

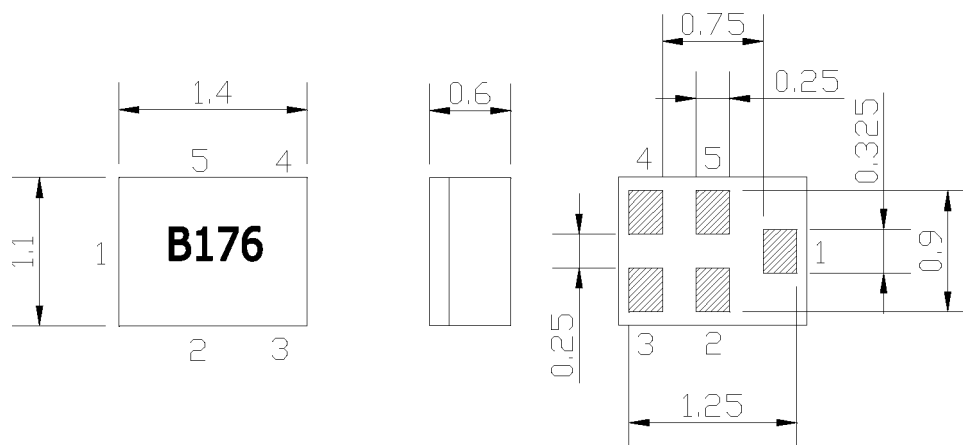
SAW Bandpass Filter F2G48



Features

- RF bandpass filter for Wi-Fi
- Matching 50Ω single-ended operation
- Usable passband 82MHz
- Ceramic Surface Mounted Device Package (1.4 mm × 1.1 mm)
- 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

1	Input
4	Output
2, 3, 5	Ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	℃	-30	25	85
Storage Temperature Range	℃	-40	25	85
Power Handling Capability	dBm	-	-	24

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Specifications

$F_c = 2442 \text{ MHz}$

	Minimum	Typical	Maximum	Unit
Center Frequency (F_c)	-	2442	-	MHz
Insertion Loss				
2402.5 ~ 2421.5 MHz	-	2.5	2.8	dB
2407.5 ~ 2426.5 MHz	-	2.2	2.5	
2412.5 ~ 2471.5 MHz	-	1.8	2.1	
2457.5 ~ 2476.5 MHz	-	1.8	2.1	
245625 ~ 2481.5 MHz	-	2.2	2.5	
Amplitude Ripple (2401 ~ 2483 MHz)	-	1.5	2.0	dB p-p
VSWR (2401 ~ 2483 MHz)	-	1.7	2.1	
Attenuation				
800 ~ 2300 MHz	25	30	-	dB
2300 ~ 2370 MHz	35	38	-	
2370 ~ 2380 MHz	38	43	-	
@ 2390MHz	6	8	-	
2500 ~ 2510 MHz	20	25	-	
2510 ~ 2570 MHz	37	40	-	
2555 ~ 2605 MHz	32	35	-	
2605 ~ 2655 MHz	30	32	-	
2690 ~ 4000 MHz	20	30	-	
4000 ~ 5000 MHz	20	30	-	

Notes :

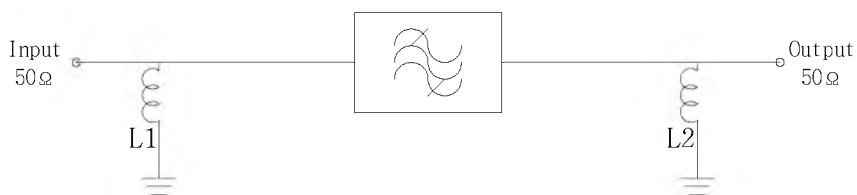
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances

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Matching Schematic

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



L1, L2 = 10 nH

Marking Configuration

B¹⁾ 176²⁾

1) Series Number

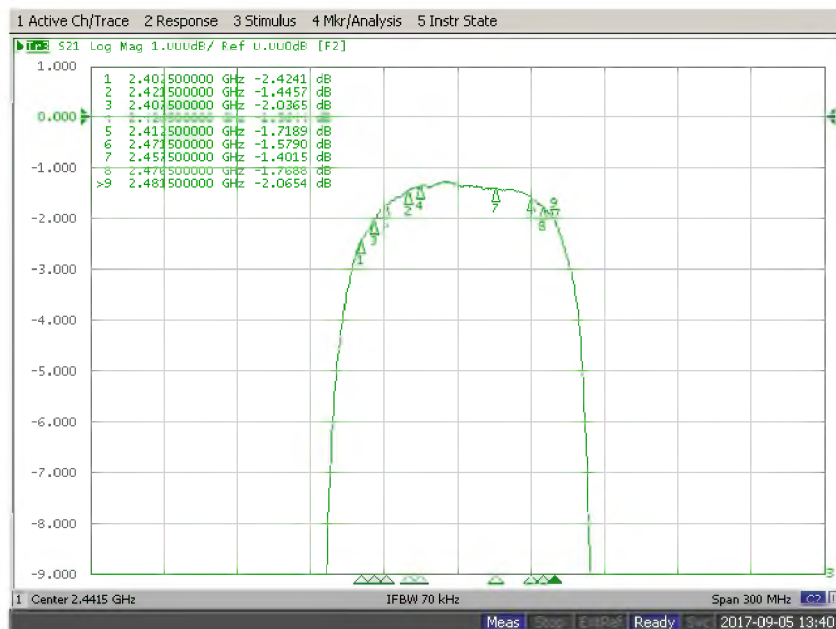
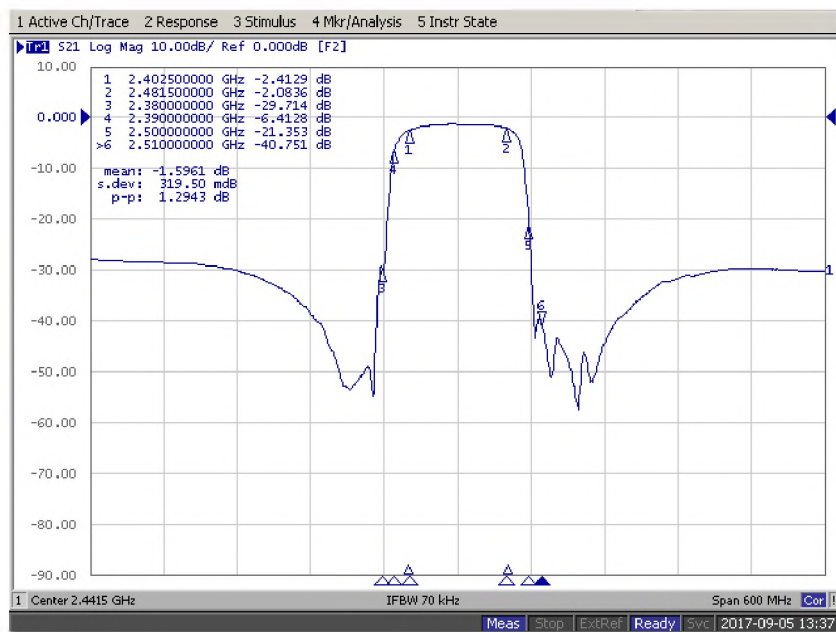
2) Date Code

* Ink or Laser Marking available

SAW Bandpass Filter F2G48



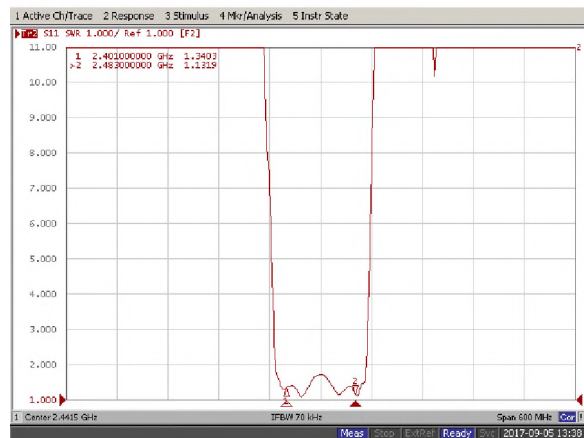
Typical Performance (at 25°C)



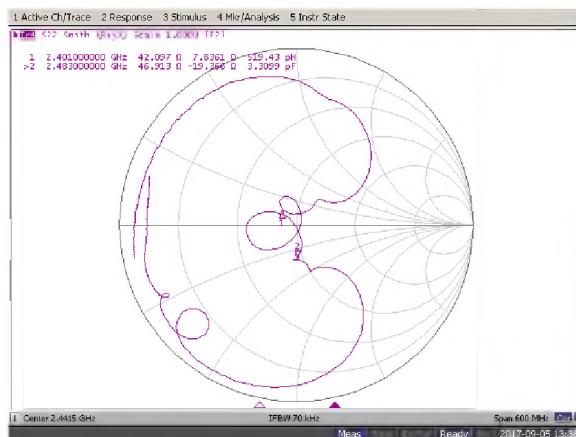
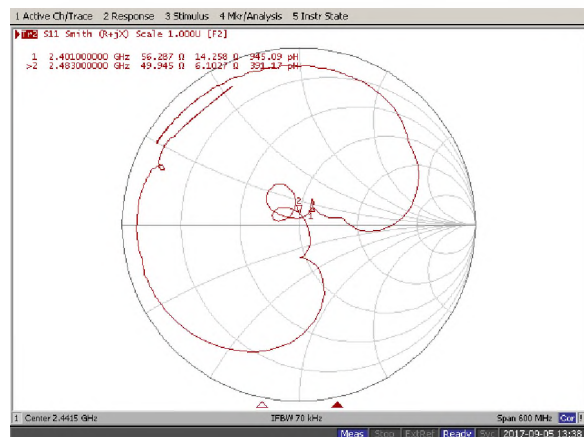
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Input / Output VSWR Charts



Input / Output Smith Charts

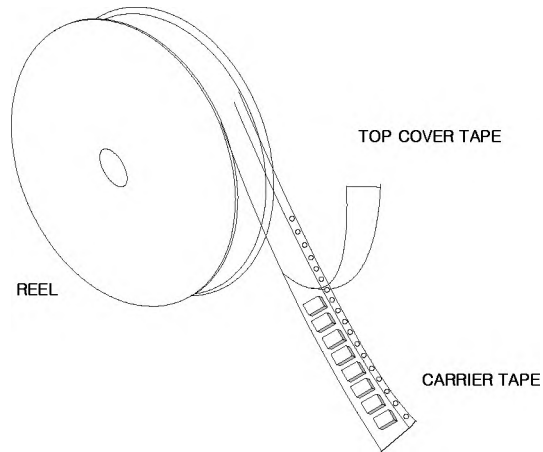


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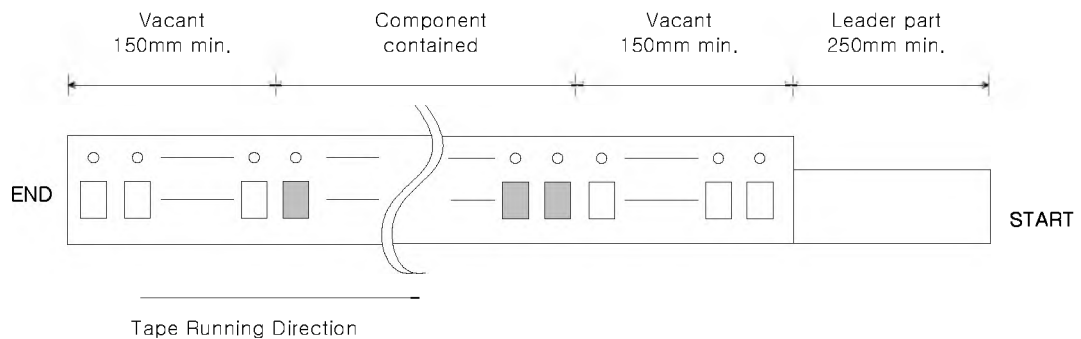
Packing Specification

1. Reeling Quantity : 3000 pcs / 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

