



SAW Components

Data Sheet X6872D





SAW Components

X6872D

Bandpass Filter

36,125 MHz

Data Sheet

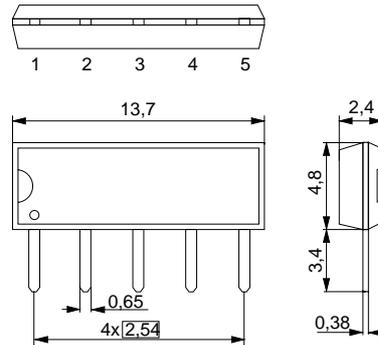
Duroplast package **SIP5D**

Features

- IF filter for digital TV
- 3 dB bandwidth: 7,0 MHz
- Standard IC package

Terminals

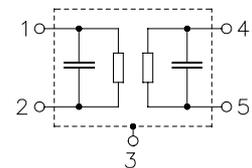
- Tinned CuFe alloy



Dimensions in mm, approx. weight 0,5 g

Pin configuration

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



Type	Ordering code	Marking and package according to	Packing according to
X 6872 D	B39361-X6872-N201	C61157-A1-A21	F61074-V8049-Z000

Maximum ratings

Operable temperature range	T_A	-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



SAW Components	X6872D
Bandpass Filter	36,125 MHz

Data Sheet

Characteristics

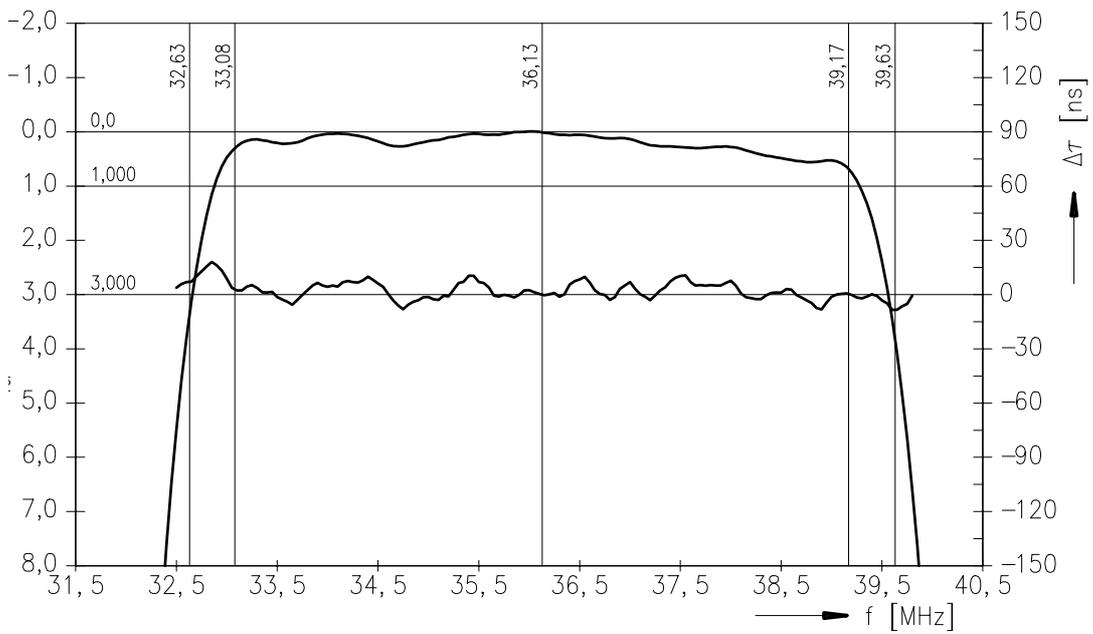
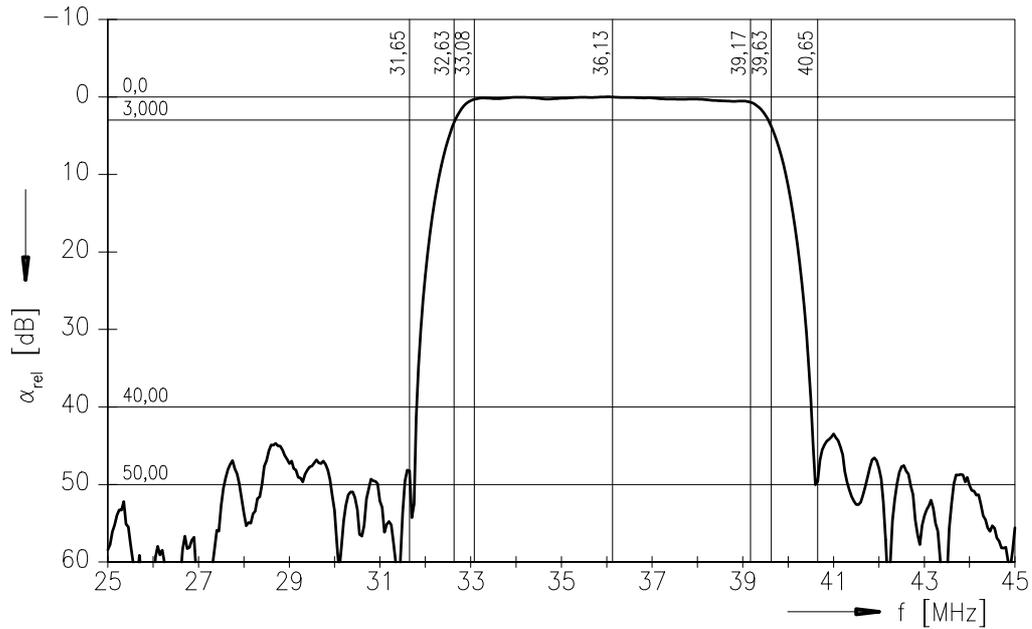
Reference temperature: $T_A = 25\text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\ \text{k}\Omega \parallel 3\ \text{pF}$

		min.	typ.	max.	
Center frequency (center between 10 dB points)	f_C	—	36,125	—	MHz
Insertion attenuation Reference level for the following data	α	18,5	20,0	21,5	dB
Pass bandwidth					
$\alpha_{\text{rel}} \leq 3\ \text{dB}$	$B_{3\text{dB}}$	—	6,9	—	MHz
$\alpha_{\text{rel}} \leq 30\ \text{dB}$	$B_{30\text{dB}}$	—	8,5	—	MHz
Relative attenuation	α_{rel}				
	33,08 MHz	—	0,5	—	dB
	39,17 MHz	—	0,6	—	dB
	32,63 MHz	—	3,6	—	dB
	39,63 MHz	—	3,8	—	dB
Lower sidelobe	25,00 ... 31,65 MHz	38,0	46,0	—	
Upper sidelobe	40,65 ... 45,00 MHz	37,0	42,0	—	
Reflected wave signal suppression 1,3 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 36,13 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression 1,3 μs ... 1,2 μs before main pulse (test pulse 250 ns, carrier frequency 36,13 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
	32,63 ... 39,63 MHz	—	40	—	ns
Impedance at 36,13 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	3,4 \parallel 13,3	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	2,2 \parallel 4,3	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



Data Sheet

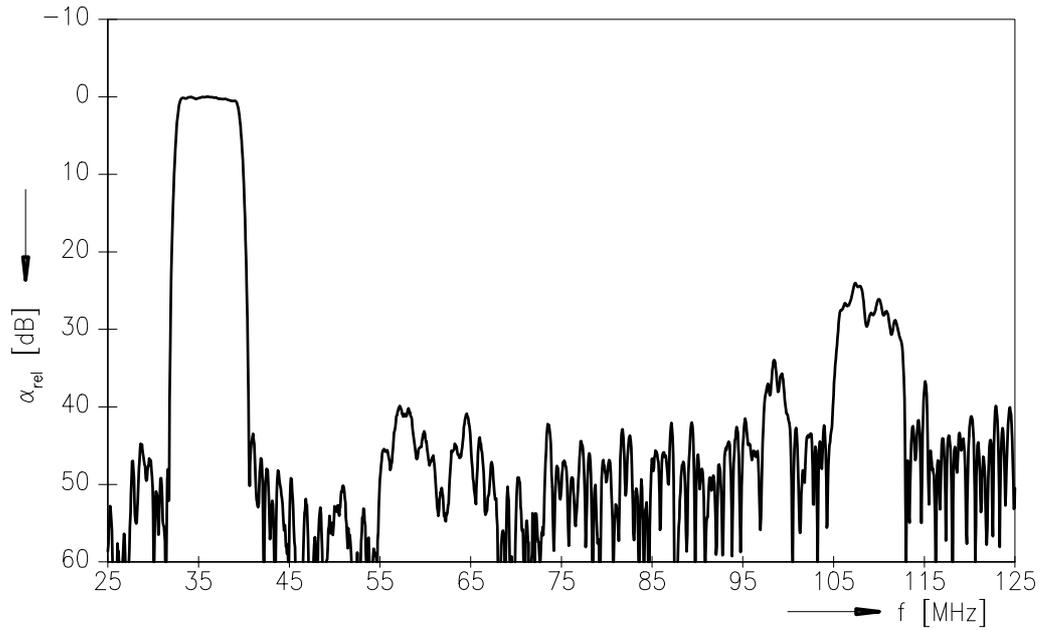
Frequency response



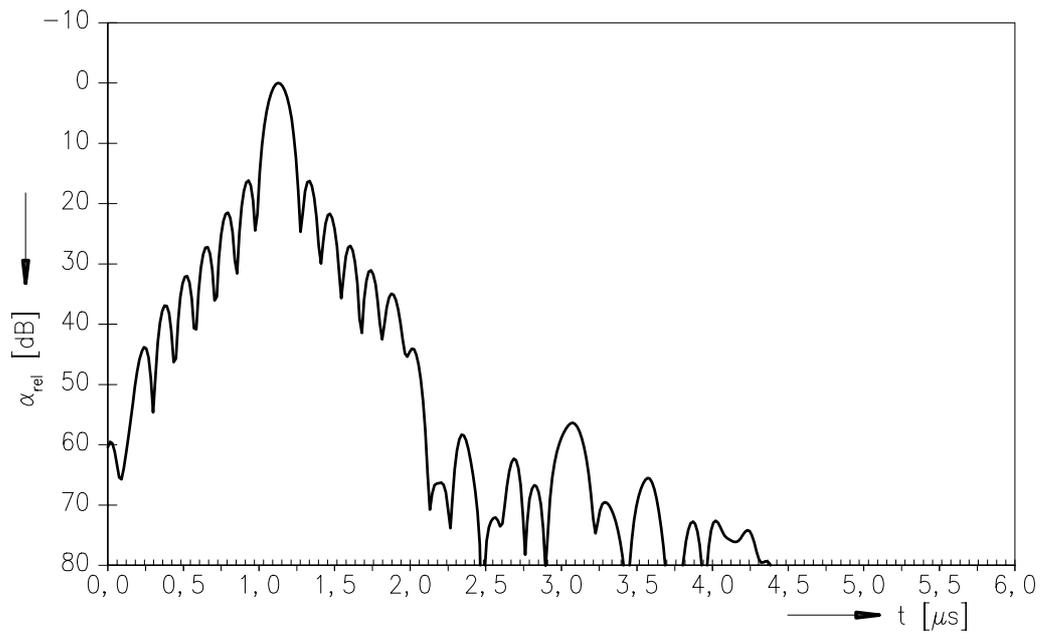


Data Sheet

Frequency response



Time domain response





SAW Components

X6872D

Bandpass Filter

36,125 MHz

Data Sheet

Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW CE MM PD

P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2003. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.