

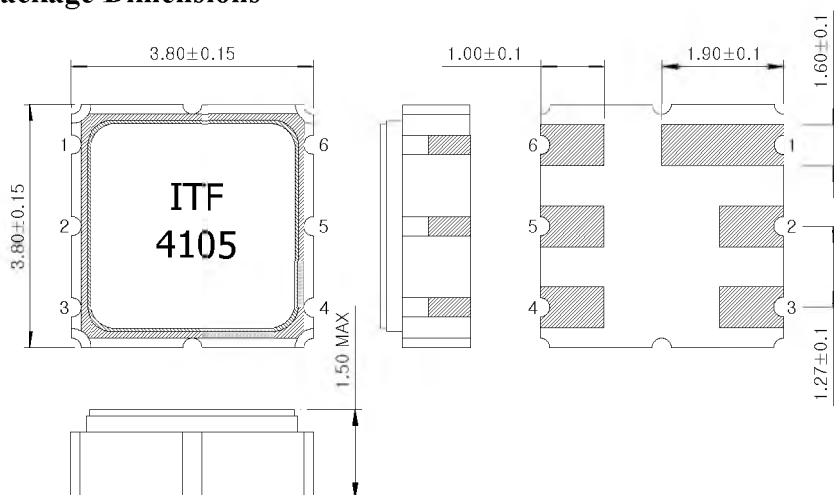
SAW Bandpass Filter F4105



Features

- RF bandpass filter
- High attenuation
- Usable bandwidth 6MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package

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	-30	25	65
Storage Temperature Range	°C	-40	-	85
Power Handling Capability	dBm	-	-	-

Electrostatics Sensitive Device (ESD)

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Specifications

$F_c = 410.0\text{MHz}$

Terminating source impedance : 50Ω

Terminating load impedance : 50Ω

		Minimum	Typical	Maximum
Center Frequency (F_c)	MHz	-	410.0	-
Insertion Loss ($F_c \pm 3.0\text{ MHz}$)	dB	-	3.0	4.0
Amplitude Ripple ($F_c \pm 3.0\text{ MHz}$)	dB	-	1.0	2.0
Absolute Group Delay at F_c	nsec	-	120	-
Group Delay Variation ($F_c \pm 3.0\text{ MHz}$)	nsec	-	50	-
VSWR ($F_c \pm 3.0\text{ MHz}$)		-	1.5	2.0
Relative Attenuation 360.0 MHz ~ 395.0 MHz 435.0 MHz ~ 460.0 MHz	dB	45 45	50 50	-
Temperature Coefficient of Frequency	ppm/ $^{\circ}\text{C}$	-	-32	-

Notes :

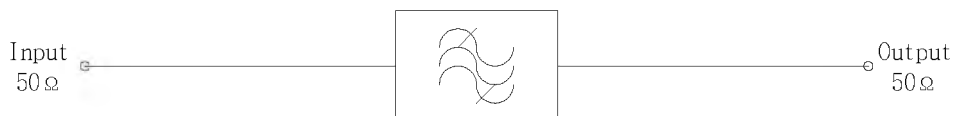
- 1) All specifications are based on the matching schematic shown below, measured by Agilent Network analyzer and full 2 port calibration.
- 2) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- 3) All attenuation measurements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

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Matching Schematic

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



Marking Configuration

ITF¹⁾

4105²⁾

1) Manufacturer name

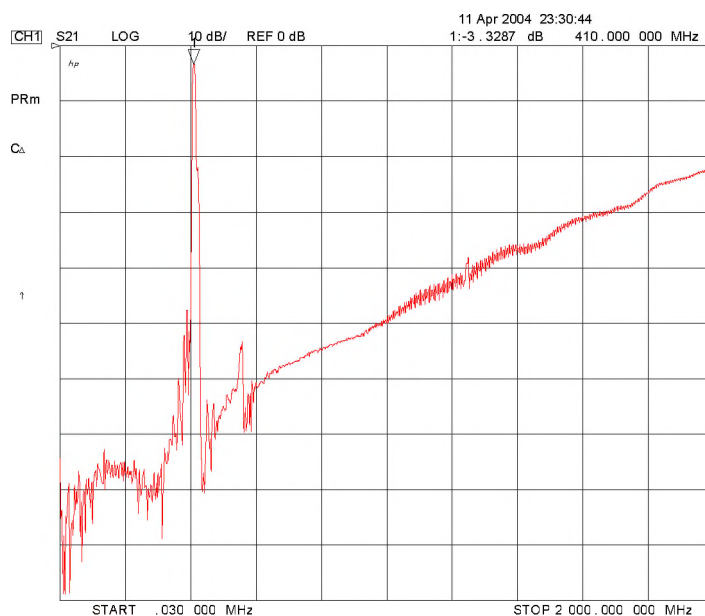
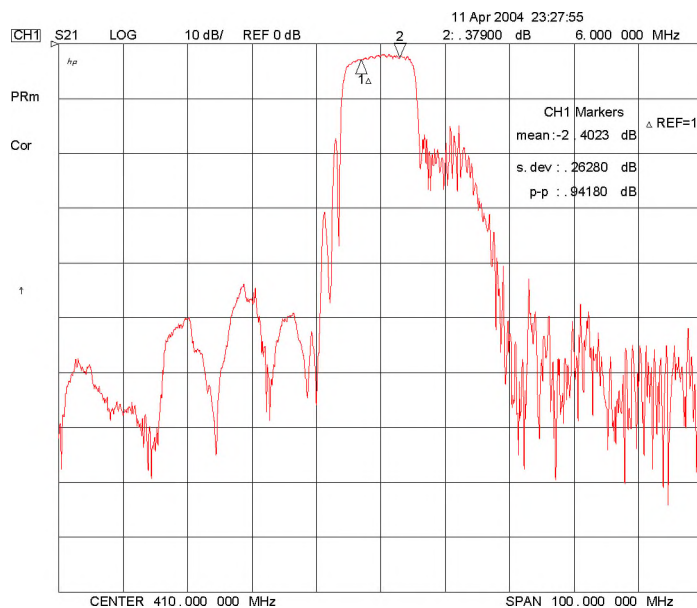
2) Marking Number

* Ink or Laser Marking available

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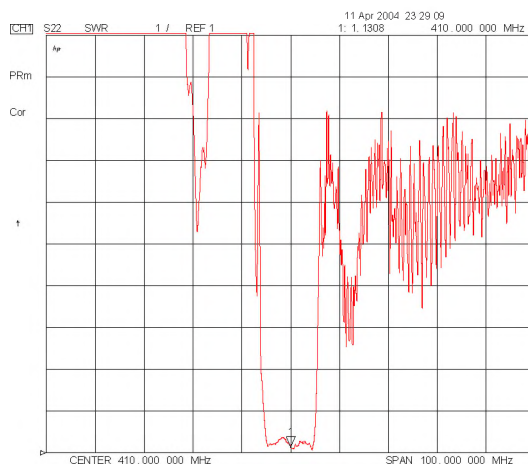
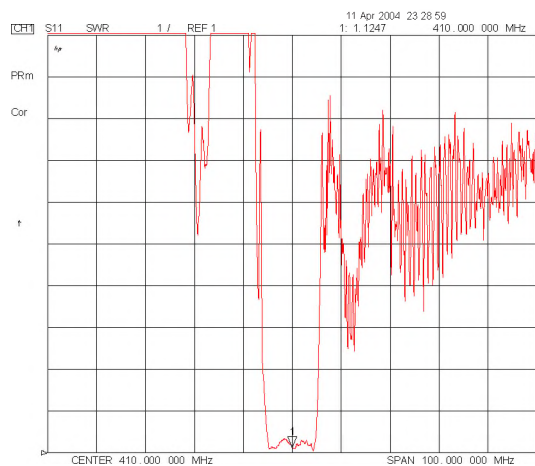
Typical Performance (at 25°C)



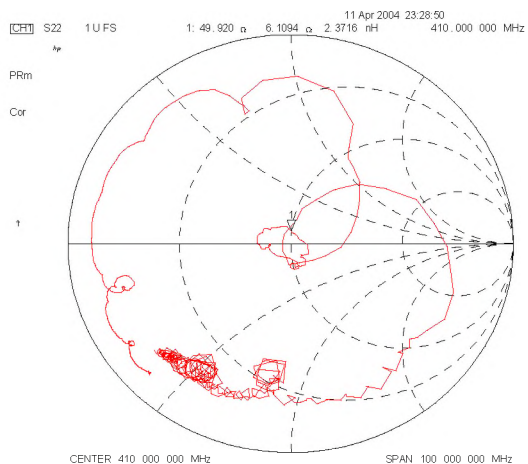
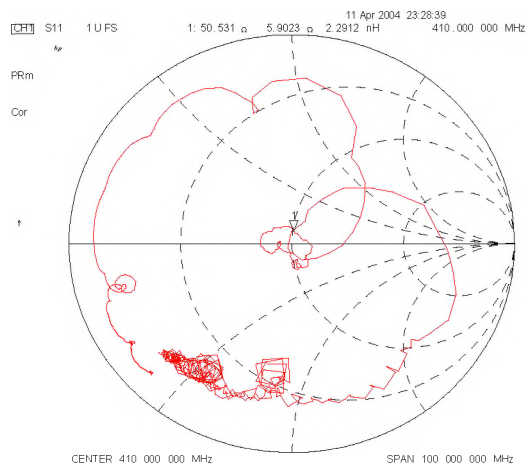
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Input / Output VSWR Charts



Input / Output Smith Charts

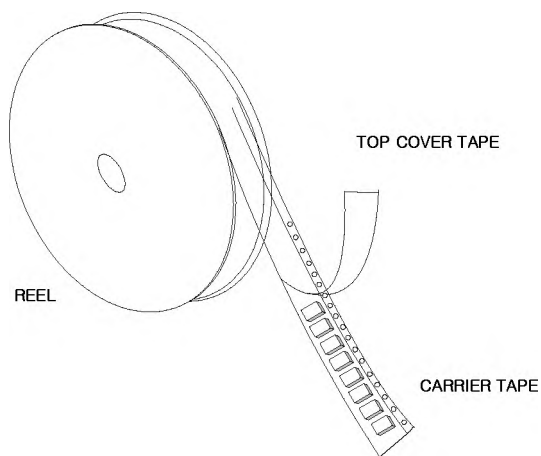


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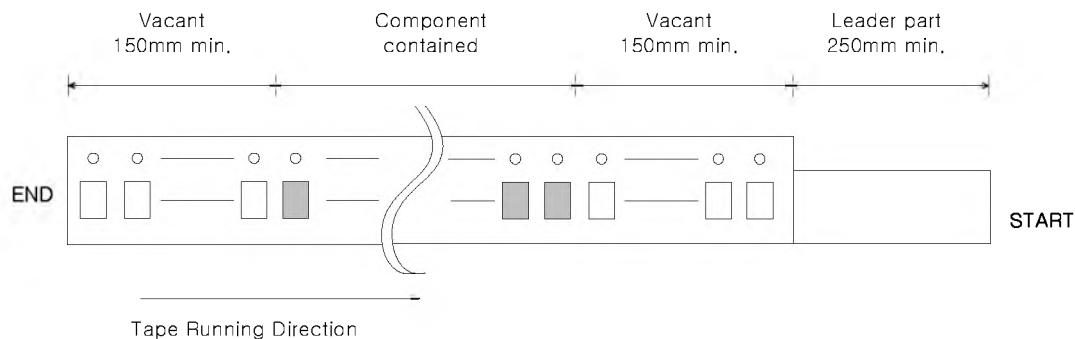
Packing Specification

1. Reeling Quantity : 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

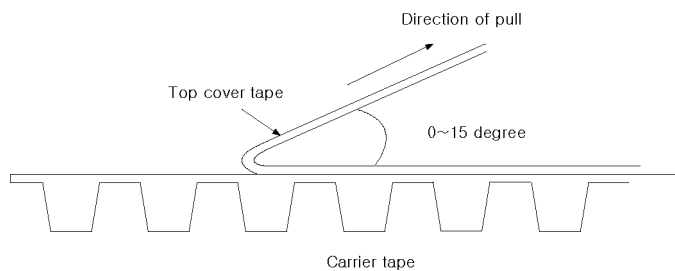
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

3) force : 20~70g



A diagram of a film strip with four frames. The first and fourth frames are empty except for a central circular hole. The second and third frames contain the text "ITF 4105" in a bold, sans-serif font, oriented vertically.