



SAW Components

SAW bandpass filter

Bandpass filters for TV applications

Series/type:	X 6771 D
Ordering code:	B39570-X6771-N201
Date:	April 12, 2007
Version:	2.0

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X 6771 D

SAW bandpass filter

57.00 MHz

Data sheet

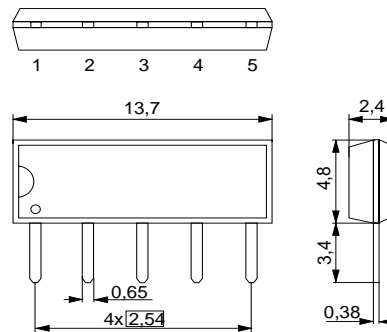
Application

- IF filter for ISDB-T
- Usable bandwidth 5.8 MHz



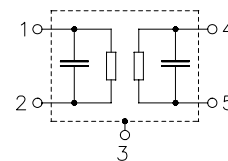
Features

- Duroplast package **SIP5D**
- Standard IC package
- Approximate weight 0.5 g
- RoHS compatible
- Tinned CuFe alloy terminals



Pin configuration

- 1 Input
- 2 Input - ground
- 3 Chip carrier - ground
- 4 Output
- 5 Output



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Characteristics

Reference temperature: $T_A = 25 (45) ^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 2 \text{ k}\Omega \parallel 3\text{pF}$

	min.	typ. @ 25 °C	max.	
Insertion attenuation α				
Reference level for 57.08 (57.00) MHz the following data	12.4	13.9	15.4	dB
Pass bandwidth				
$\alpha_{\text{rel}} \leq 3 \text{ dB}$ $B_{3\text{dB}}$	—	5.8	—	MHz
Relative attenuation α_{rel}				
54.50 (54.42) MHz	-1.0	0.0	1.0	dB
59.50 (59.42) MHz	-0.9	0.1	1.1	dB
54.11 (54.03) MHz	1.3	2.3	3.3	dB
59.91 (59.83) MHz	1.9	2.9	3.9	dB
60.39 (60.31) MHz	10.0	14.5	—	dB
Lower sidelobe				
45.08 ... 52.08 (45.00 ... 52.00) MHz	36.0	44.0	—	dB
52.08 ... 53.03 (52.00 ... 52.95) MHz	30.0	36.0	—	dB
Upper sidelobe				
60.88 ... 62.58 (60.80 ... 62.50) MHz	30.0	36.0	—	dB
62.58 ... 65.08 (62.50 ... 65.00) MHz	34.0	42.0	—	dB
Reflected wave signal suppression				
1.2 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 57.08 MHz)	—	50.0	—	dB
Group delay ripple (p-p) $\Delta\tau$				
Aperture 50kHz 54.11 ... 59.91 (54.03 ... 59.83) MHz	—	40	—	ns
Impedance at 57.08 MHz				
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$	—	1.1 13.6	—	k Ω pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$	—	1.2 3.4	—	k Ω pF
Temperature coefficient of frequency TC_f	—	-72	—	ppm/K

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Maximum ratings

Operable temperature range	T	-25 / +65	°C	
Storage temperature range	T _{stg}	-40 / +85	°C	
DC voltage	V _{DC}	5	V	between any terminals
AC voltage	V _{pp}	10	V	between any terminals

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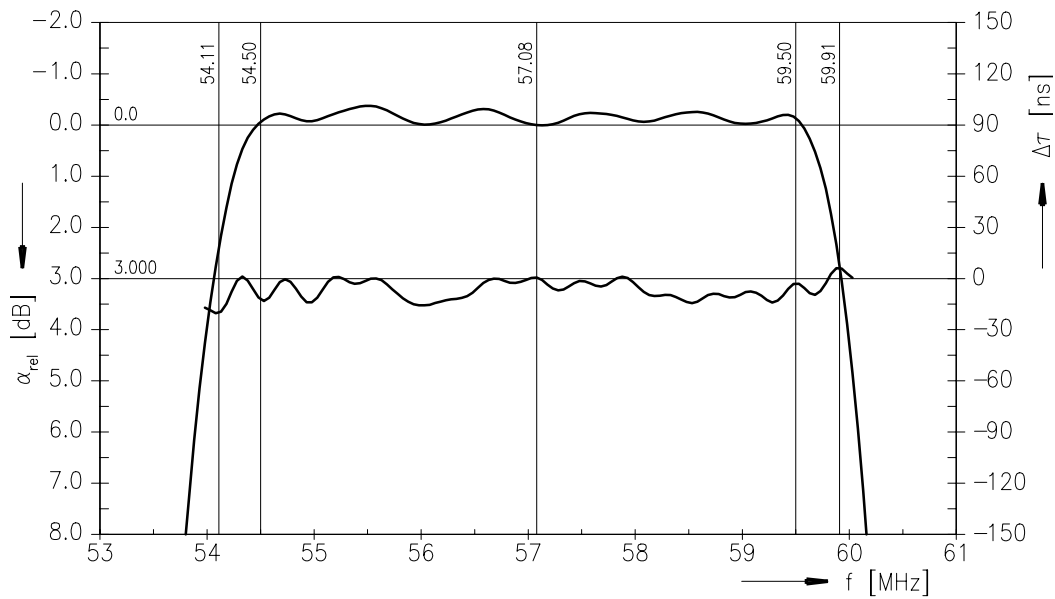
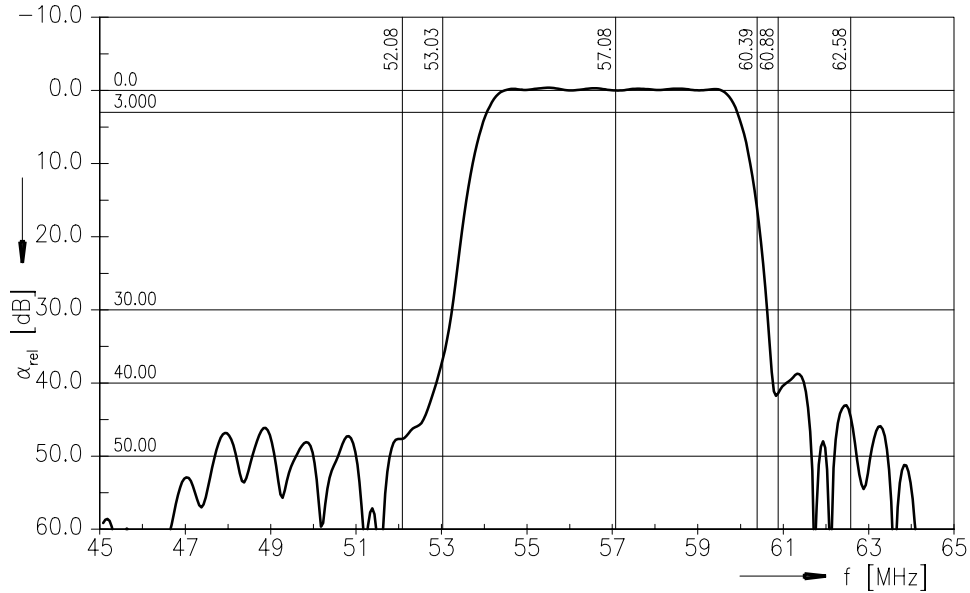
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Frequency response



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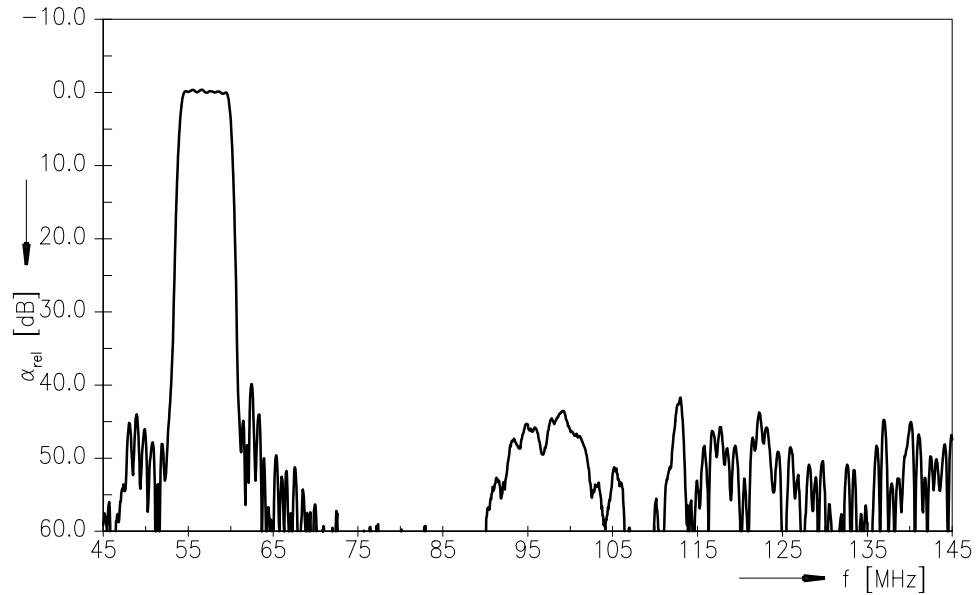
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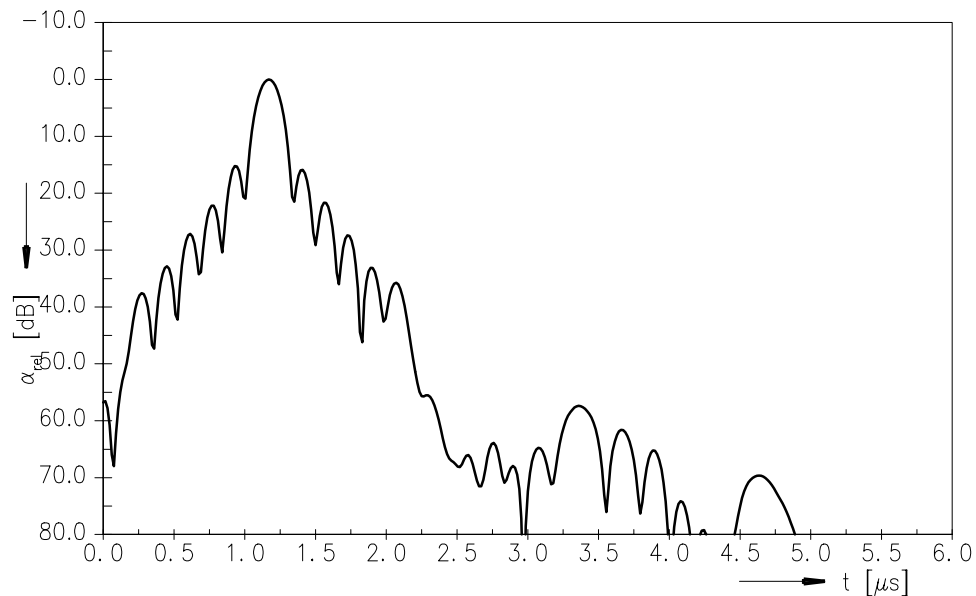
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Frequency response



Time domain response



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Data sheet

References

Type	X 6771 D
Ordering code	B39570-X6771-N201
Marking and package	C61157-A1-A21
Packaging	F61074-V8049-Z000
Date codes	L_1126
S-parameters	X6771N_NB.s4p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com.

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