

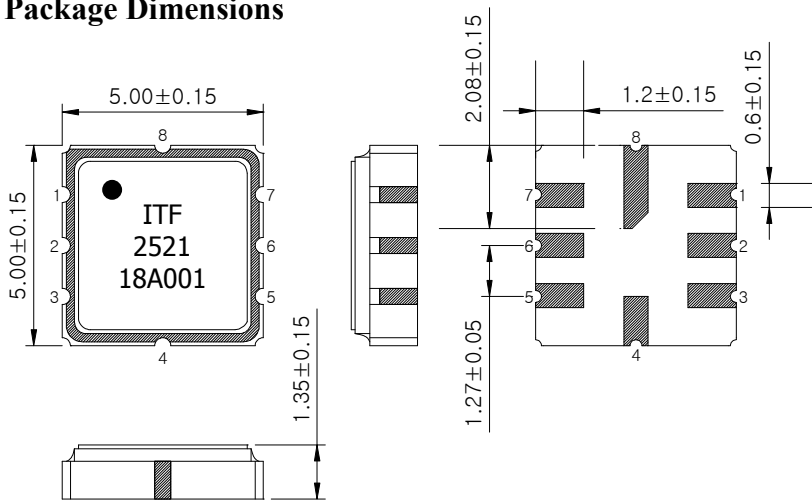
SAW Bandpass Filter F2521



Features

- RF bandpass filter
- Usable bandwidth 3.0 MHz
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (5.0mm * 5.0mm)
- 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 |
| 6 | Output |
| 1, 3, 4, 5, 7, 8 | Ground |

Maximum Ratings

| Parameter | Unit | Minimum | Typical | Maximum |
|-----------------------------|------|---------|---------|---------|
| Operating Temperature Range | °C | -30 | 25 | 60 |
| Storage Temperature Range | °C | -40 | - | 85 |
| Power Handling Capability | dBm | - | - | - |

Electrostatics Sensitive Device (ESD)

| | | | | |
|---|---|-----------|-------------|-----|
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Specifications

$F_c = 252.5 \text{ MHz}$

| | | Minimum | Typical | Maximum |
|--|-----|---------|---------|---------|
| Center Frequency (F_c) | MHz | - | 252.5 | - |
| Insertion Loss ($F_c \pm 1.5 \text{ MHz}$) | dB | - | 2.3 | 3.0 |
| Amplitude Ripple ($F_c \pm 1.5 \text{ MHz}$) | dB | - | 0.7 | 1.5 |
| VSWR ($F_c \pm 1.5 \text{ MHz}$) | | - | 2.1 | 2.5 |
| 1dB Bandwidth | MHz | - | 5.7 | - |
| 3dB Bandwidth | MHz | - | 7.0 | - |
| Absolute Attenuation | | | | |
| 50.0 ~ 236.0 MHz | dB | 55 | 60 | - |
| 236.0 ~ 246.0MHz | | 35 | 40 | - |
| 259.0 ~ 269.0MHz | | 40 | 45 | - |
| 269.0 ~ 500.0MHz | | 50 | 55 | - |

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

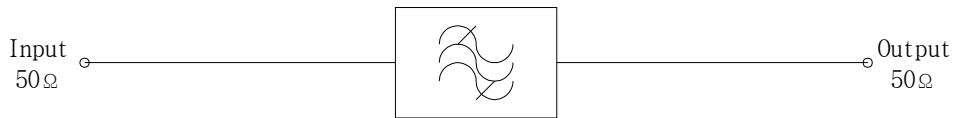
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Matching Schematic

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



Marking Configuration

- ¹⁾
ITF ²⁾
2521 ³⁾
18A001 ⁴⁾


1) Pad Number 1 Index

2) Manufacturer name

3) Marking Number

4) Lot Number

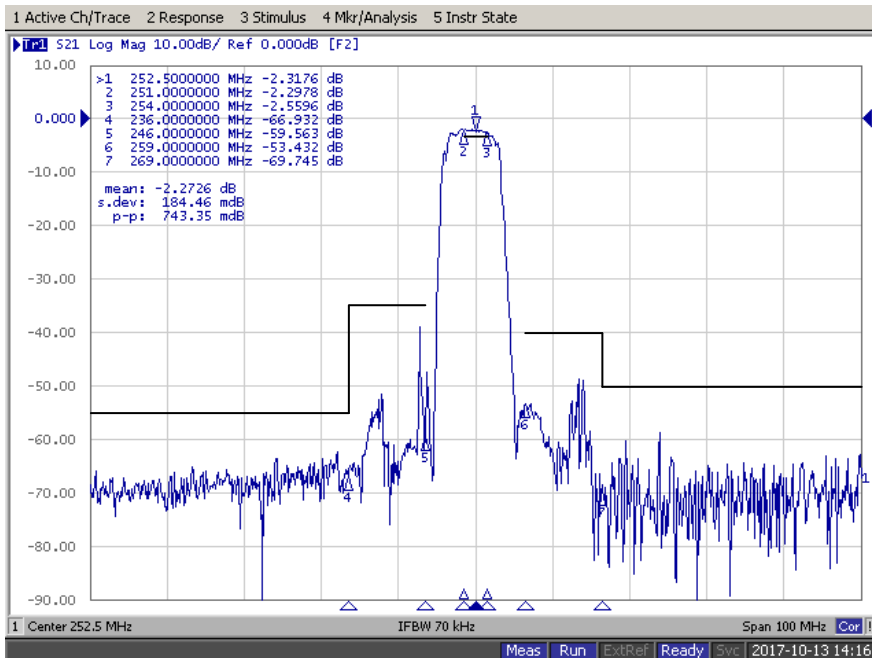
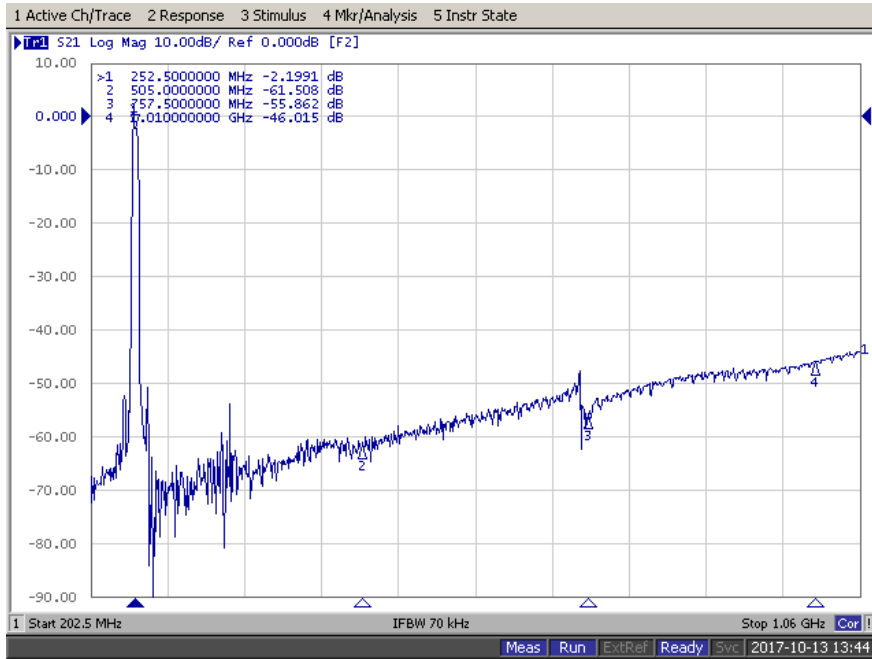
* Ink or Laser Marking available

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



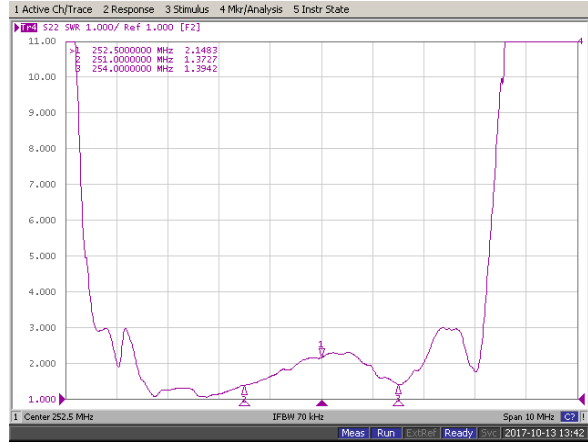
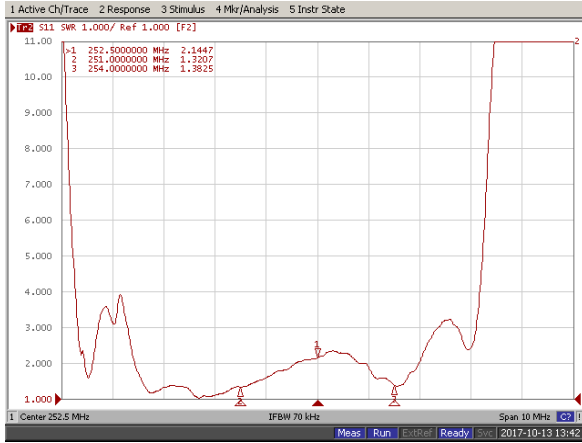
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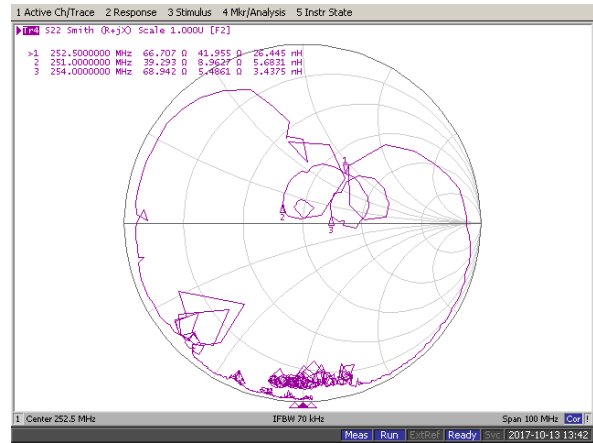
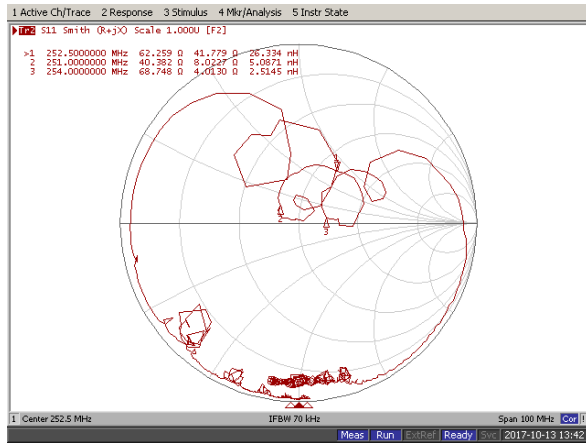
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Input / Output VSWR Charts



Input / Output Smith Charts



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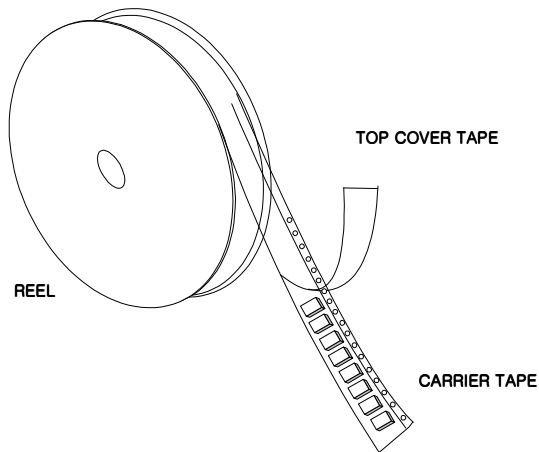
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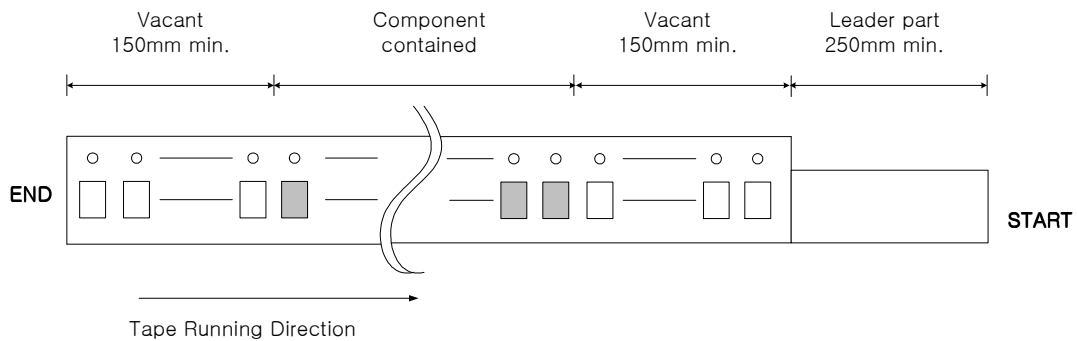
Packing Specification

1. Reeling Quantity : 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

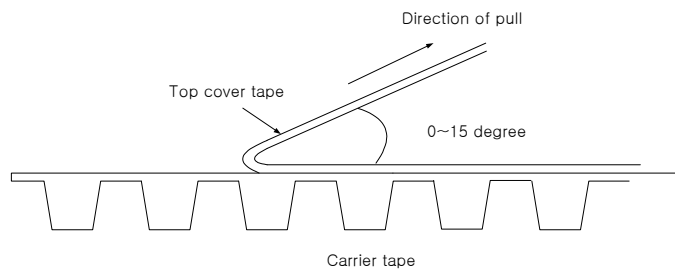



2. Tensile strength of carrier tape

4.4N/mm width

3. Top cover tape adhesion

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

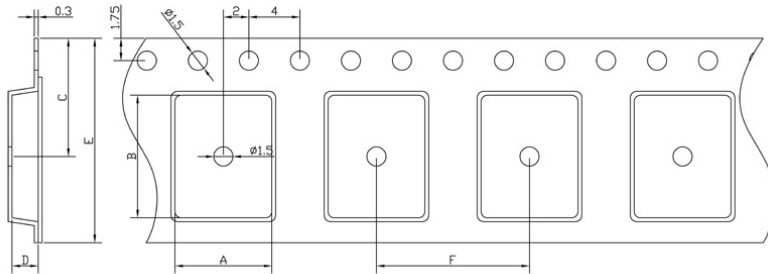


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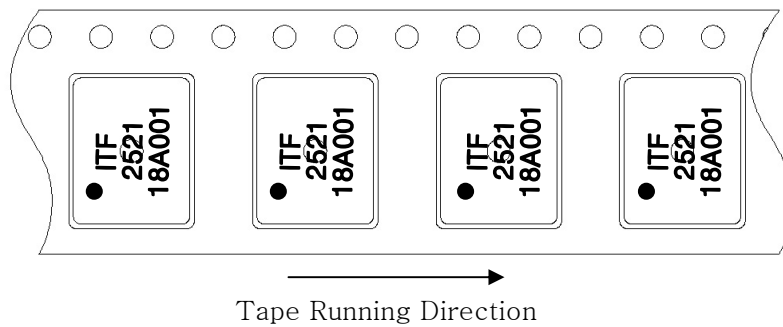


Carrier Tape Dimensions [unit : mm]

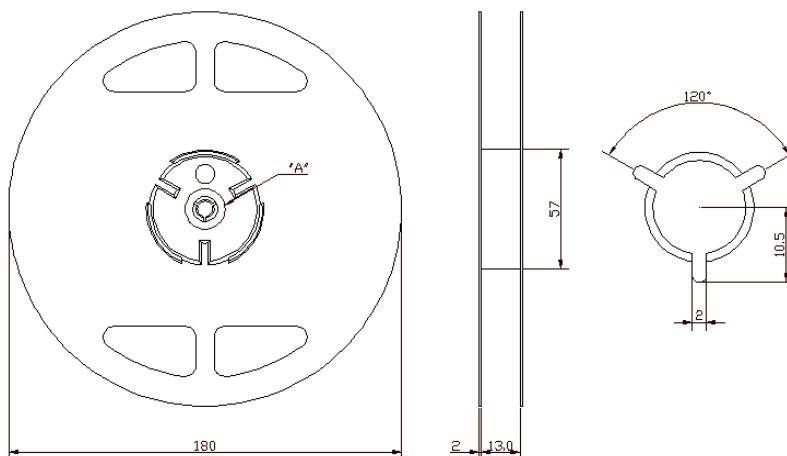


| | |
|---|-------------|
| A | 5.50 ± 0.1 |
| B | 5.50 ± 0.1 |
| C | 7.25 ± 0.1 |
| D | 1.95 ± 0.1 |
| E | 12.00 ± 0.1 |
| F | 8.00 ± 0.1 |

Part Direction



Reel Dimensions [unit : mm]



| | | | | |
|--|---|-----------|-------------|-----|
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