

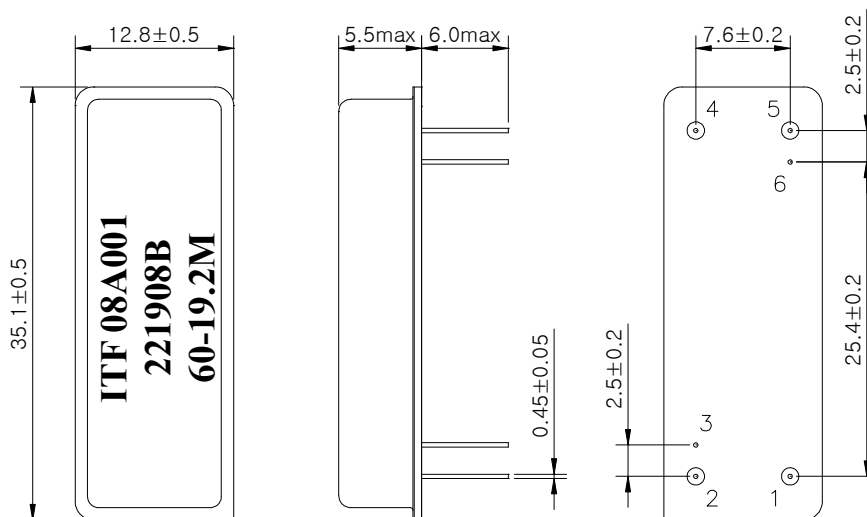
SAW Bandpass Filter 221908B



1. Features

- IF Bandpass Filter
- High Attenuation
- Single-Ended Operation
- DIP Package
- Maximum Storage Temperature Range : -40°C ~ 85°C
- Electrostatics Sensitive Device (ESD)

2. Package Dimension



Package : D3512

Dimensions shown are nominal in millimeters
 Base : Fe(SPCC), Au plating over Ni plated
 Cap : Cu & Cr Alloy, Ni Plated
 Termination : Kovar, Au Plated

Pin Configuration	
1	Input
5	Output
2, 4	Ground
3, 6	Case ground

	ITF Co., Ltd. 102-901, Bucheon Technopark 364, Samjeong-Dong, Ojeong-Gu, Bucheon-City, Gyeonggi-Do, Korea 421-809	Part No.	221908B	
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3. Specifications

Fo = 60.0 MHz


Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency	MHz	-	60.0	-
Insertion Loss	dB	-	25.5	27.0
1dB Bandwidth	MHz	19.1	19.25	-
3dB Bandwidth	MHz	-	19.53	-
40dB Bandwidth	MHz	-	20.74	-
50dB Bandwidth	MHz	-	20.85	20.95
Amplitude Ripple (fo±9.375 MHz)	dB	-	0.55	1.0
Group Delay Variation (fo±9.375 MHz)	nsec	-	45	60
Absolute Delay	usec	-	2.46	-
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 at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

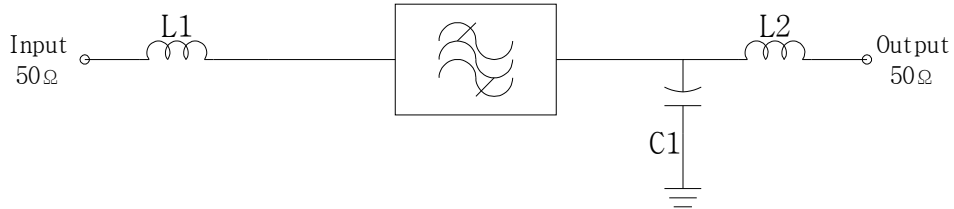
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4. Matching Schematic

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



L1 = 180nH, L2 = 180nH

C1 = 12pF


5. Marking Configuration

ITF¹⁾ 08A001²⁾

221908B³⁾

60⁴⁾ -19.2M⁵⁾

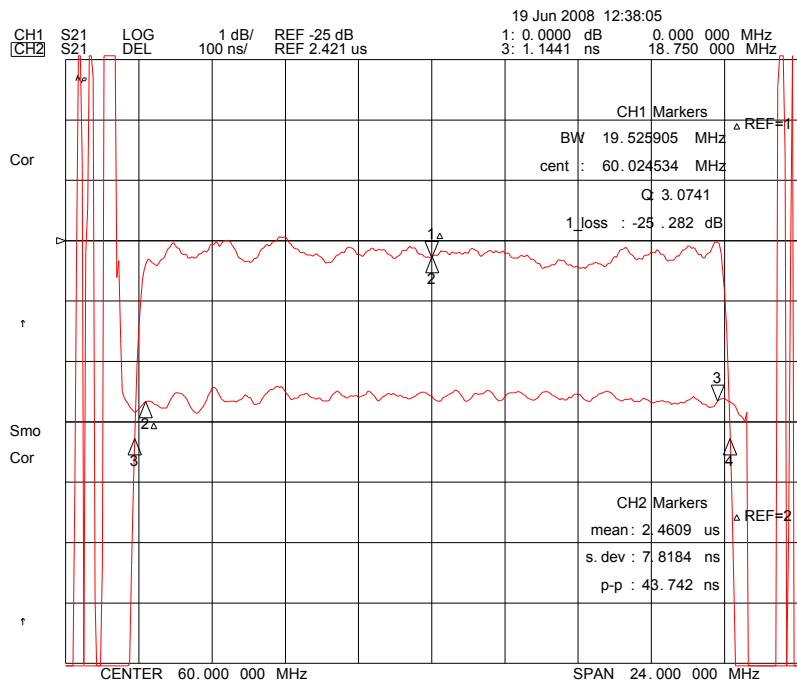
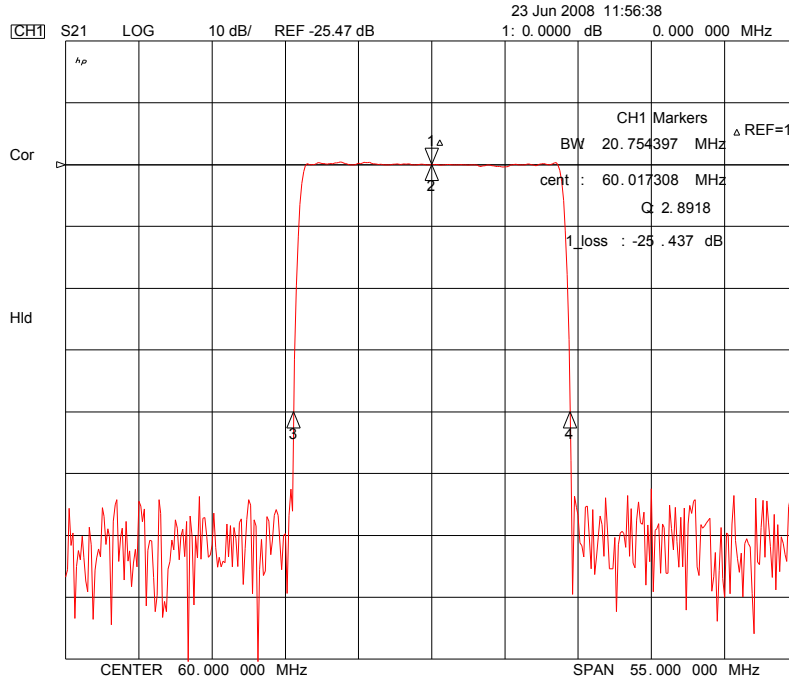
- 1) Manufacturer name
- 2) Lot Number
- 3) Part Number
- 4) Center Frequency
- 5) 1dB-Bandwidth

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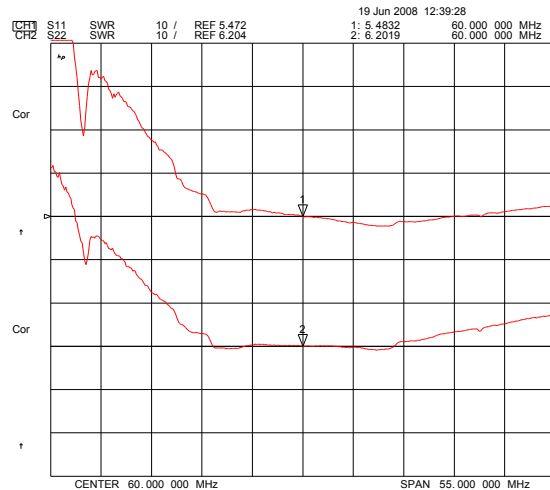
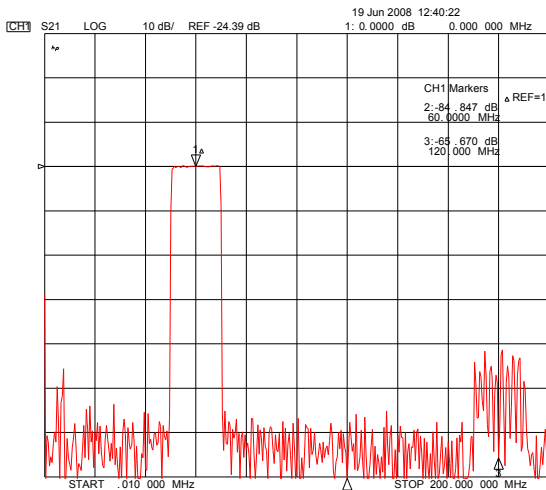
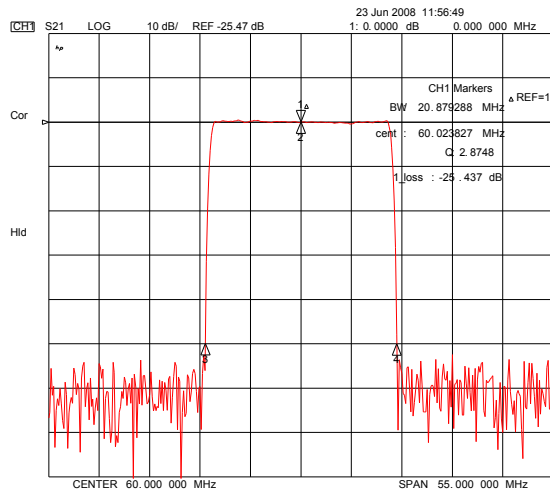
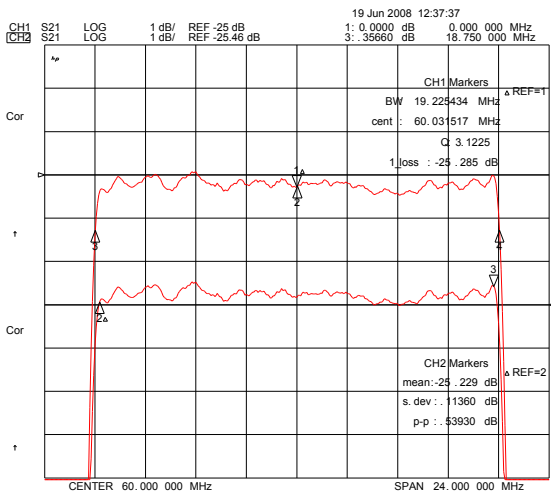
6. Typical Performance (at +25°C)



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