



SAW Components

SAW bandpass filter

Bandpass filter for terrestrial TV applications

Series/type:	X 6792 M
Ordering code:	B39361-X6792-M100
Date:	March 30, 2009
Version:	2.0



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SAW bandpass filter

36.13 MHz

Data Sheet

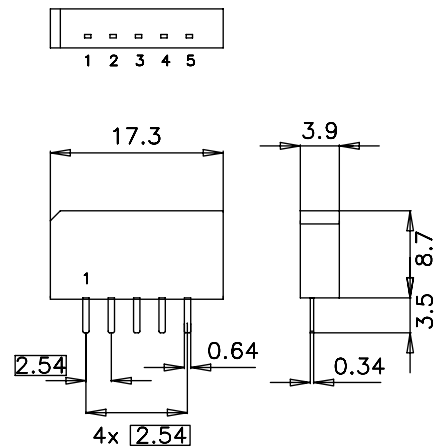
Application

- Usable bandwidth 8.0 MHz
- Balance input option
- Constant group delay



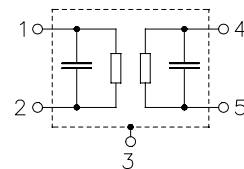
Features

- Plastic package **SIP5K**
- Approximate weight 1.0 g
- RoHS compatible
- Tinned CuFe alloy terminals



Pin configuration

- 1 Input
- 2 Input - ground
- 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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Characteristics

Reference temperature: $T_A = 25\text{ °C}$
 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.	
Center frequency (center between 10 dB points)	f_C	—	36.13	—	MHz
Insertion attenuation	α				
Reference level for the following data	36.13 MHz	18.5	20.0	21.5	dB
Amplitude ripple	32.65 ... 39.60 MHz	0.0	0.5	1.0	dB
Pass bandwidth					
$\alpha_{rel} \leq 1\text{ dB}$	$B_{1\text{dB}}$	—	7.5	—	MHz
$\alpha_{rel} \leq 3\text{ dB}$	$B_{3\text{dB}}$	—	8.0	—	MHz
Relative attenuation	α_{rel}				
	32.33 MHz	0.2	1.2	2.2	dB
	39.93 MHz	0.8	1.8	2.8	dB
	30.90 MHz	36.0	48.0	—	dB
	41.40 MHz	38.0	49.0	—	dB
Lower sidelobe	25.00 ... 30.90 MHz	33.0	39.0	—	dB
Upper sidelobe	41.40 ... 50.00 MHz	34.0	40.0	—	dB
Reflected wave signal suppression					
1.2 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 36.13 MHz)		40.0	50.0	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
	32.33 ... 39.93 MHz	—	50	—	ns
Impedance at 36.13 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	3.6 \parallel 10.7	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	3.4 \parallel 3.6	—	k Ω \parallel 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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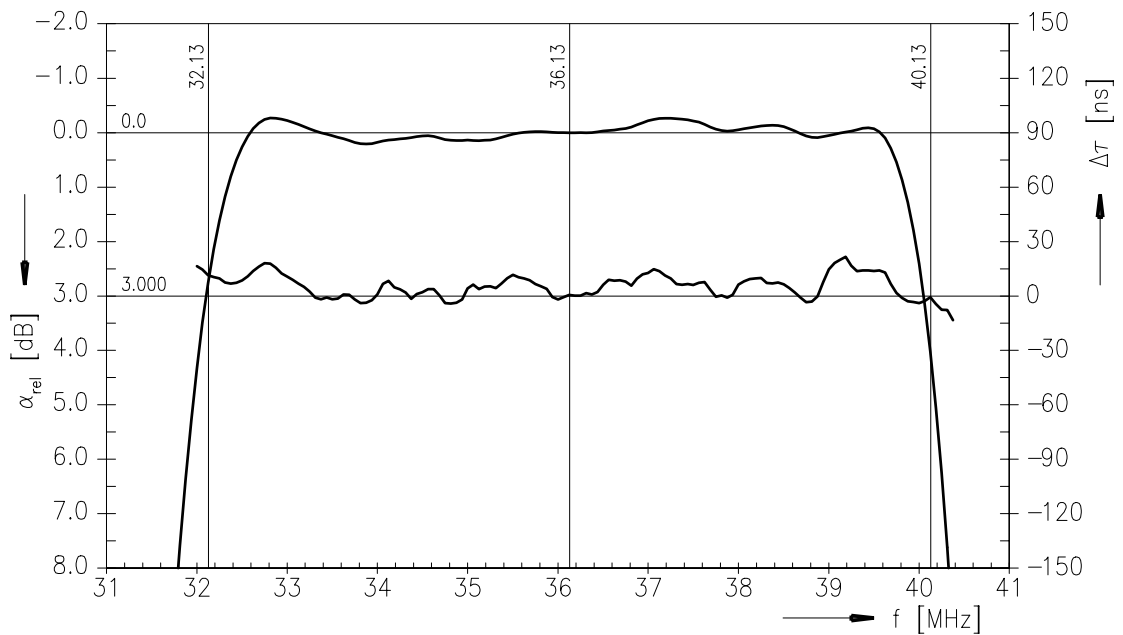
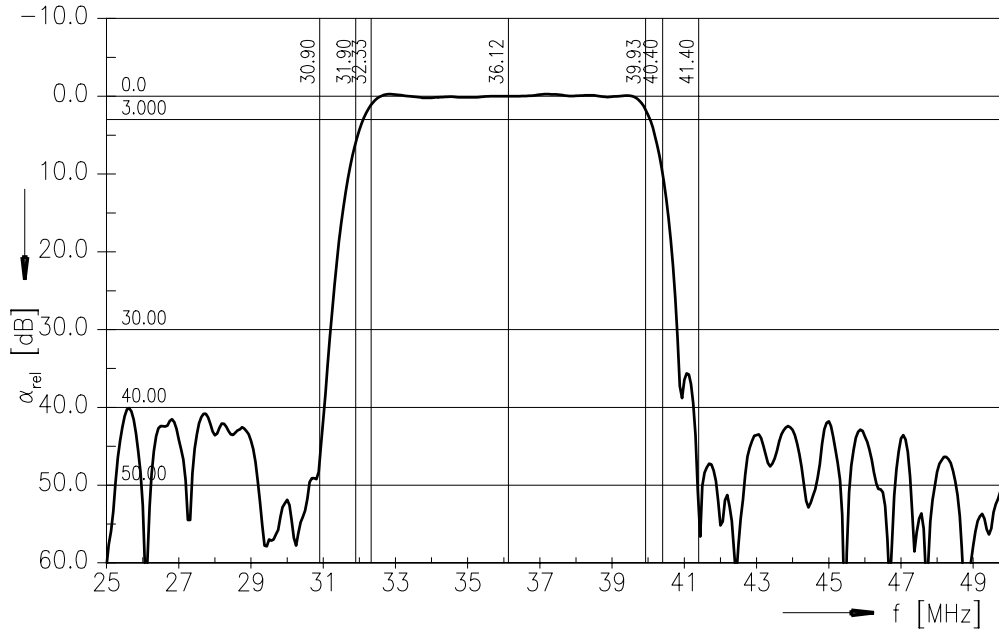
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Data Sheet

Frequency response



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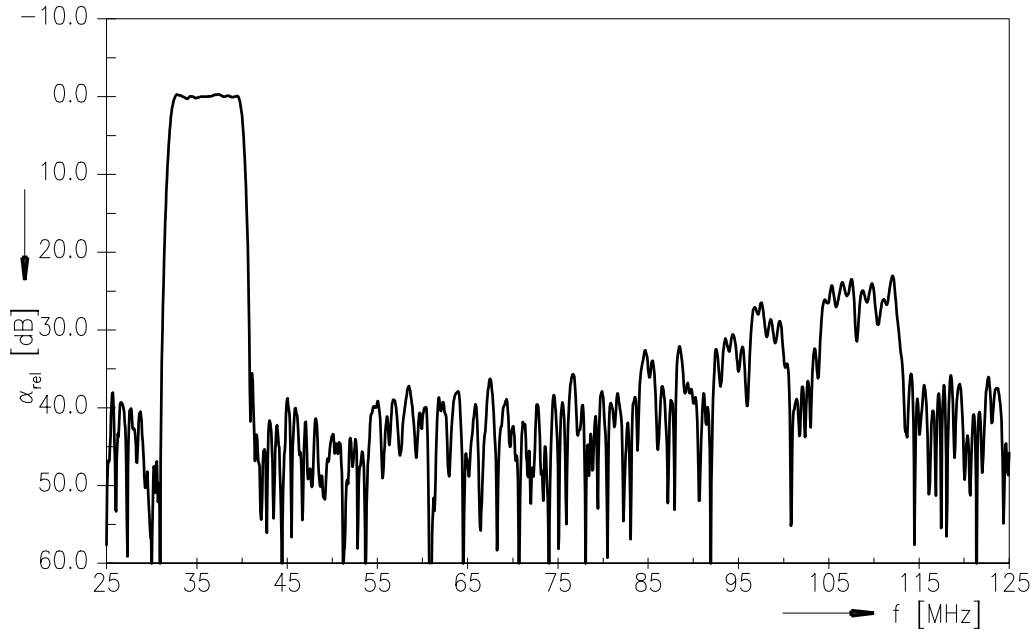
X 6792 M

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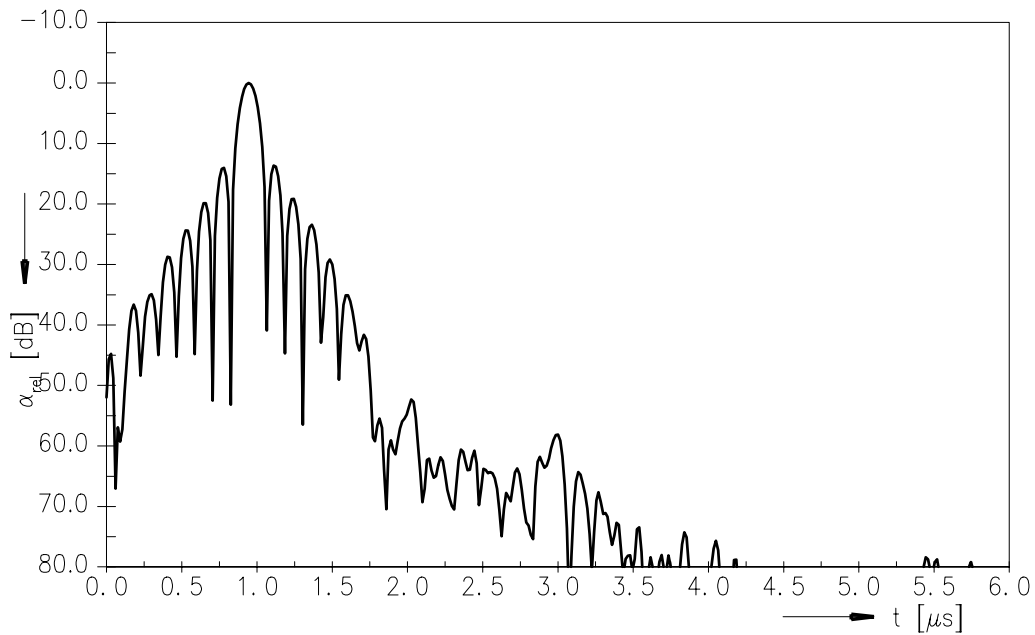
36.13 MHz

Data Sheet

Frequency response



Time domain response



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References

Type	X 6792 M
Ordering code	B39361-X6792-M100
Marking and package	C61157-A1-A15
Packaging	F61074-V8067-Z000
Date codes	L_1126
S-parameters	X6792M_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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