

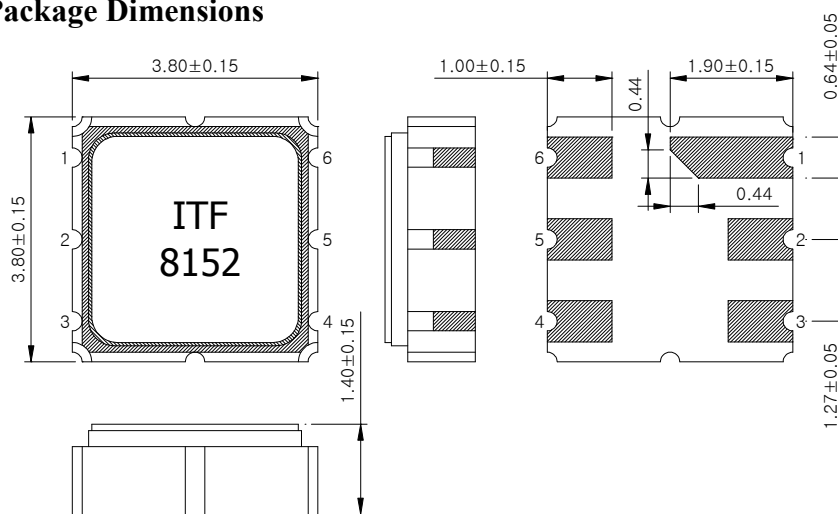
SAW Bandpass Filter F8152



Features

- RF bandpass filter
- High attenuation
- Usable bandwidth 19MHz
- 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 | -10 | 25 | 60 |
| Storage Temperature Range | °C | -40 | - | 85 |
| Power Handling Capability | dBm | - | - | - |

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. | F8152 | |
| | | Rev. Date | 2004-09-30 | |
| | | Rev. | DR3002-PS02 | 1/7 |

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Specifications

$F_c = 815.5\text{MHz}$

Terminating source impedance : 50Ω

Terminating load impedance : 50Ω

| | | Minimum | Typical | Maximum |
|---|-------------------------|----------|----------|---------|
| Center Frequency (F_c) | MHz | - | 815.5 | - |
| Insertion Loss ($F_c \pm 9.5$ MHz) | dB | - | 3.5 | 4.0 |
| Amplitude Ripple ($F_c \pm 9.5$ MHz) | dB | - | 1.0 | 2.0 |
| Absolute Group Delay at F_c | nsec | - | 35 | - |
| Group Delay Variation ($F_c \pm 9.5$ MHz) | nsec | - | 15 | - |
| VSWR ($F_c \pm 9.5$ MHz) | | - | 1.5 | 2.0 |
| Relative Attenuation 615.5 MHz ~ 780.0 MHz 885.0 MHz ~ 1015.5 MHz | dB | 45 45 | 50 50 | - |
| Temperature Coefficient of Frequency | ppm/ $^{\circ}\text{C}$ | - | -80 | - |

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

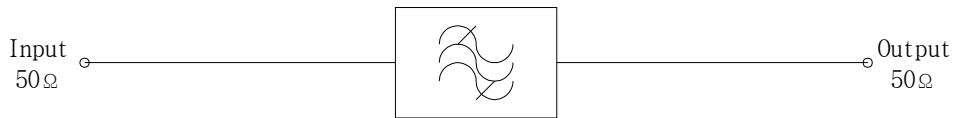
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Matching Schematic

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



Marking Configuration

ITF¹⁾
8152²⁾

1) Manufacturer name

2) Marking Number

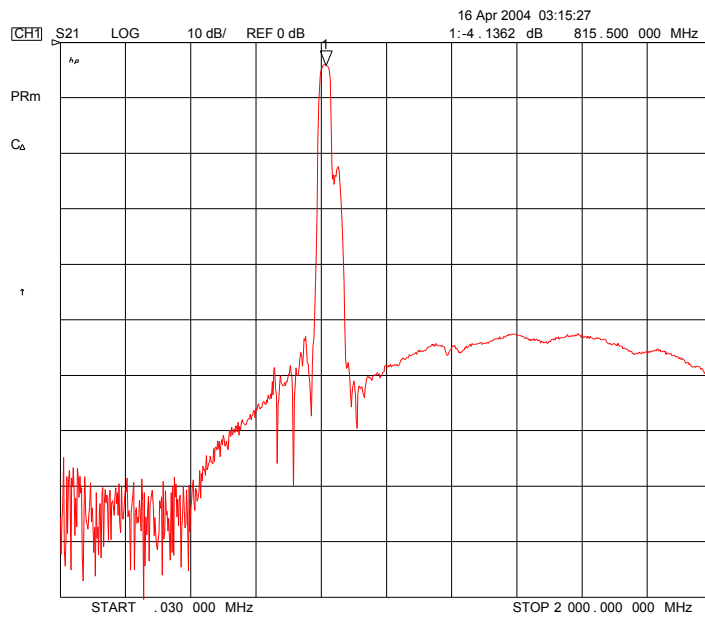
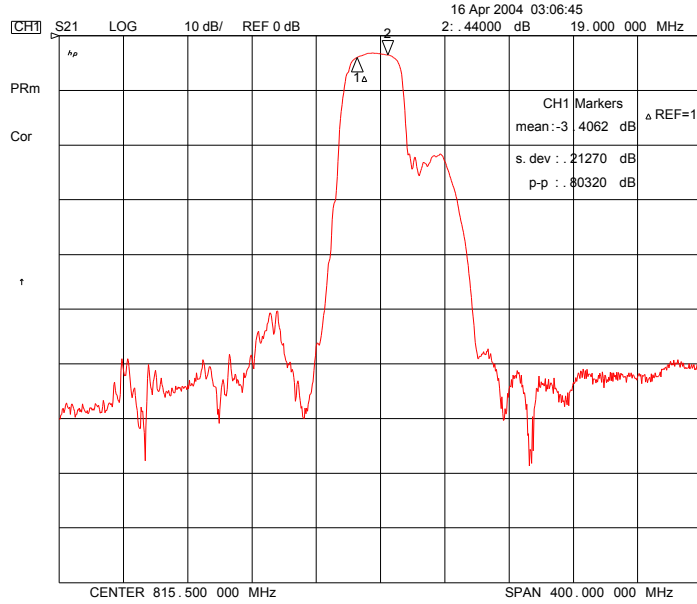
* Ink or Laser Marking available

| | | | | |
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Typical Performance (at 25°C)

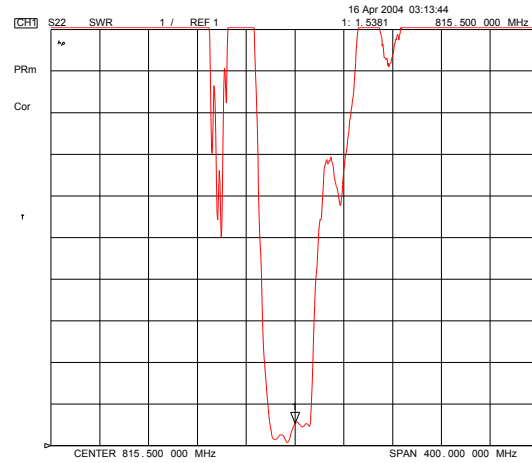
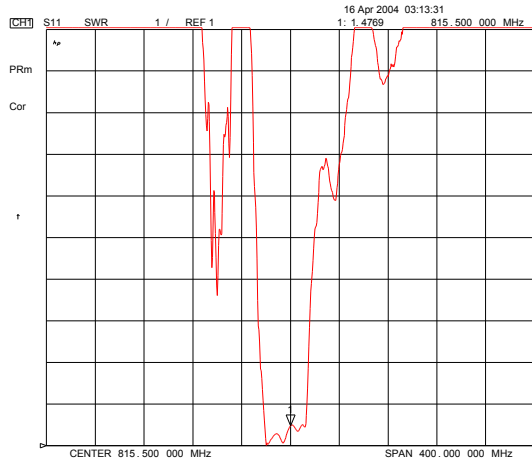


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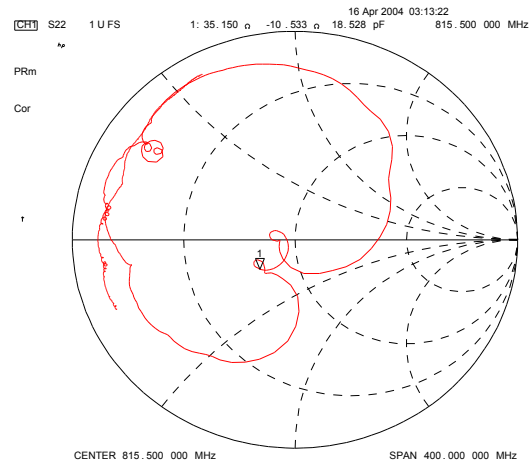
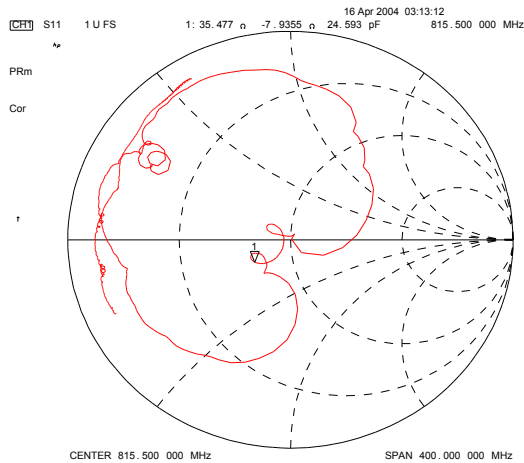
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Input / Output VSWR Charts



Input / Output Smith Charts



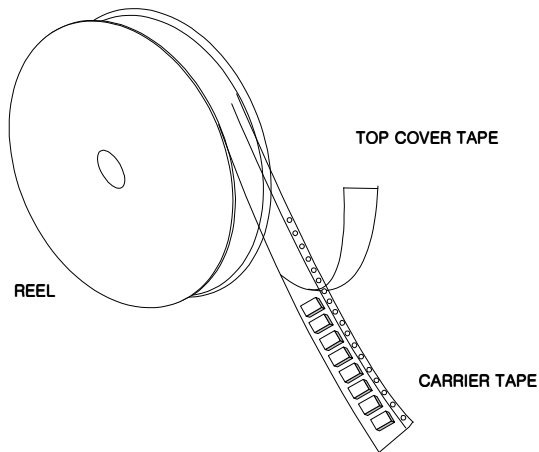
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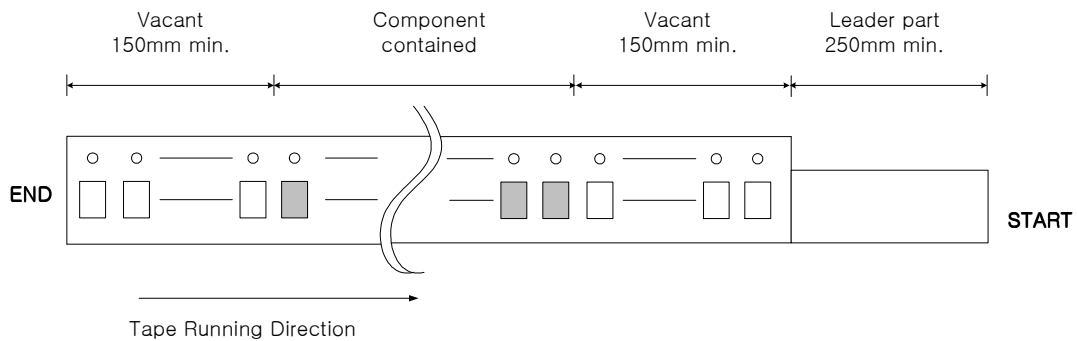
Packing Specification

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

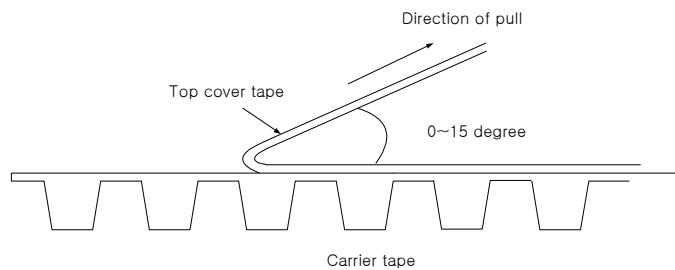



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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



| | | | | |
|---|---|-----------|-------------|-----|
|  Integrated Technology Future | ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809 | Part No. | F8152 | |
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