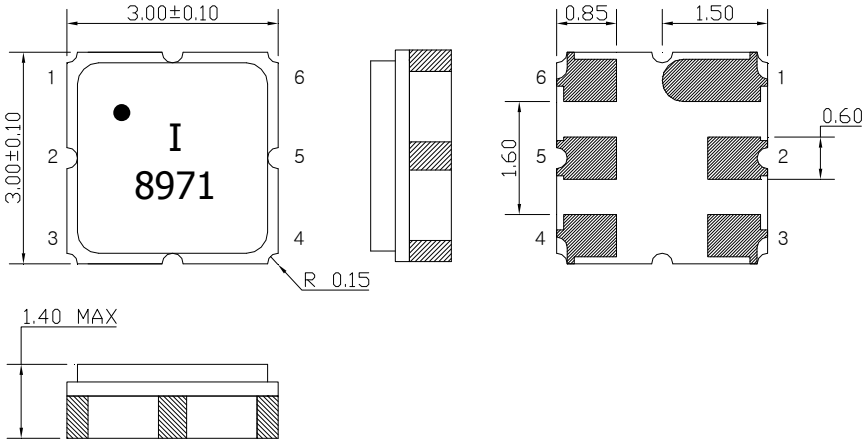
SAW Bandpass Filter F8971

Features

- EGSM applications
- Usable bandwidth of 35 MHz
- No impedance matching require for operation at 50 Ω
- Ceramic Surface Mounted Device Package (3.0 mm * 3.0 mm)
- Single-ended Operation
- RoHS Compliant

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 Configurations	
2	Input
5	Output
1, 3, 4, 6	Case ground

Maximum Ratings

Parameters	**Unit**	**Minimum**	**Typical**	**Maximum**
Operating Temperature Range	℃	-25	25	75
Storage Temperature Range	℃	-40	-	85
Power Handling Capability	dBm	-	-	5

Electrostatics Sensitive Device (**ESD**)

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Specifications

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	897.5	-	MHz
Insertion Loss (In Fc +/- 17.5 MHz)	-	2.1	3.0	dB
Amplitude Ripple (In Fc +/- 17.5 MHz)	-	1.0	2.0	dBp-p
VSWR (In Fc +/- 17.5 MHz)	-	2.0	2.6	
Relative Attenuation				
DC ~ 860.0 MHz	17.0	19.0	-	dB
925.0 MHz ~ 935.0 MHz	5.0	12.0	-	
935.0 MHz ~ 960.0 MHz	20.0	24.0	-	
980.0 MHz ~ 2000.0 MHz	20.0	22.0	-	
Temperature Range (Operational)	-20	25	75	℃
Input RF Power (In Fc +/- 17.5 MHz)			5	dBm
Input/Output Impedance		50		Ohms

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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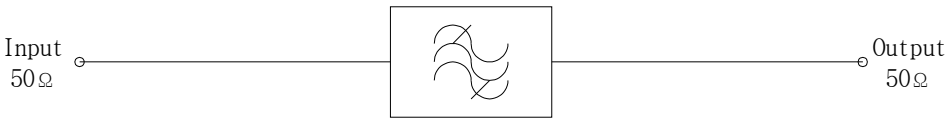
Matching Schematic

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



Marking Configuration

● [1]

I[2]

8971[3]

1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

* Ink or Laser Marking available

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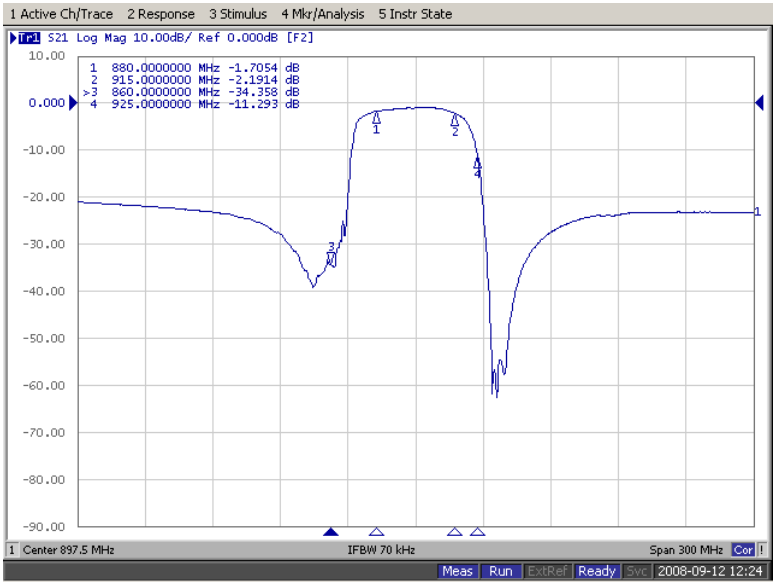
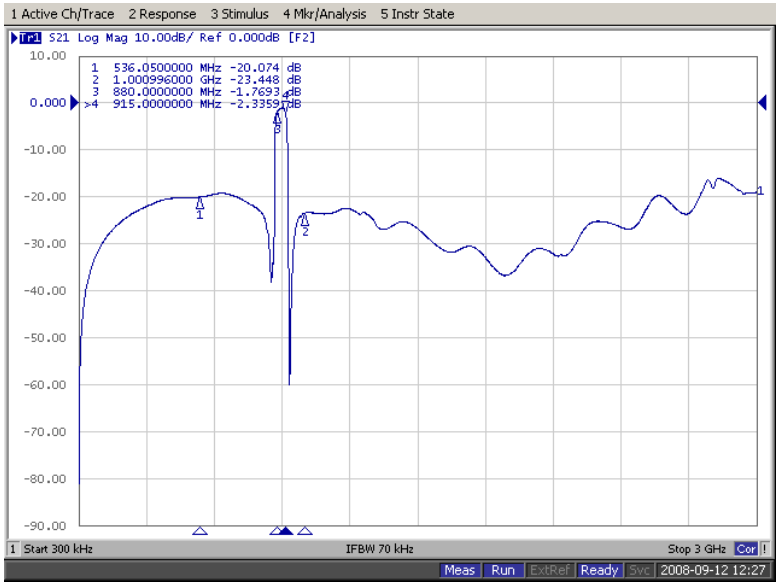
Typical Performance (at 25℃)





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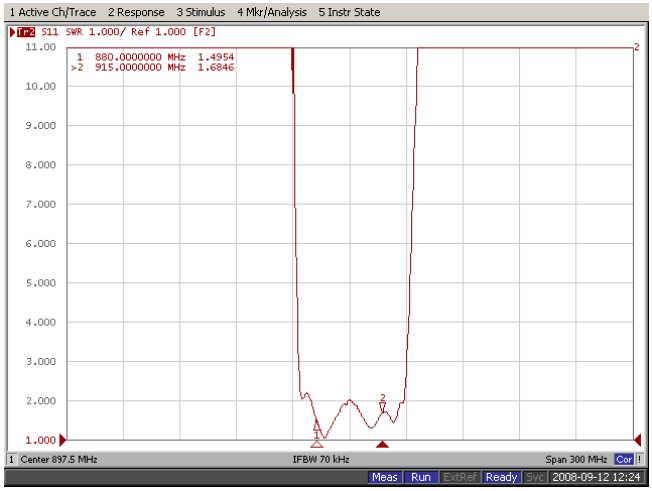
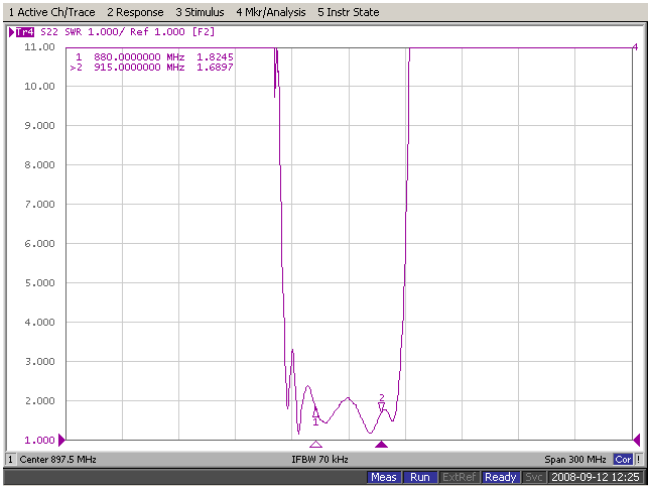
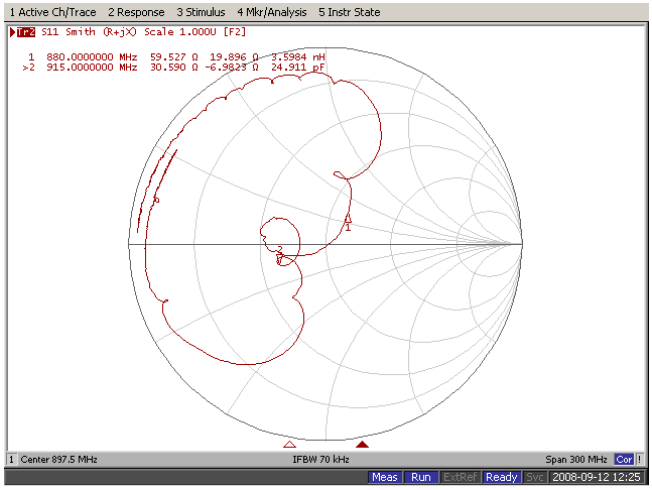
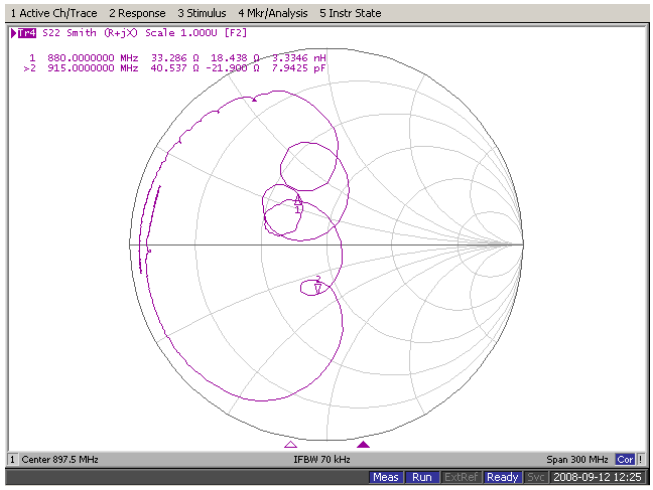
Input / Output VSWR Charts





Input / Output Smith Charts





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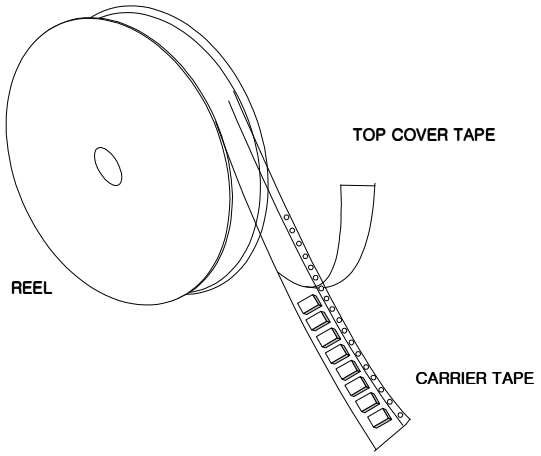
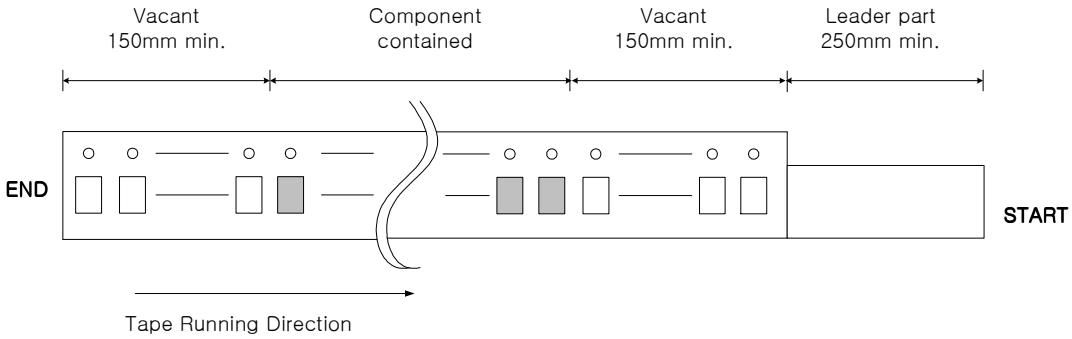
Packing Specification

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

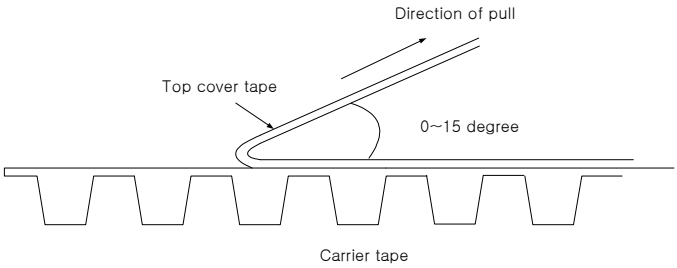
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

3) force : 20~70g



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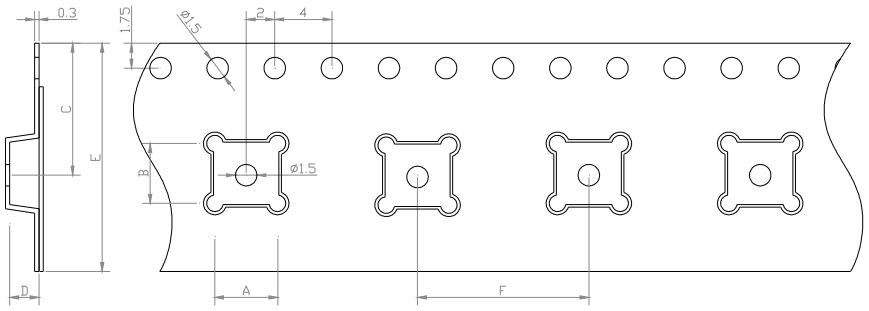
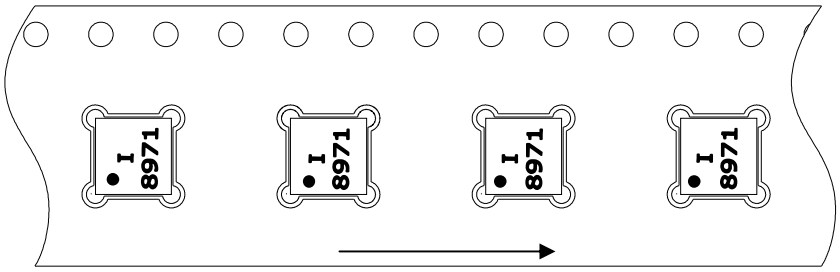
Carrier Tape Dimensions [unit : mm]



A	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]