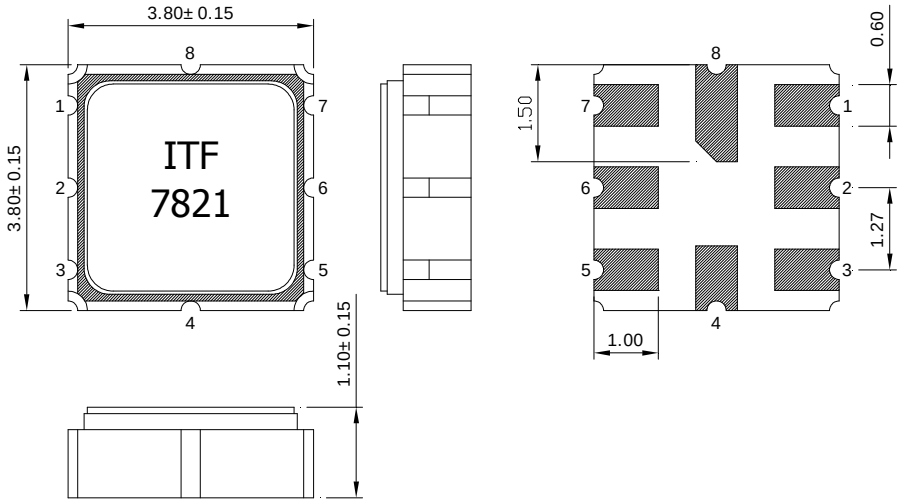
SAW Bandpass Filter F7821

Features

- RF bandpass filter
- High attenuation
- No matching 50Ω single-ended operation
- Ceramic Surface Mounted Device (SMD) Package (3.8 mm * 3.8 mm)
- RoHS Compliant

Package Dimension – SMD 3.8 × 3.8



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	℃	-20	25	70
Storage Temperature Range	℃	-40	25	85
Power Handling Capability	dBm		10	

Electrostatics Sensitive Device (**ESD**)

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Specifications

Fc = 782.0 MHz

Terminating source impedance : 50Ω

Terminating load impedance : 50Ω

	Minimum	Typical	Maximum	Unit
Center Frequency (Fc)	-	782	-	MHz
Insertion Loss (In Fc +/- 5 MHz)	-	1.4	2.5	dB
Amplitude Ripple (In Fc +/- 5 MHz)	-	0.5	1.5	dBp-p
VSWR (In Fc +/- 5 MHz)	-	1.2	2.0	
Relative Attenuation 10 ~ 700 MHz 746 ~ 756 MHz 840 ~ 890 MHz	 30 40 35	 41 47 44	 - - -	dB
Temperature Range (Operational)	-20	25	70	℃
Input RF Power (In Fc +/- 5 MHz)	-	0	-	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

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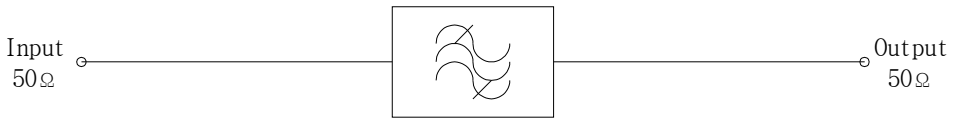
Matching Schematic

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



Marking Configuration

ITF [1)]

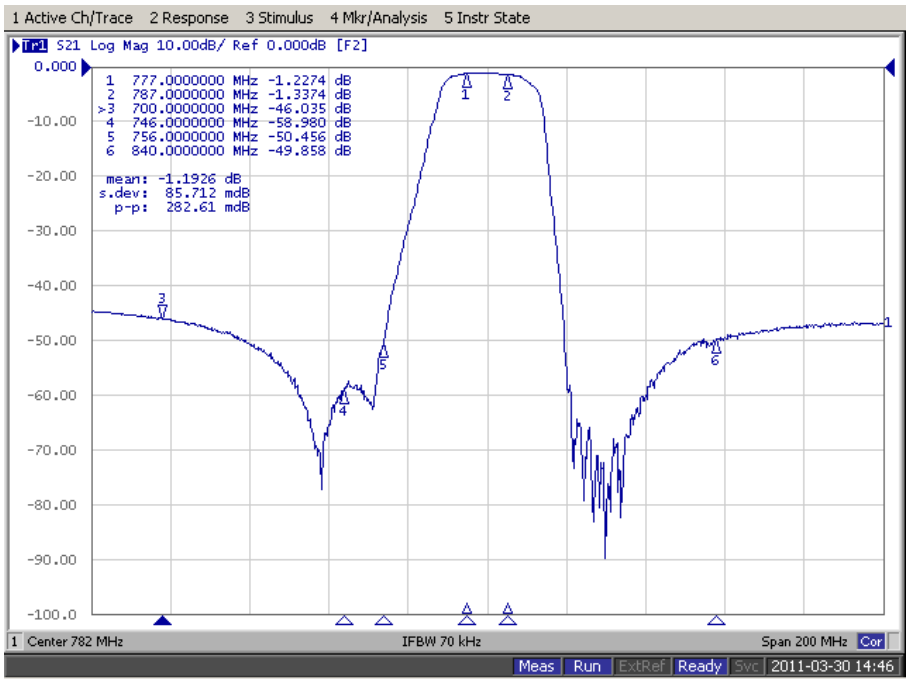
7821 [2)]

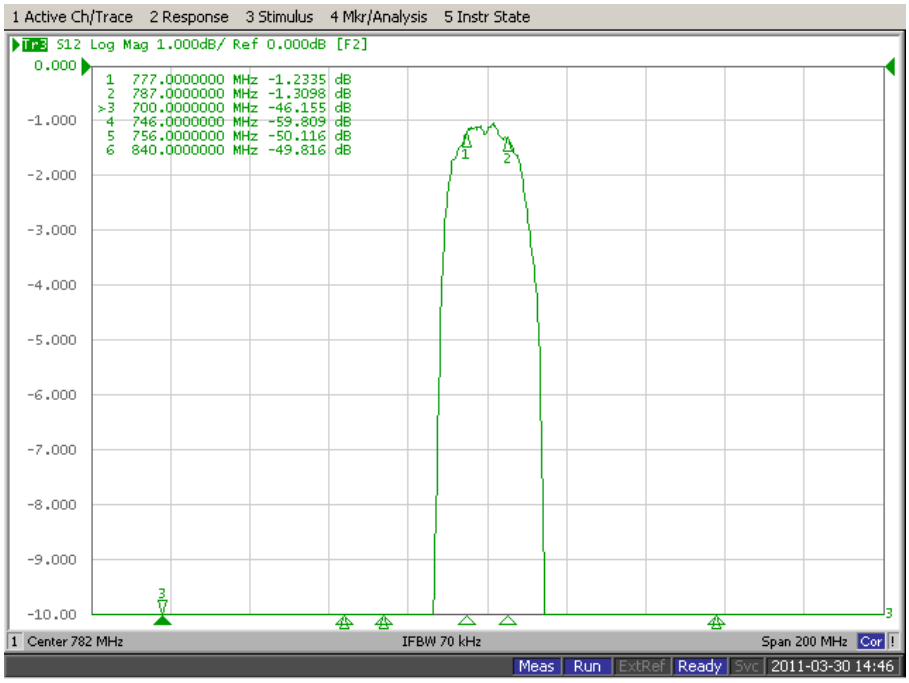
1) Manufacturer name

2) Marking Number

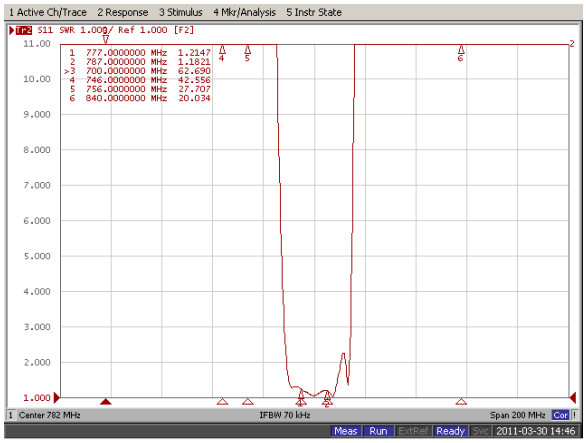
* Ink or Laser Marking available

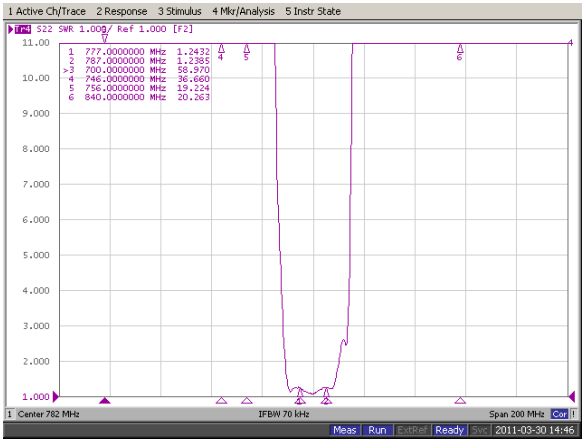
Typical Performance (at 25℃)



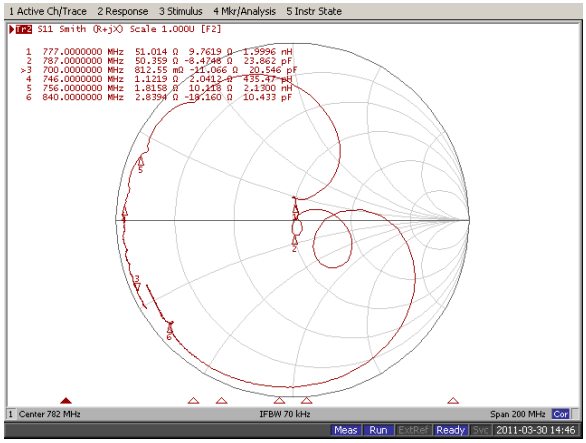


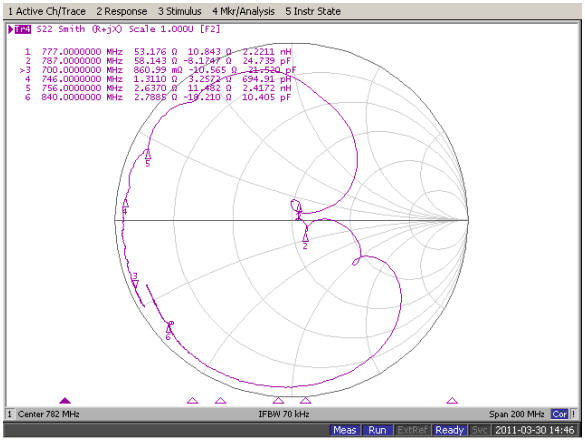
Input / Output VSWR Charts





Input / Output Smith Charts

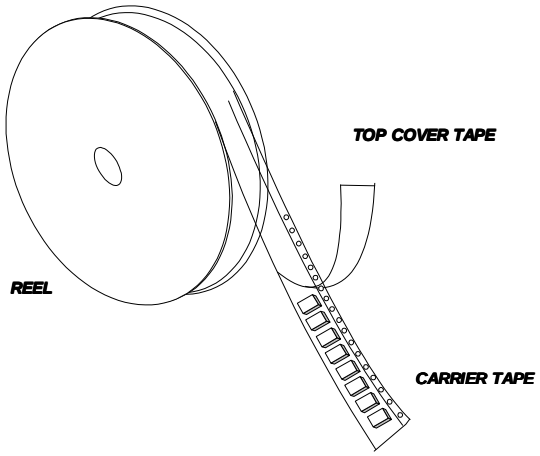




Packing Specification

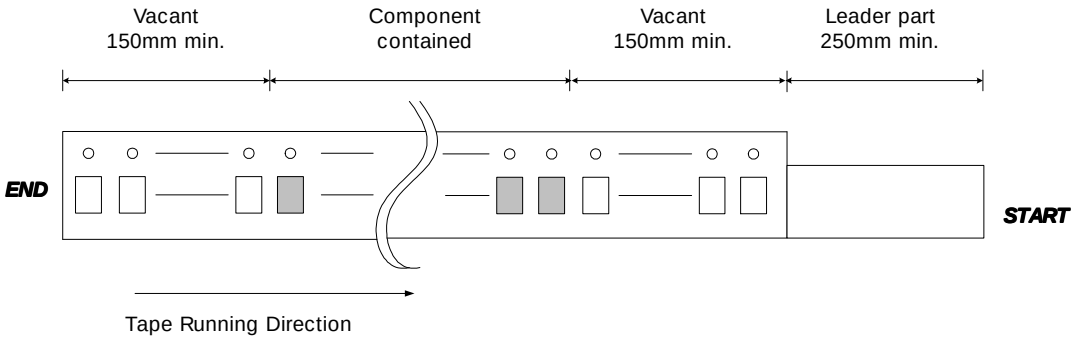
1. Reeling Quantity : 3000 pcs / 13” reel (or 1000 pcs / 7” reel)

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

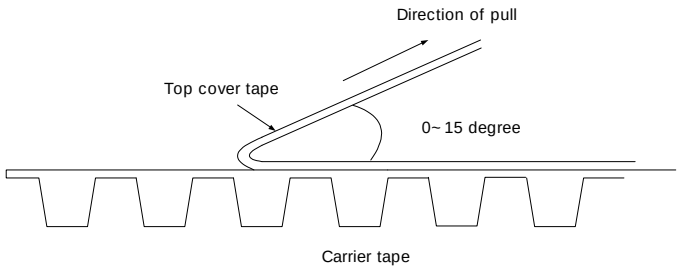
4.4N/mm width

3. Top cover tape adhesion

1) pull off angle : 0~15°

2) speed : 300mm/min

3) force : 20~70g



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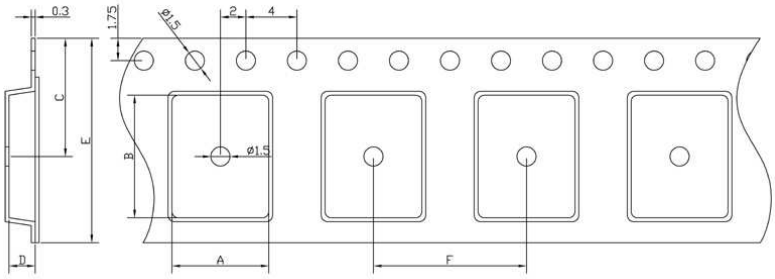
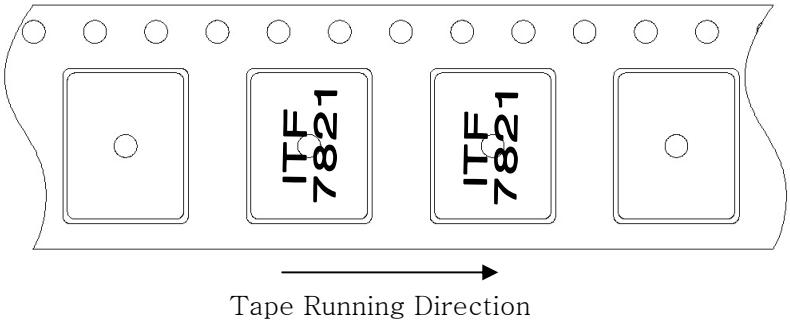
Carrier Tape Dimensions [unit : mm]



A	4.30 ± 0.1
B	4.30 ± 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]