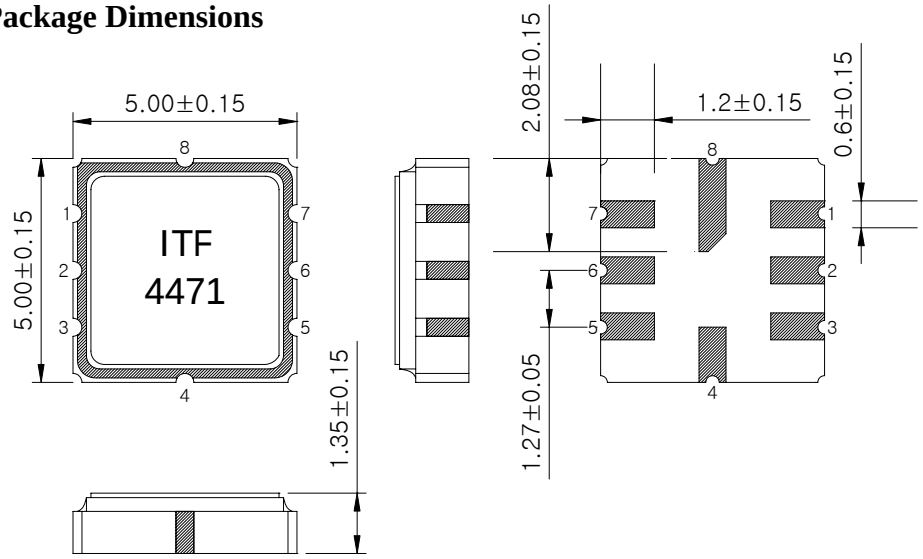
SAW Bandpass Filter F4471

Features

- Narrow bandpass filter
- High attenuation
- Usable bandwidth 25 kHz
- 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package

Package Dimensions



Dimensions shown are nominal in millimeters

Body : Al_2O_3 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
6	Output
1, 3, 4, 5, 7, 8	Case ground

Maximum Ratings

Parameter	**Unit**	**Minimum**	**Typical**	**Maximum**
Operating Temperature Range	°C	-10	25	60
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	-

Electrostatics Sensitive Device (**ESD**)

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Specifications

Fc = 447.725MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency (Fc)	MHz	-	447.725	-
Insertion Loss (Fc +/- 12.5 kHz)	dB	-	3.8	5.5
Amplitude Ripple (Fc +/- 12.5 kHz)	dB	-	-	-
Absolute Group Delay at Fc	usec	-	3.5	-
Group Delay Variation (Fc +/- 12.5 kHz)	usec	-	0.5	-
VSWR (Fc +/- 12.5 kHz)		-	1.5	2.2
Attenuation Fo +/− 12.5 kHz Fo +/− 750.0 kHz ~ Fo +/− 2.0 MHz Fo +/− 2.0 MHz ~	 dB dB dB	 - 30 55	 3.8 35 65	 5.5 - -
Temperature Coefficient of Frequency	ppm/°C^2	-	-0.032	-

Notes :

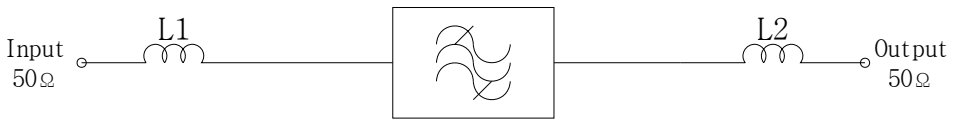
1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.

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

Matching Schematic

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



L1 = L2 = 39nH

Marking Configuration

ITF[1)]

4471[2)]

1) Manufacturer name

2) Marking Number

* Ink or Laser Marking available

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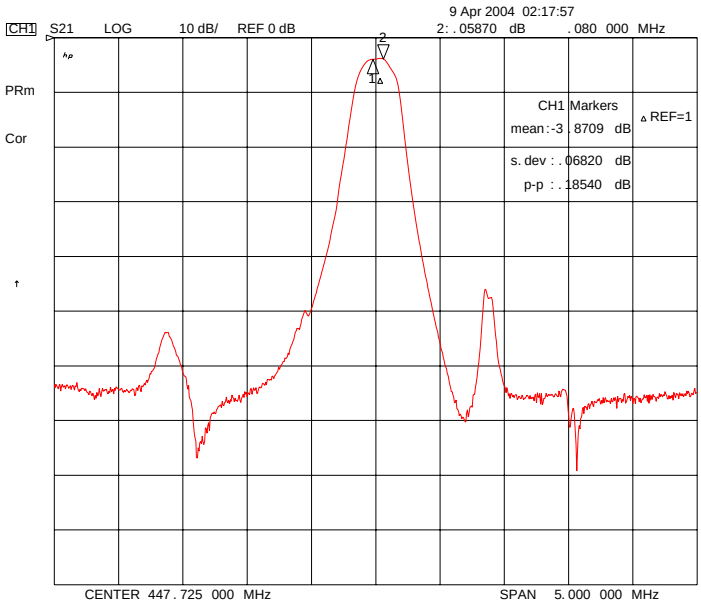
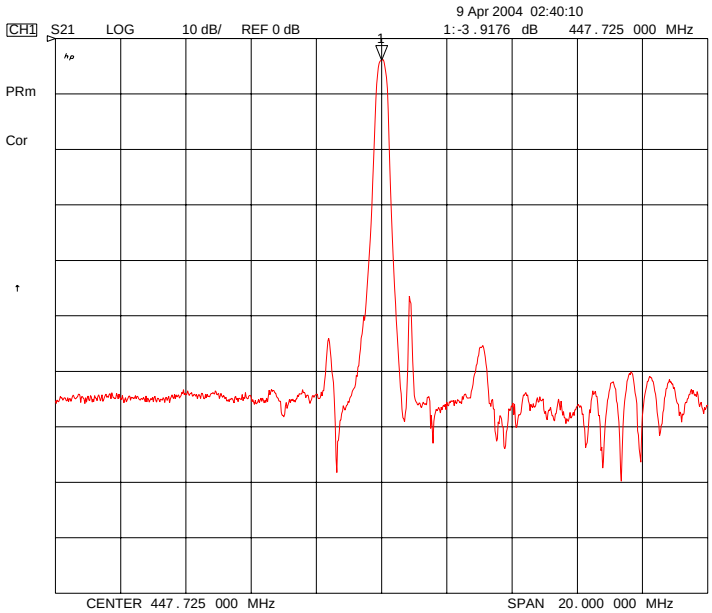
Typical Performance (at 25℃)





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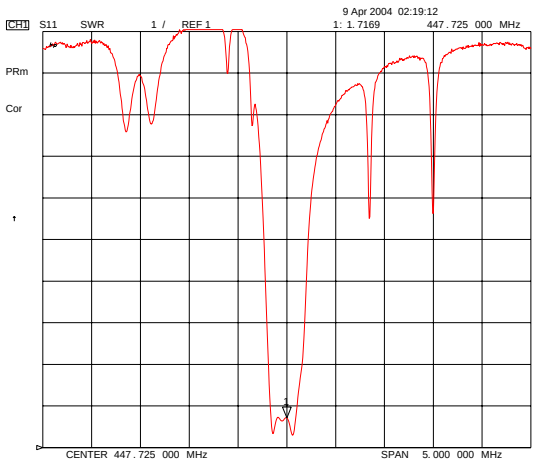
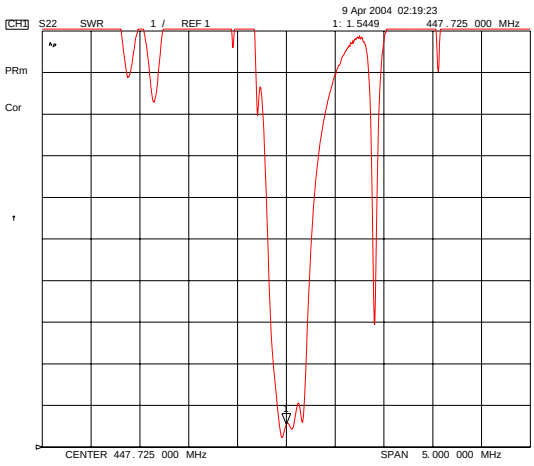
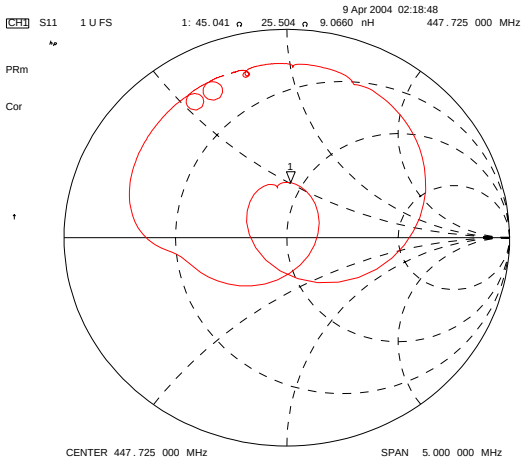
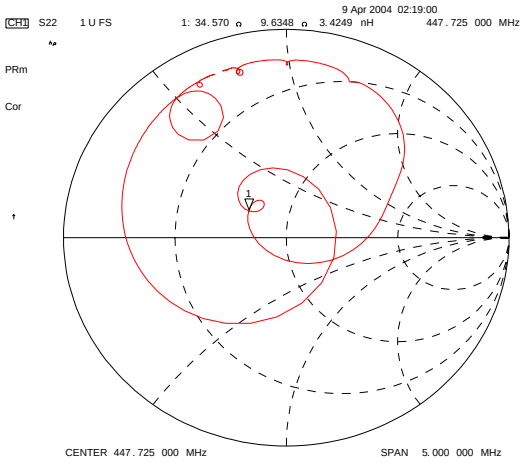
Input / Output VSWR Charts





Input / Output Smith Charts

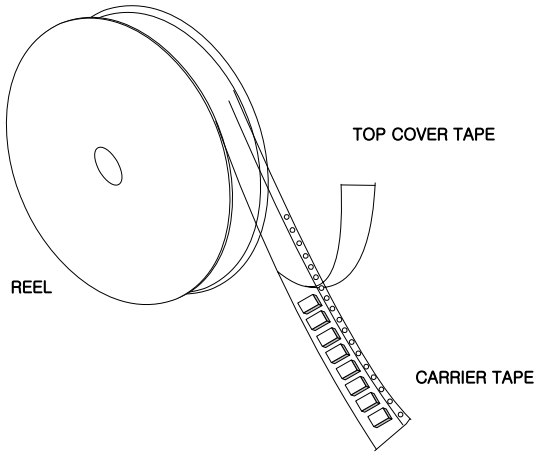




Packing Specification

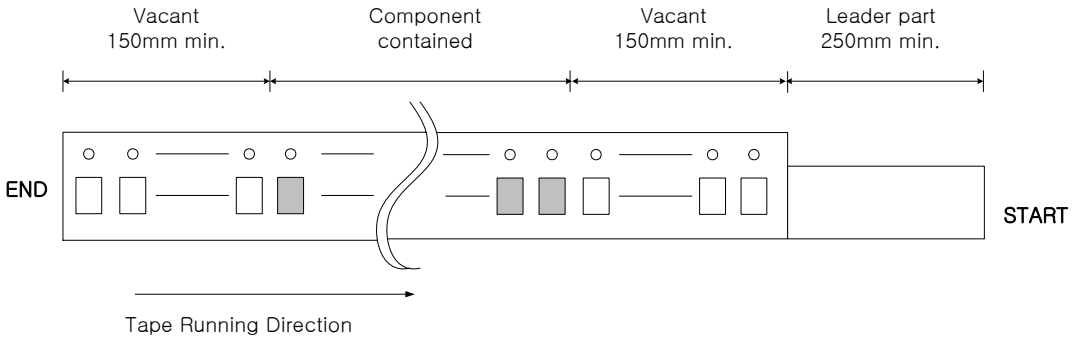
1. Reeling Quantity : 1000 pcs / reel

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

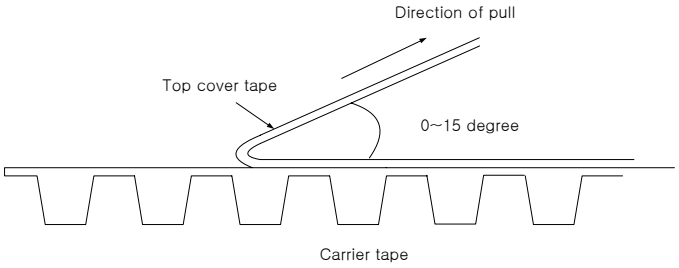
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

3) force : 20~70g



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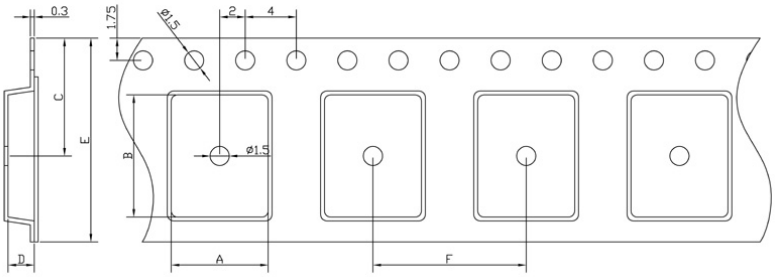
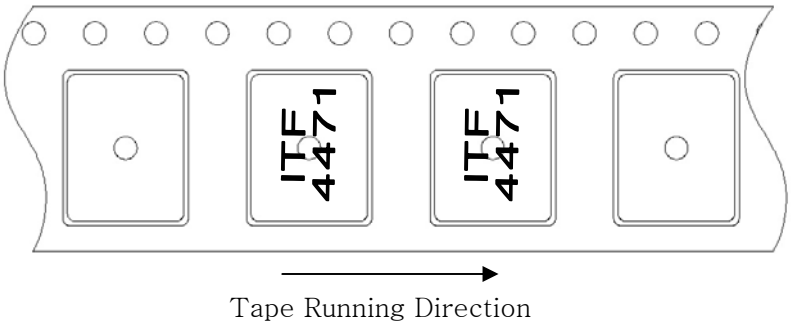
Carrier Tape Dimensions [unit : mm]



A	5.50 ± 0.1
B	5.50 ± 0.1
C	7.25 ± 0.1
D	1.95 ± 0.1
E	12.00 ± 0.1
F	8.00 ± 0.1

Part Direction



Reel Dimensions [unit : mm]