



SAW multimedia filters

Series/Type: X7261X

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39362X7261X400		2011-01-14	2011-09-30	2012-09-30

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SAW Components

X 7261 X

SAW bandpass filter

36.17 MHz

Data Sheet

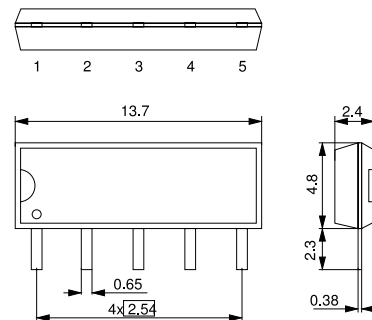
Application

- IF filter for digital TV
- Switchable between usable bandwidths 8.0MHz and 7.0MHz
- Constant group delay



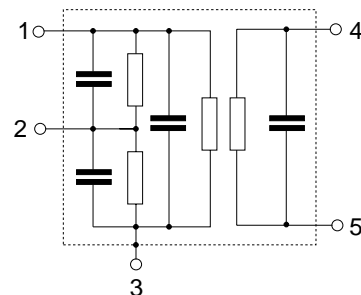
Features

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



Pin configuration

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



Please read *cautions and warnings and important notes* at the end of this document.



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SAW bandpass filter	36.17 MHz

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Characteristics of channel 1 (switching pin 2 connected to ground)

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

		min.	typ. @ 25 °C	max.	
Center frequency (center between 10 dB points)	f_C	—	36.22	—	MHz
Insertion attenuation Reference level for 36.22 (36.17) MHz the following data	α	21.1	22.6	24.1	dB
Pass bandwidth					
$\alpha_{rel} \leq 1.5 \text{ dB}$	$B_{1.5dB}$	—	7.5	—	MHz
$\alpha_{rel} \leq 3 \text{ dB}$	B_{3dB}	—	7.9	—	MHz
$\alpha_{rel} \leq 15 \text{ dB}$	B_{15dB}	—	9.0	—	MHz
$\alpha_{rel} \leq 30 \text{ dB}$	B_{30dB}	—	9.7	—	MHz
Relative attenuation	α_{rel}				
32.22 (32.17) MHz		—	3.2	—	dB
32.72 (32.67) MHz		—	0.3	—	dB
39.72 (39.67) MHz		—	0.7	—	dB
40.22 (40.17) MHz		—	4.3	—	dB
Lower sidelobe 25.05 ... 31.20 (25.00 ...31.15) MHz		30.0	36.0	—	dB
Upper sidelobe 41.20 ... 42.05 (41.15 ...42.00) MHz		34.0	40.0	—	dB
42.05 ... 45.05 (42.00 ...45.00) MHz		32.0	37.0	—	dB
Reflected wave signal suppression 1.3 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 36.22 MHz)		36.0	46.0	—	dB
Group delay ripple (p-p) 32.20 ... 40.20 (32.15 ...40.15) MHz	$\Delta\tau$	—	70	—	ns
Impedance at 36.22 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	3.2 \parallel 10.9	—	$\text{k}\Omega \parallel \text{pF}$
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	4.4 \parallel 2.9	—	$\text{k}\Omega \parallel \text{pF}$
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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Characteristics of channel 2 (switching pin 2 connected to pin 1)

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

		min.	typ. @ 25 °C	max.	
Center frequency (center between 10 dB points)	f_C	—	36.22	—	MHz
Insertion attenuation Reference level for 36.22 (36.17) MHz the following data	α	19.7	21.2	22.7	dB
Pass bandwidth					
$\alpha_{rel} \leq 1.5 \text{ dB}$	$B_{1.5dB}$	—	6.5	—	MHz
$\alpha_{rel} \leq 3 \text{ dB}$	B_{3dB}	—	6.8	—	MHz
$\alpha_{rel} \leq 15 \text{ dB}$	B_{15dB}	—	8.0	—	MHz
$\alpha_{rel} \leq 30 \text{ dB}$	B_{30dB}	—	8.5	—	MHz
Relative attenuation	α_{rel}				
32.72 (32.67) MHz		—	3.2	—	dB
33.39 (33.34) MHz		—	0.0	—	dB
39.05 (39.00) MHz		—	0.0	—	dB
39.62 (39.57) MHz		—	4.0	—	dB
Lower sidelobe 25.05 ... 31.70 (25.00 ...31.65) MHz		28.0	33.0	—	dB
Upper sidelobe 40.80 ... 42.55 (40.75 ...42.50) MHz		28.0	34.0	—	dB
42.55 ... 45.05 (42.55 ...45.00) MHz		30.0	36.0	—	dB
Reflected wave signal suppression 1.3 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 36.22 MHz)		—	48.0	—	dB
Group delay ripple (p-p) 32.82 ... 39.72 (32.67 ...39.67) MHz	$\Delta\tau$	—	60	—	ns
Impedance at 36.22 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1.9 \parallel 14.3	—	$\text{k}\Omega \parallel \text{pF}$
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	4.4 \parallel 2.9	—	$\text{k}\Omega \parallel \text{pF}$
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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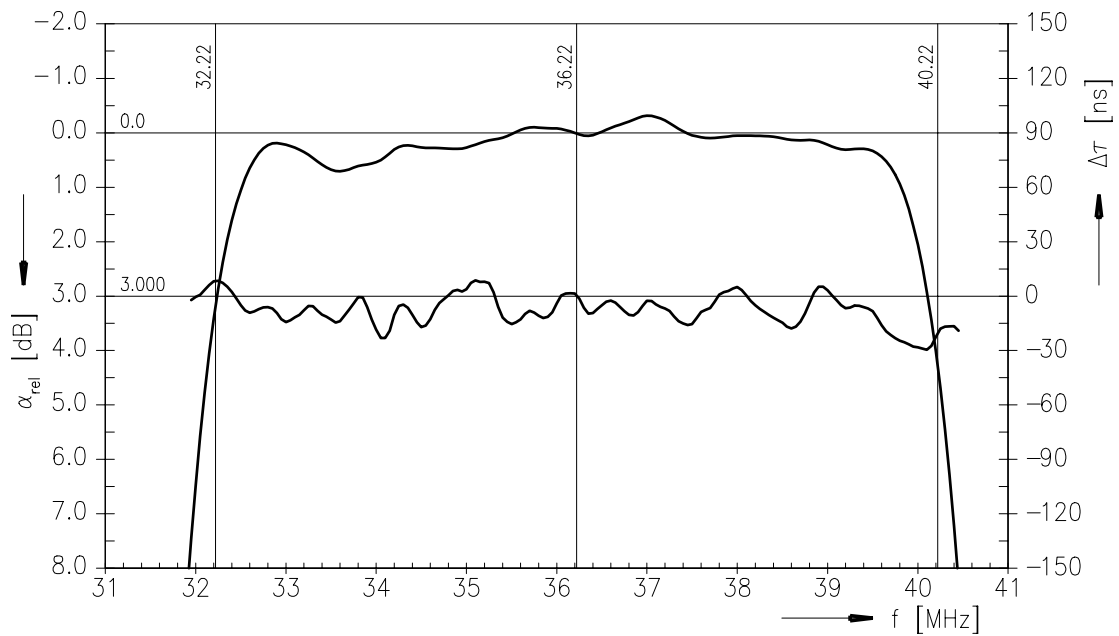
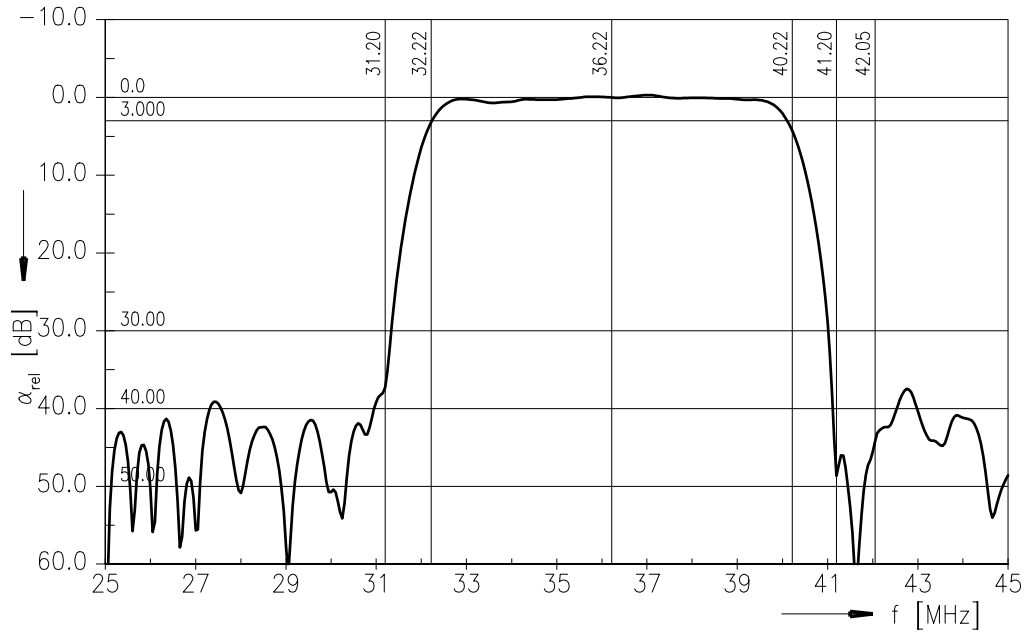
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Data Sheet

Frequency response of channel 1



Please read *cautions and warnings* and *important notes* at the end of this document.



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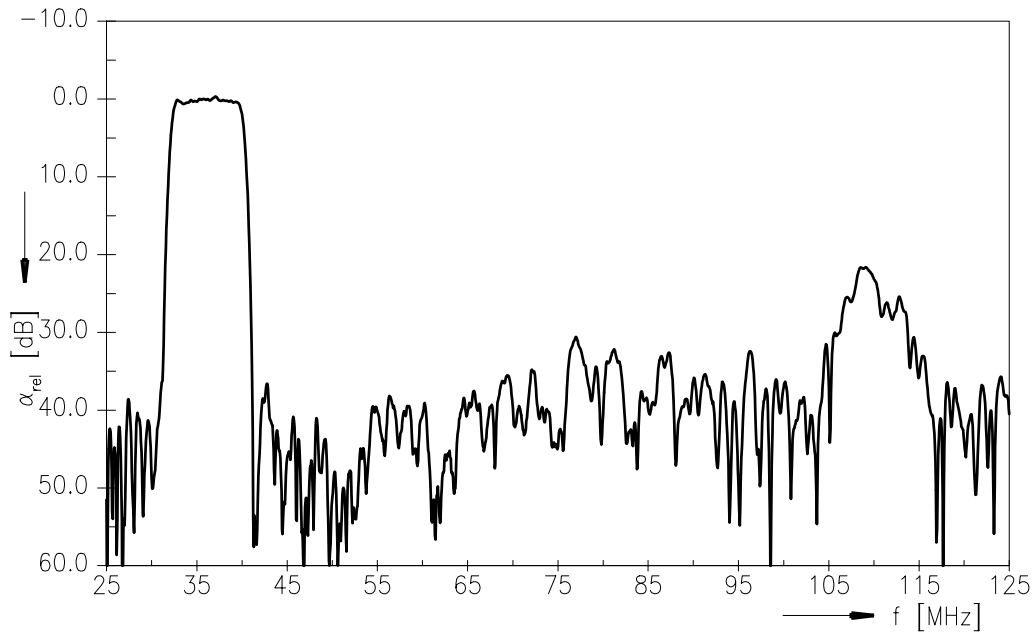
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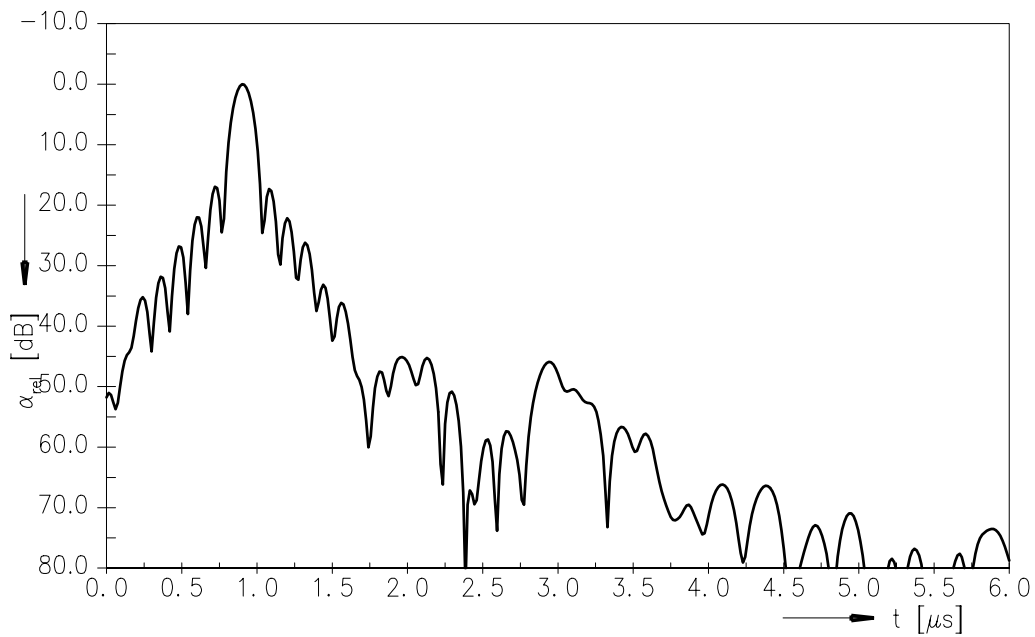
36.17 MHz

Data Sheet

Frequency response of channel 1



Time domain response of channel 1

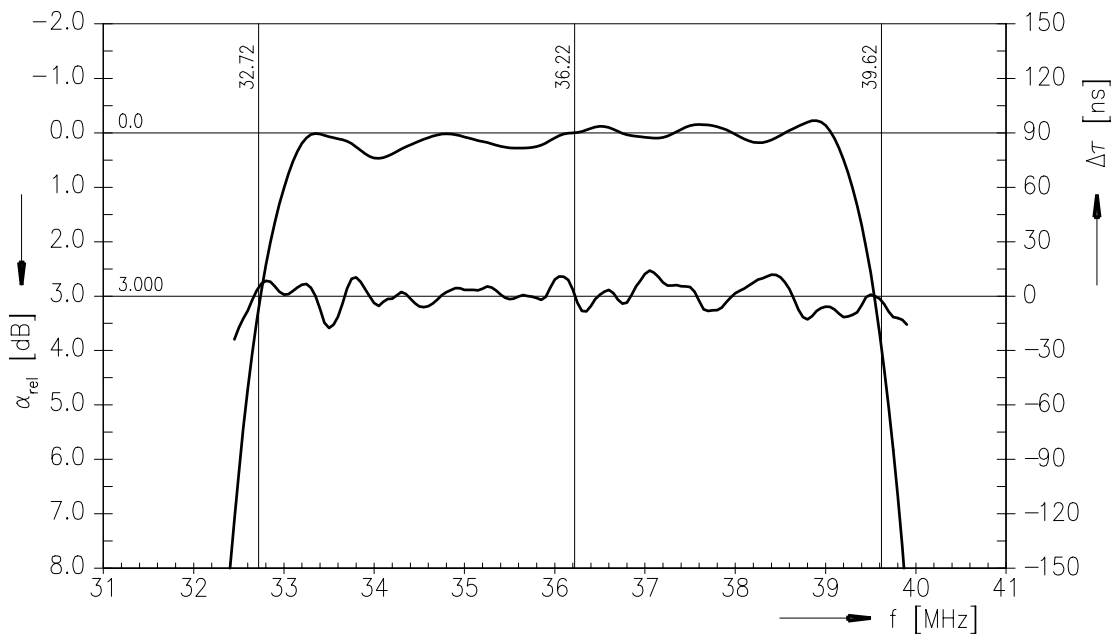
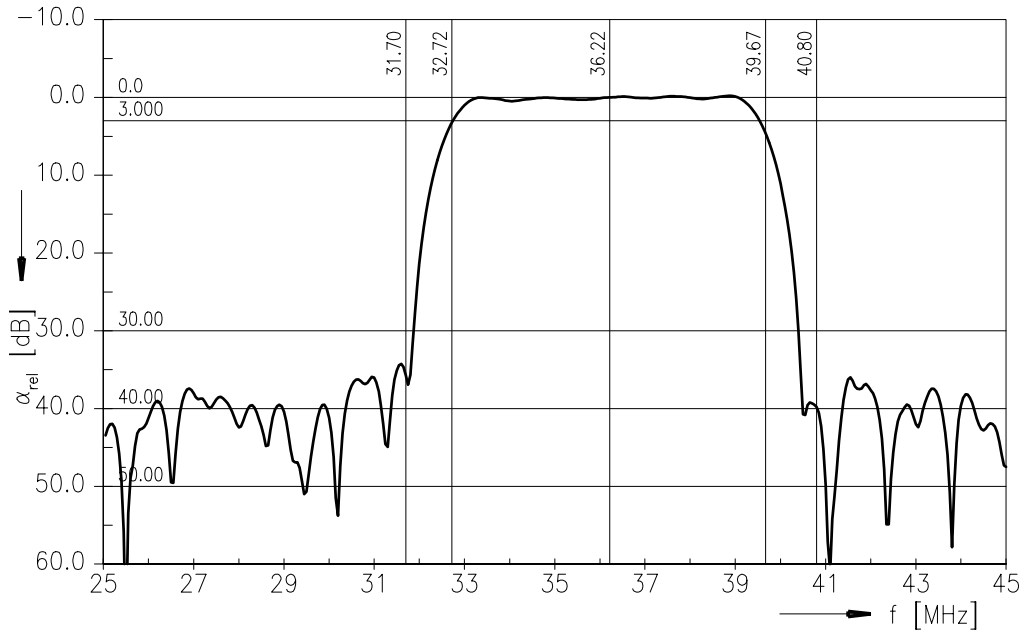


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Data Sheet

Frequency response of channel 2





SAW Components

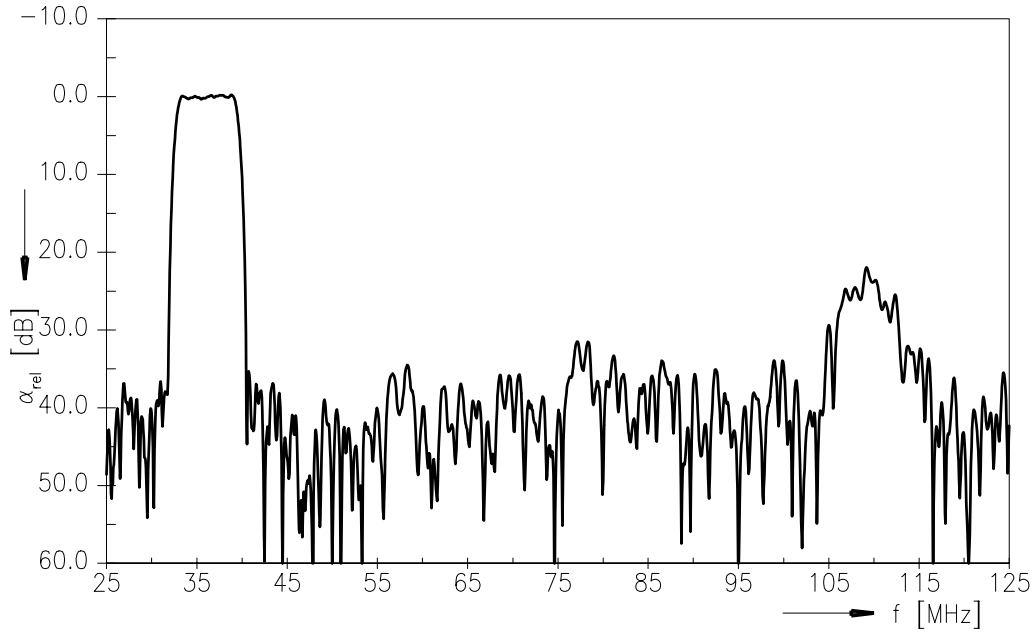
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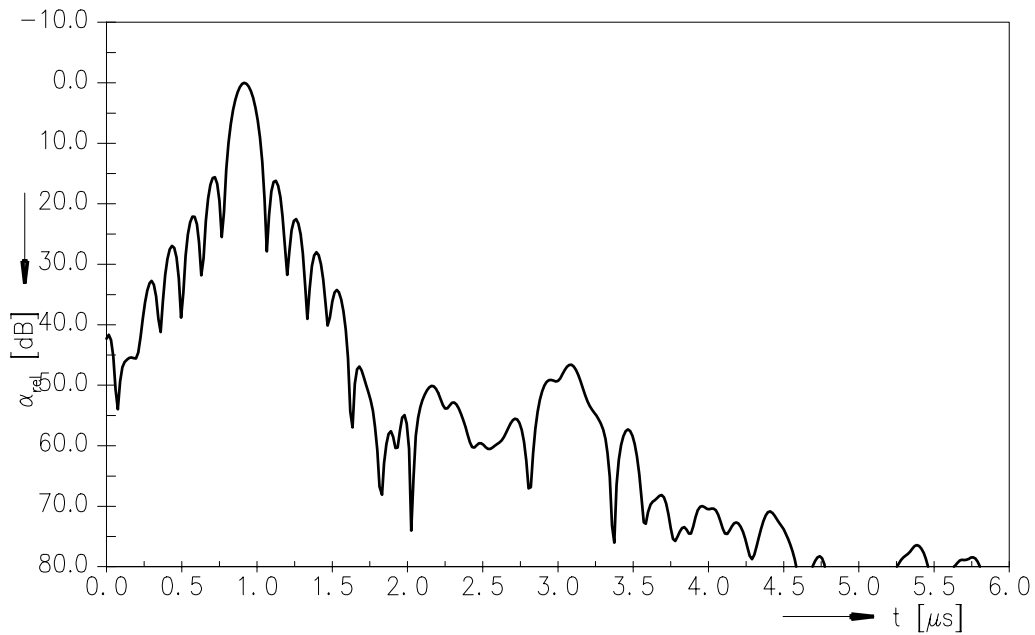
36.17 MHz

Data Sheet

Frequency response of channel 2



Time domain response of channel 2



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References

Type	X 7261 X
Ordering code	B39362-X7261-X400
Marking and package	C61157-A1-A22
Packaging	F61074-V8049-Z000
Date codes	L_1126
S-parameters	X7261X_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."

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