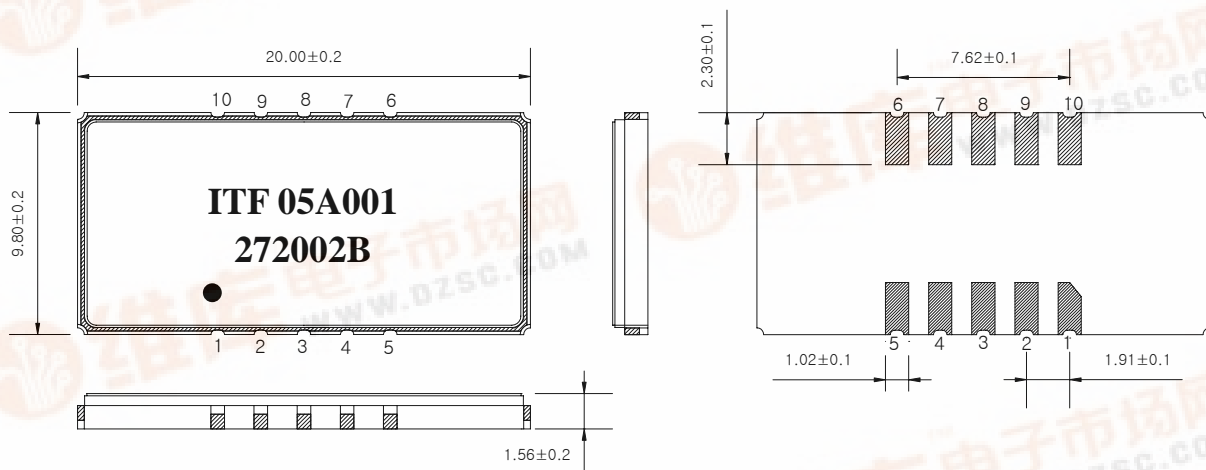


# SAW Bandpass Filter 272002B

## 1. Features

- IF Bandpass Filter
- High Attenuation
- Single-Ended Operation
- Ceramic Surface Mount Device (SMD) Package
- Maximum Storage Temperature Range : -40°C ~ 85°C
- Electrostatics Sensitive Device (ESD)
- Operating Temperature Range : -20°C ~ 75°C

## 2. Package Dimensions



### Package : S2098

Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um Ni Plating

Pad Configuration	
10	Input
5	Output
4,1	Ground
Other	Case ground

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		Rev. Date	2007-07-15	
		Rev.	NM5003-CS04	1/5

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### 3. Specifications

Fo = 70.0 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

Measurement Temperature : 25°C		Minimum	Typical	Maximum
Center Frequency	MHz	-	70.05	-
Insertion Loss	dB	-	23.1	24.5
1dB Bandwidth	MHz	-	20.18	-
3dB Bandwidth	MHz	20.3	20.48	-
40dB Bandwidth	MHz	-	21.8	21.85
Amplitude Ripple (Fo +/- 9.75 MHz)	dB	-	0.57	1.0
Group Delay Variation (Fo +/- 9.75 MHz)	nsec	-	40	100
Absolute Delay	usec	-	2.36	-
Ultimate Rejection	dB	50	55	-
Temperature Coefficient of Frequency	ppm/°C	-	-72	-

#### Notes :

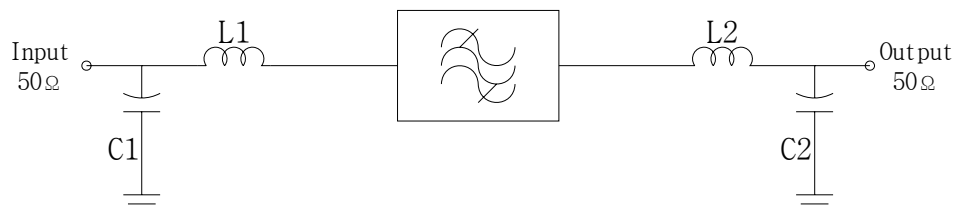
- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration
- 3) Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances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

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### 4. Matching Schematic

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



L1 = 180 nH, L2 = 180 nH

C1 = 12 pF, C2 = 13 pF

### 5. Marking Configuration


ITF<sup>1)</sup> 05A001<sup>2)</sup>

272002B<sup>3)</sup>

1) Manufacturer name

2) Lot Number

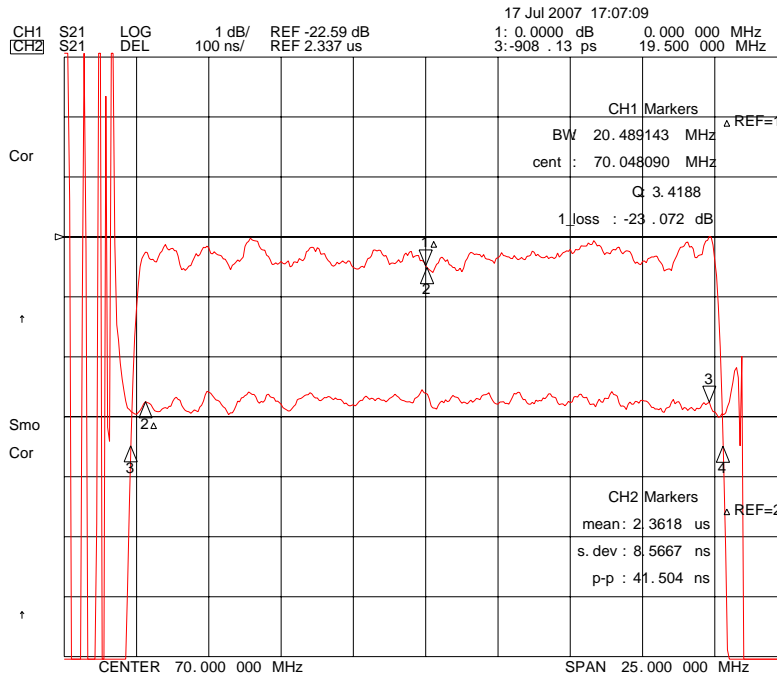
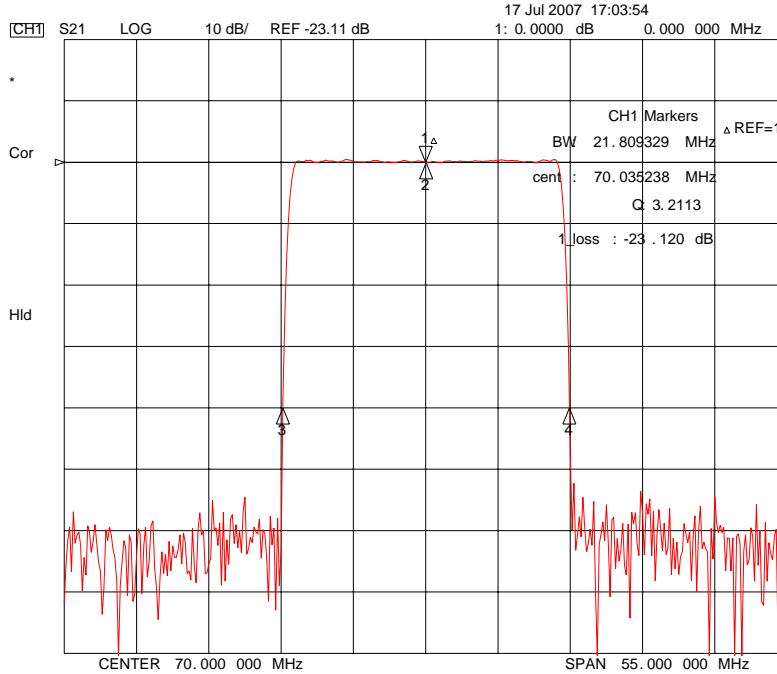
3) Part Number

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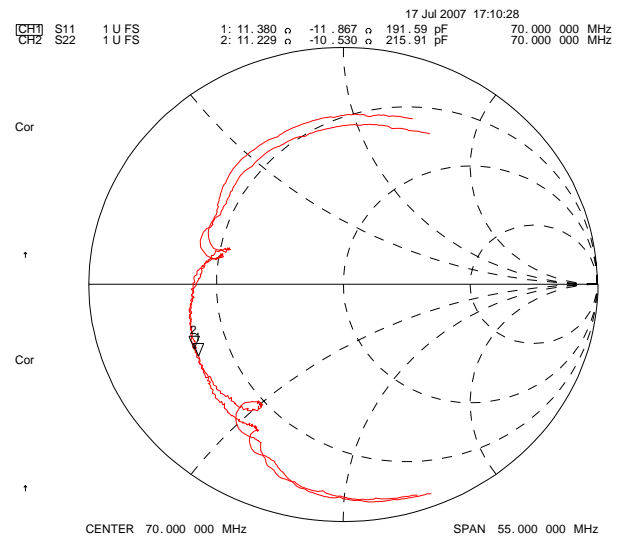
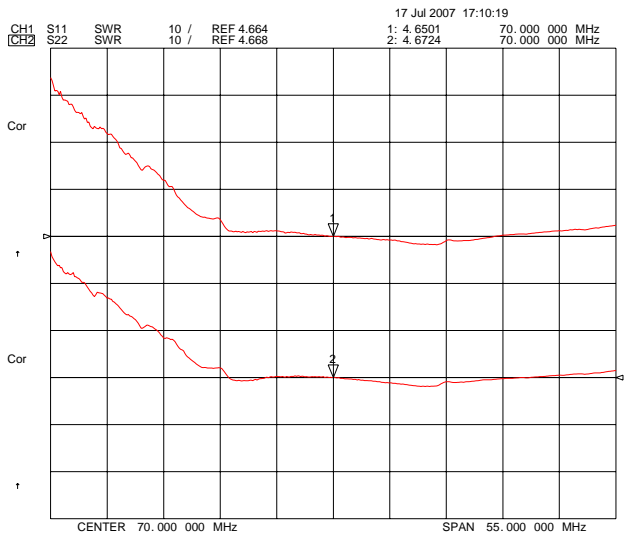
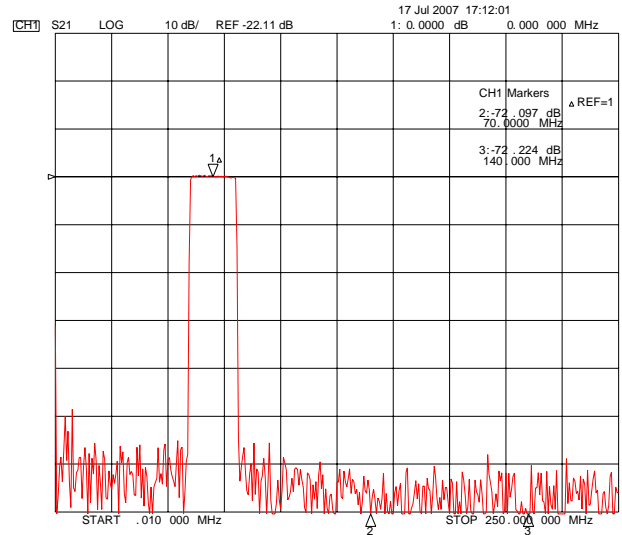
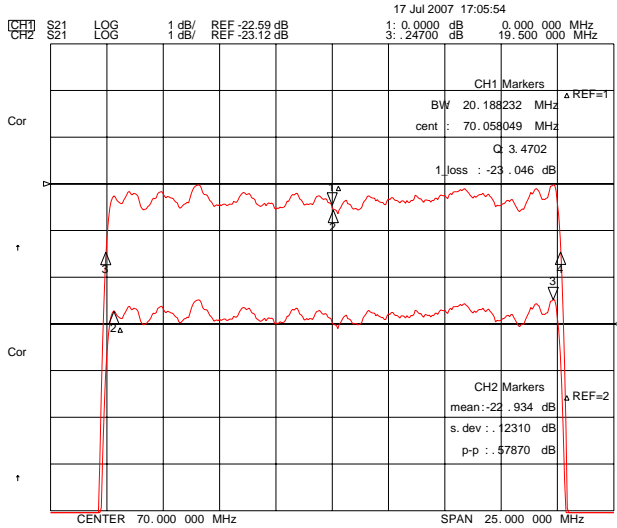


## 6. Typical Performance ( at +25°C )



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