

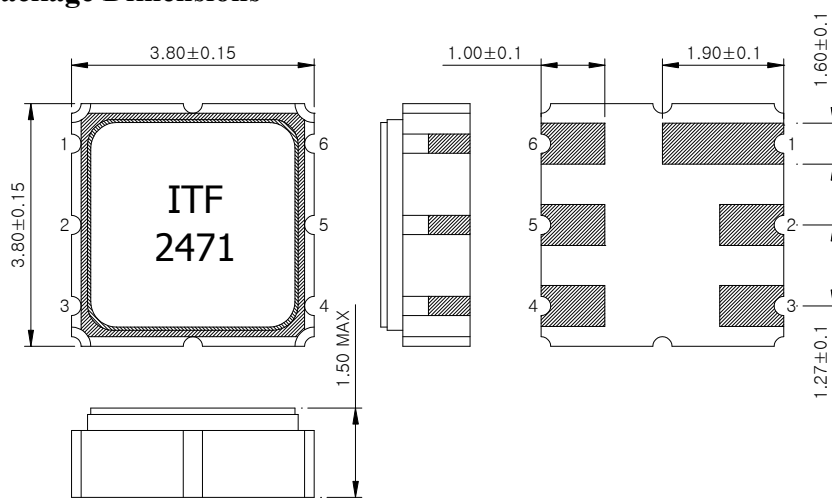
SAW Bandpass Filter F2471



Features

- Narrow bandpass filter
- High attenuation
- Matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (3.8 mm * 3.8 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	
2	Input
5	Output
1, 3, 4, 6	Case ground

Maximum Ratings

Parameter	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
Storage Temperature Range	°C	-45	25	85
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.	F2471	
		Rev. Date	2019-05-09	
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Specifications

$F_c = 247.45\text{MHz}$


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency (F_c)	MHz	-	247.45	-
Insertion Loss	dB	-	-	5.0
3dB Bandwidth	kHz	-	600	-
Absolute Group Delay at F_c	usec	-	1.4	-
Attenuation				
$F_c \pm 600\text{ kHz}$	dB	20	-	-
$F_c \pm 1.2\text{ MHz}$		34	-	-
$F_c \pm 21.6\text{ MHz}$		45	-	-
Input/Output Impedance	Ohms	-	50	-

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

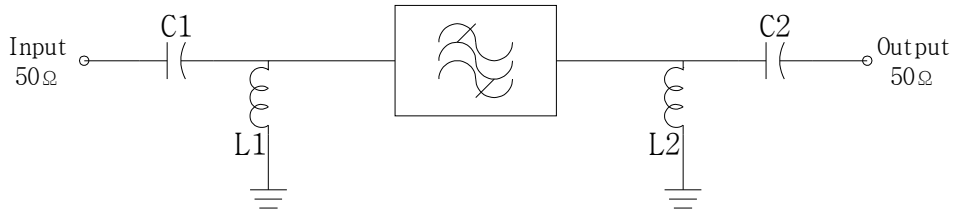
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Matching Schematic

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



$$C1 = C2 = 3.9\text{pF}, \quad L1 = L2 = 68\text{nH}$$

Marking Configuration


ITF¹⁾

2471²⁾

1) Manufacturer name

2) Marking Number

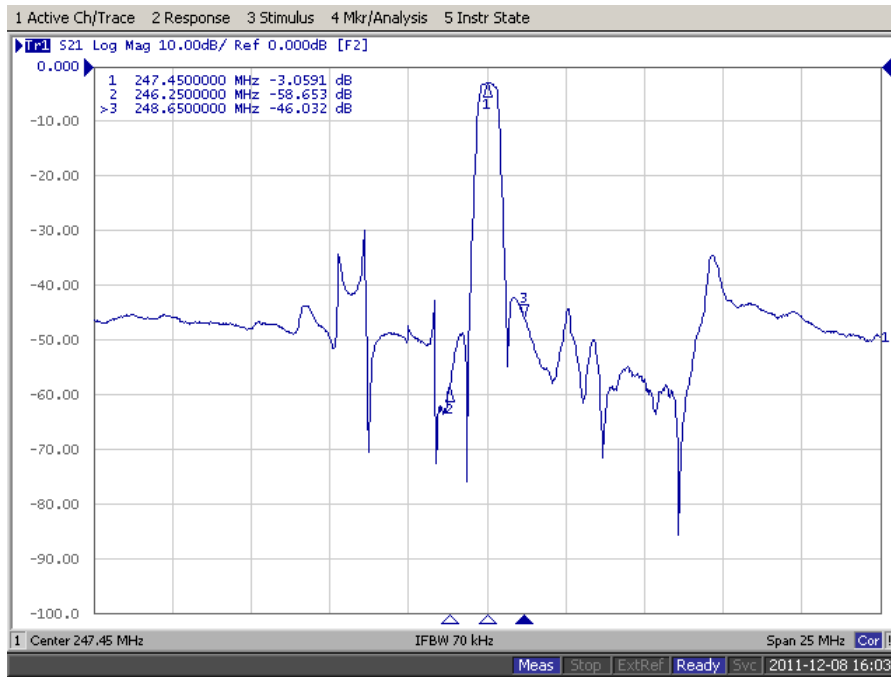
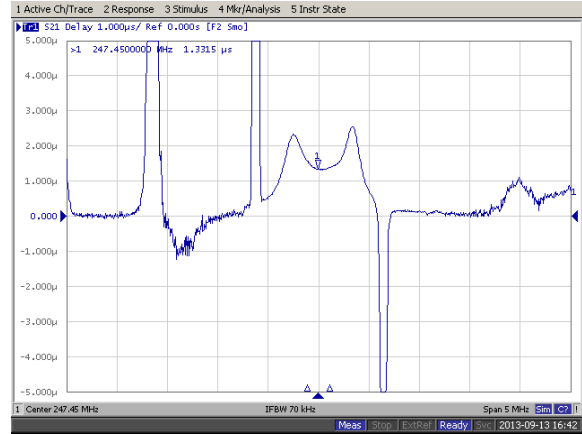
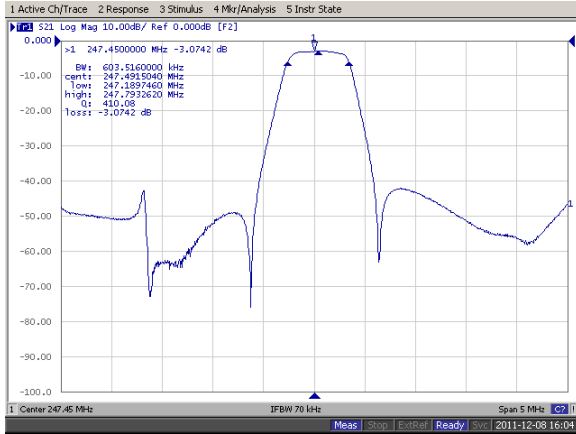
Ink or Laser Marking available

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Typical Performance (at 25°C)



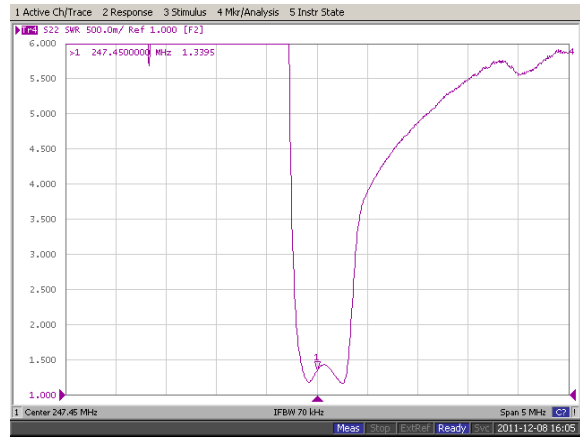
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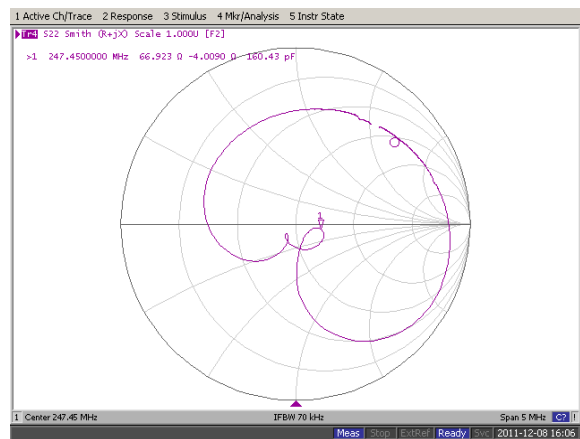
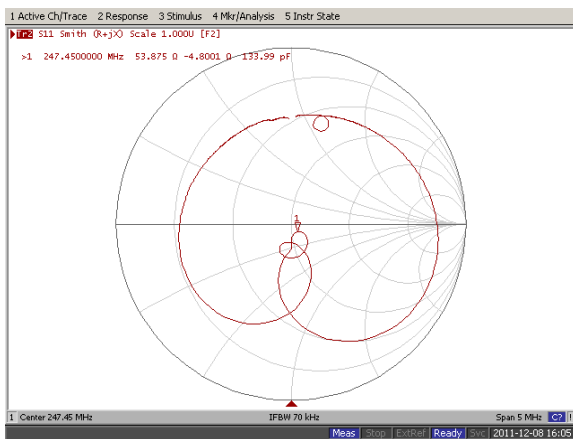
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Input / Output VSWR Charts



Input / Output Smith Charts



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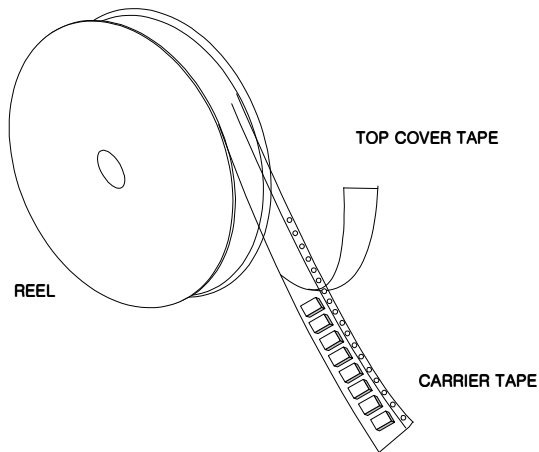
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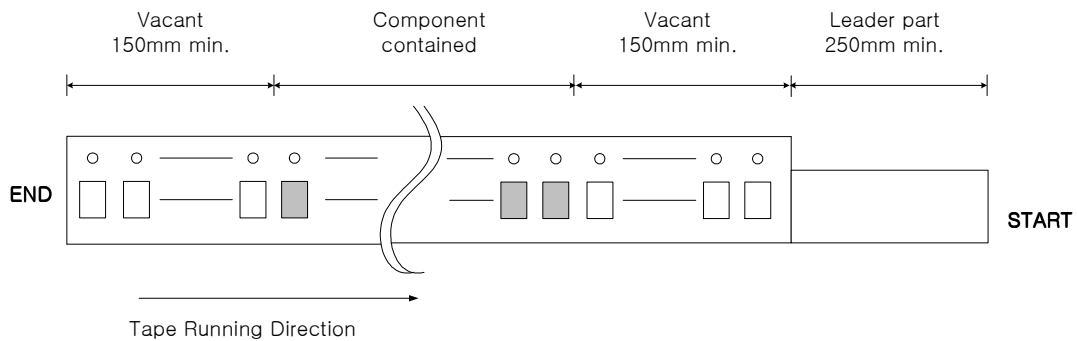
Packing Specification

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

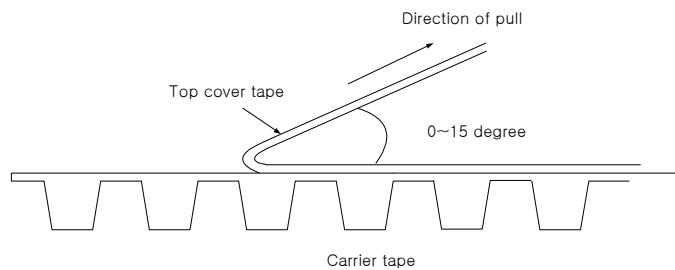



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

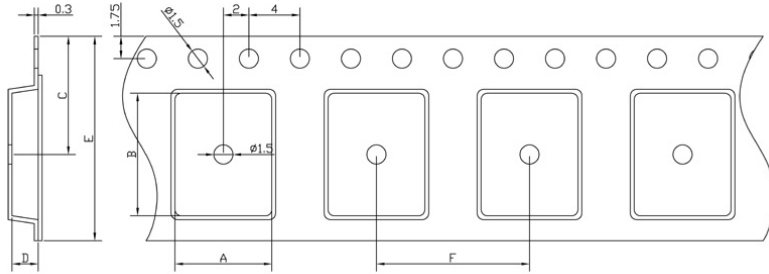


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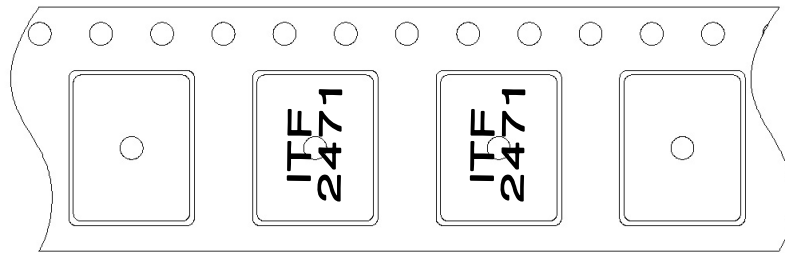


Carrier Tape Dimensions [unit : mm]



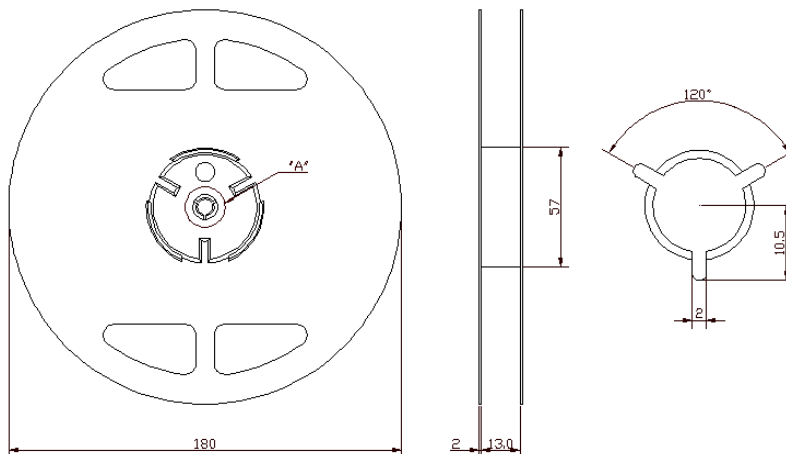
A	4.30 ± 0.1
B	4.30 ± 0.1
C	7.25 ± 0.1
D	1.70 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Tape Running Direction

Reel Dimensions [unit : mm]



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