

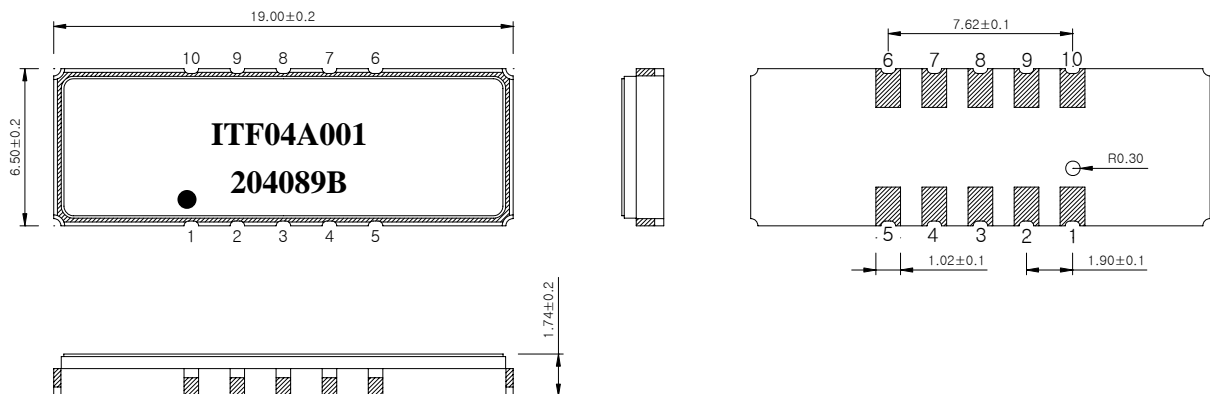
SAW Bandpass Filter 204089B



1. Features

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

2. Package Dimensions



Package : S1965

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

Pad Configuration	
10	Input
5	Output
1, 6	Ground
Other	Case ground



ITF Co., Ltd.
 102-901, Bucheon Technopark 364,
 Samjeong-Dong, Ojeong-Gu, Bucheon-City,
 Gyeonggi-Do, Korea 421-809

Part No.	204089B	
Rev. Date	2004-04-06	
Rev.	NW3004-CS02	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

		Minimum	Typical	Maximum
Center Frequency	MHz	-	70.0	-
Insertion Loss	dB	-	11.0	12.5
1dB Bandwidth	MHz	-	1.1	-
3dB Bandwidth	MHz	1.5	1.6	-
40dB Bandwidth	MHz	-	3.15	3.3
Amplitude Ripple (Fo +/- 0.3 MHz)	dB	-	0.5	0.8
Group Delay Variation (Fo +/- 0.3 MHz)	nsec	-	180	250
Absolute Delay	usec	-	1.67	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient of Frequency	ppm/°C ²	-	-23	-

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 at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

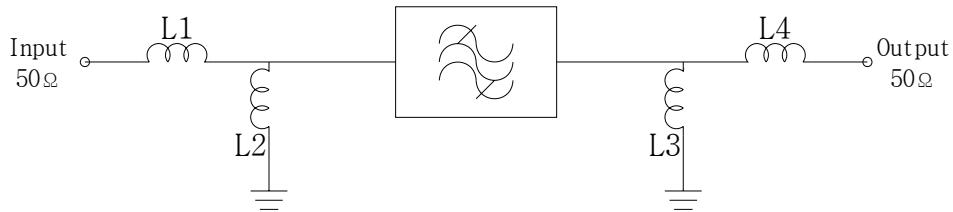
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4. Matching Schematic

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



L1 = 180 nH, L4 = 150 nH
L2 = 180 nH L3 = 220 nH

5. Marking Configuration

ITF¹⁾ 04A001²⁾

204089B³⁾


● 4)

1) Manufacturer name

2) Lot Number

3) Part Number

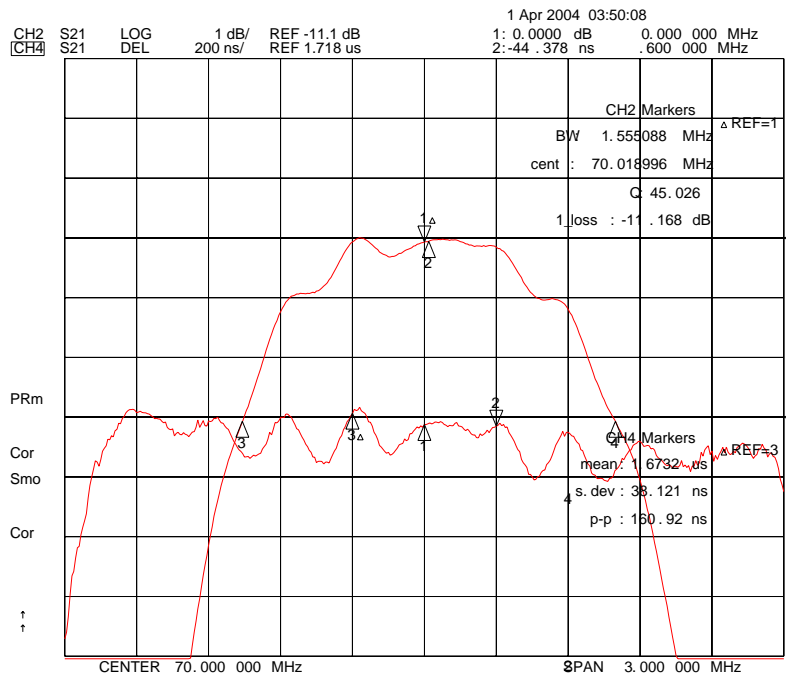
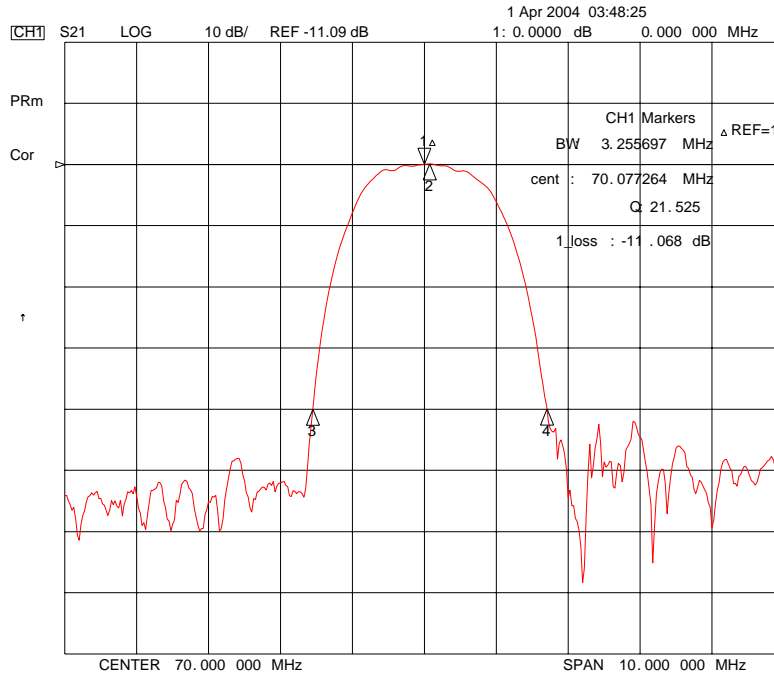
4) Pad Number 1 Index

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6. Typical Performance (at +25°C)



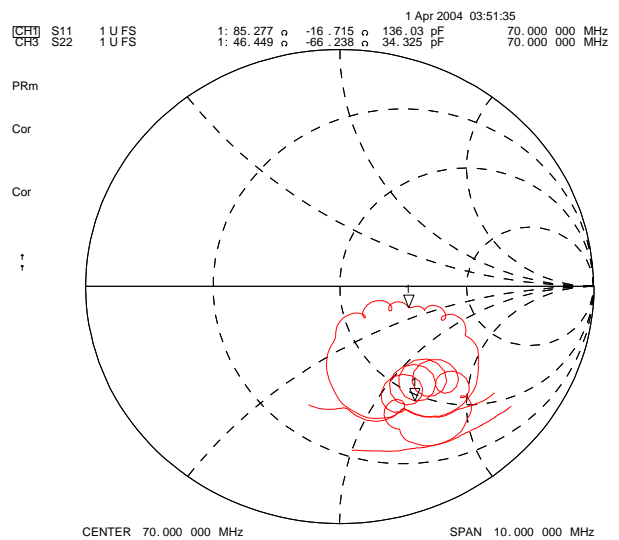
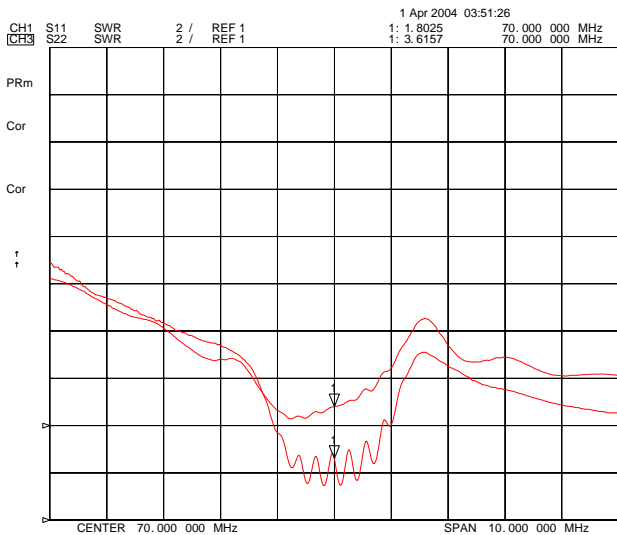
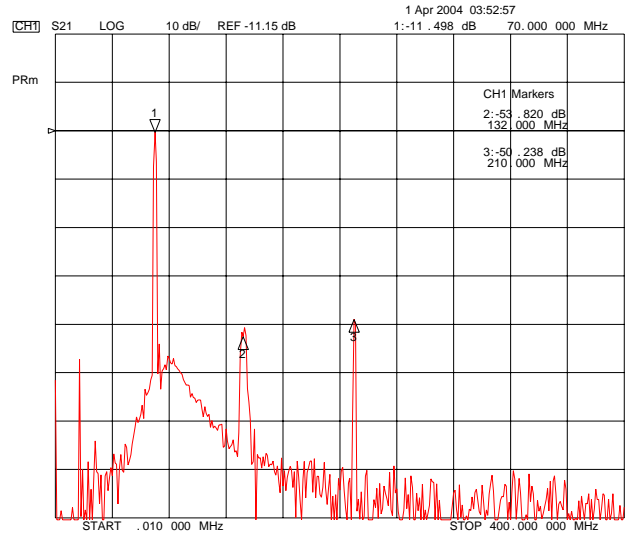
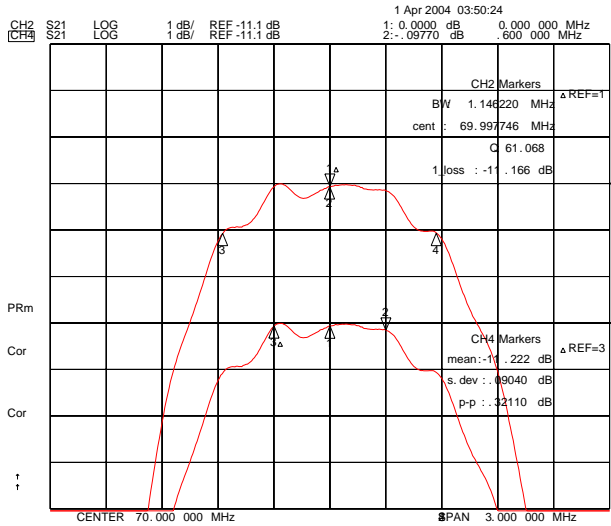
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