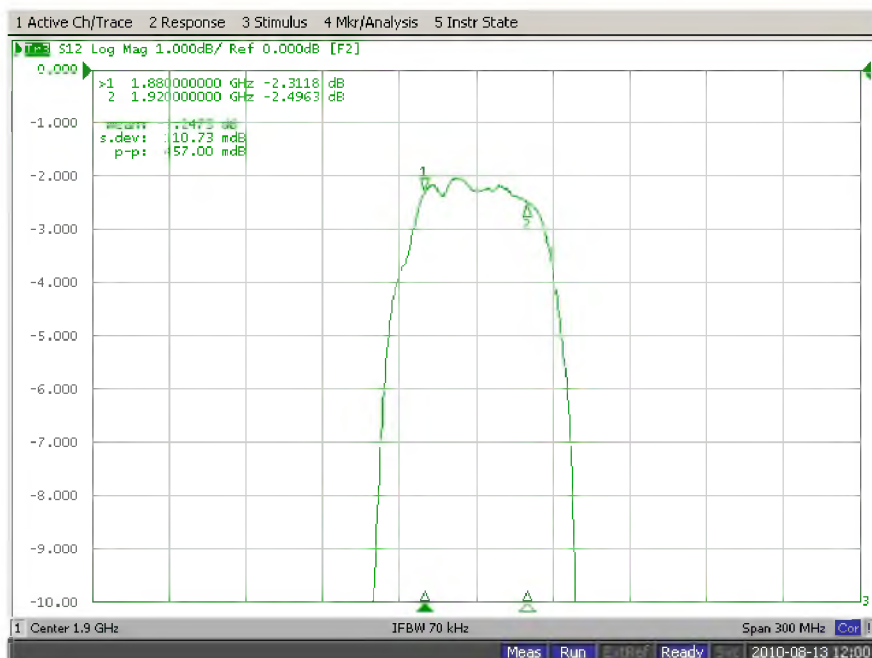
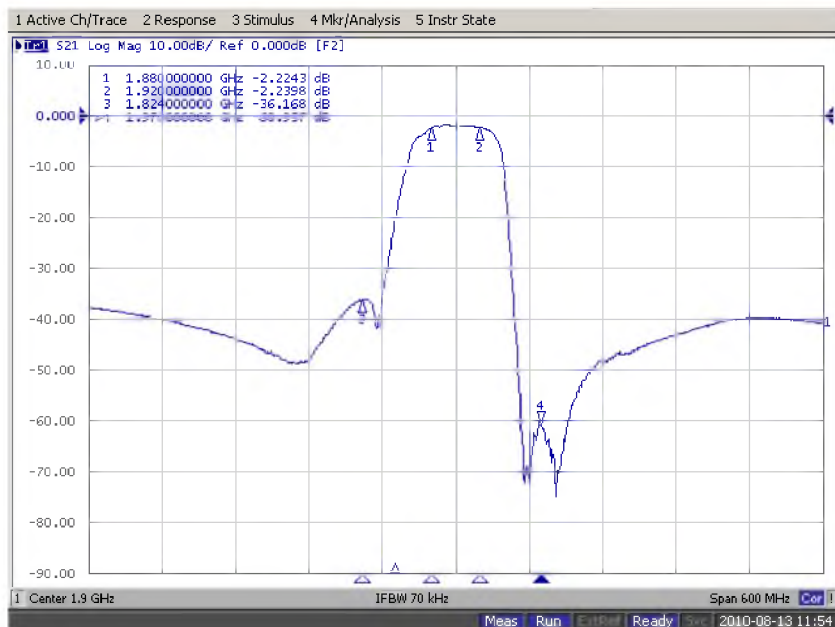
3) Marking Number

* Ink or Laser Marking available

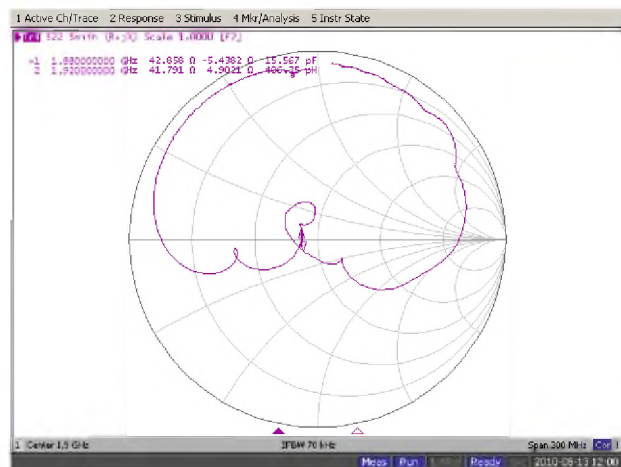
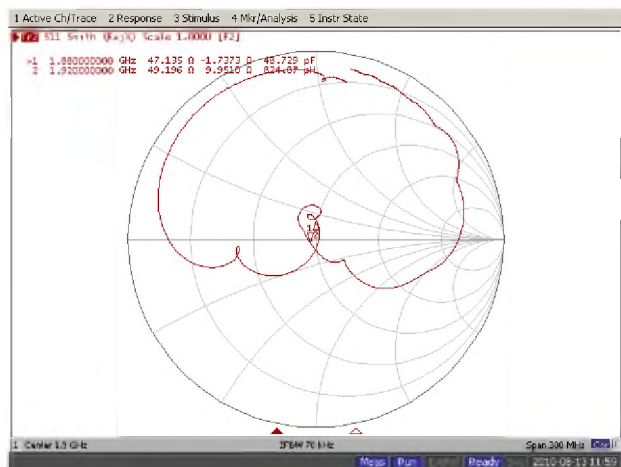
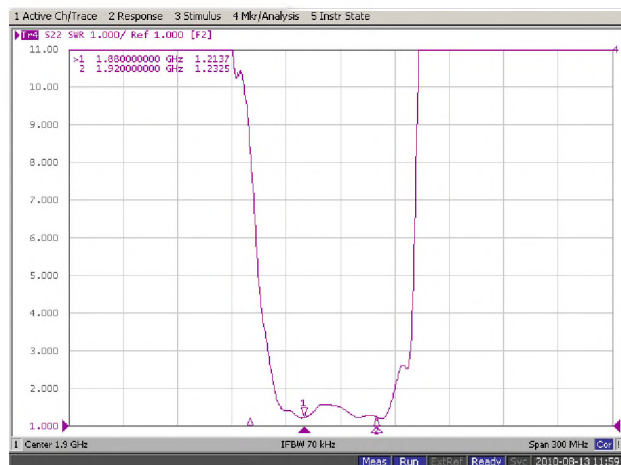
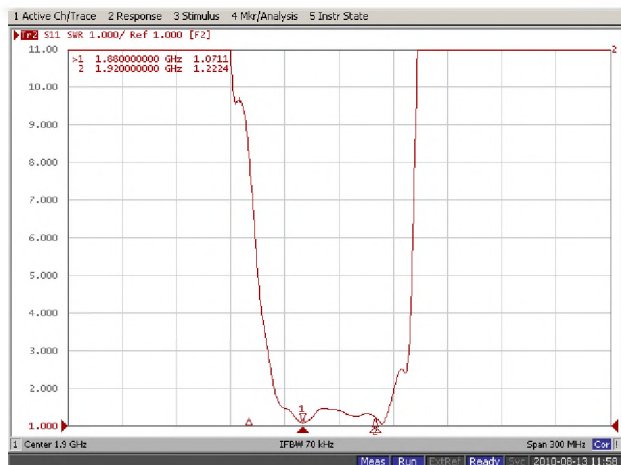
SAW Bandpass Filter F1G90



Typical Performance (at +25°C)



SAW Bandpass Filter F1G90

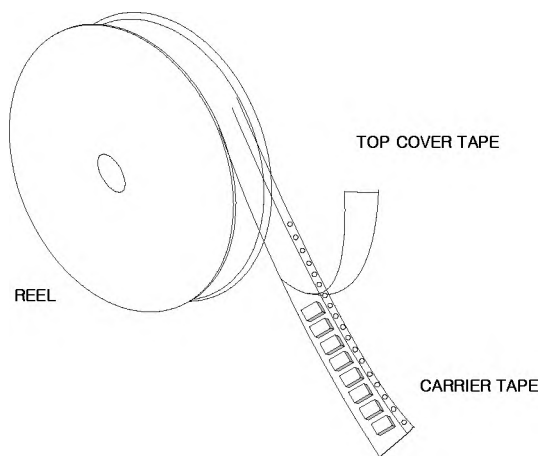


SAW Bandpass Filter F1G90



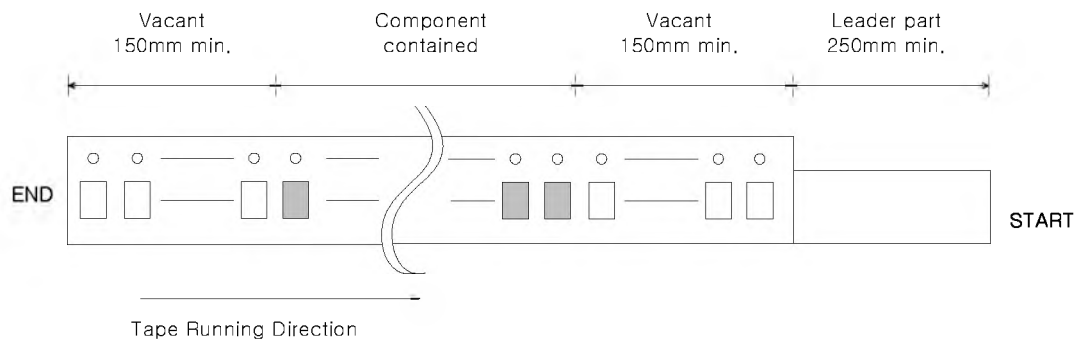
Packing Specification

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

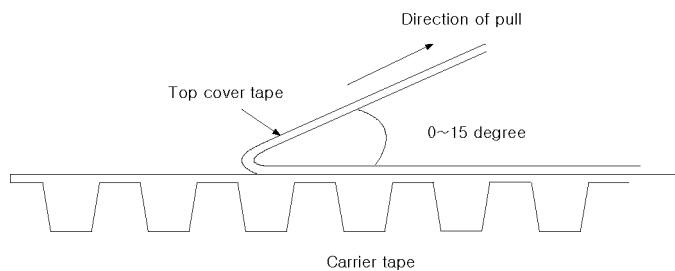
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

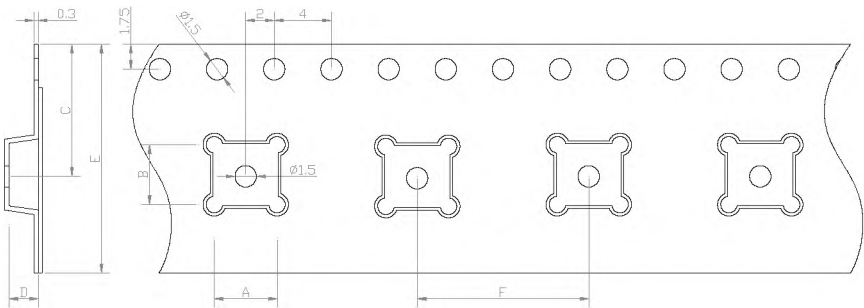
3) force : 20~70g



SAW Bandpass Filter F1G90

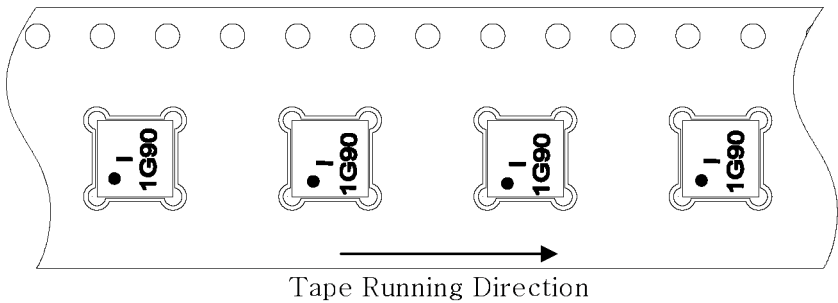


Carrier Tape Dimensions [unit : mm]



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]

