



SAW Components

Data Sheet X 6966 M





SAW Components

X 6966 M

Bandpass Filter

36,125 MHz

Data Sheet

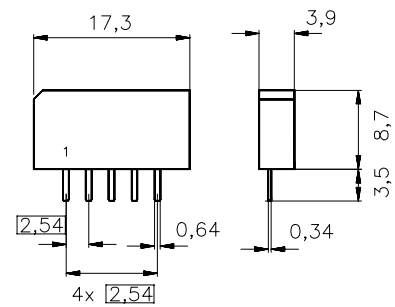
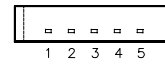
Plastic package **SIP5K**

Features

- IF filter for digital cable TV

Terminals

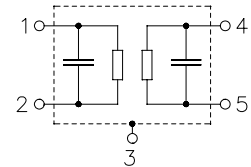
- Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 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 6966 M	B39361-X6966-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operable temperature range	T_A	-25/+65	°C	
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	12	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals



SAW Components	X 6966 M
Bandpass Filter	36,125 MHz

Data Sheet

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.	max.	
Insertion attenuation		α			
Reference level for the following data	36,125 MHz	18,8	20,3	21,8	dB
Amplitude ripple		$\Delta\alpha$			
	32,65 ... 39,60 MHz	0,0	0,5	1,0	dB
Pass bandwidth					
$\alpha_{rel} \leq 1\text{ dB}$	B_{1dB}	—	7,5	—	MHz
$\alpha_{rel} \leq 3\text{ dB}$	B_{3dB}	—	8,0	—	MHz
$\alpha_{rel} \leq 30\text{ dB}$	B_{30dB}	—	9,4	—	MHz
Relative attenuation		α_{rel}			
	32,32 MHz	-0,1	0,9	1,9	dB
	39,93 MHz	0,4	1,4	2,4	dB
	32,13 MHz	1,5	2,7	3,9	dB
	40,13 MHz	2,3	3,5	4,7	dB
	31,25 MHz	37,0	51,0	—	dB
	47,25 MHz	45,0	60,0	—	dB
Lower sidelobe	25,00 ... 31,25 MHz	35,0	41,0	—	dB
Upper sidelobe	40,90 ... 50,00 MHz	32,0	39,0	—	dB
Reflected wave signal suppression					
1,0 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 36,125 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 36,125 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)		$\Delta\tau$			
Aperture 62,5 kHz	32,32 ... 39,93 MHz	—	40	—	ns
Impedance at 36,125 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	2,3 \parallel 14,7	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	2,4 \parallel 3,9	—	k Ω \parallel pF
Temperature coefficient of frequency		TC_f			
		—	-72	—	ppm/K



SAW Components

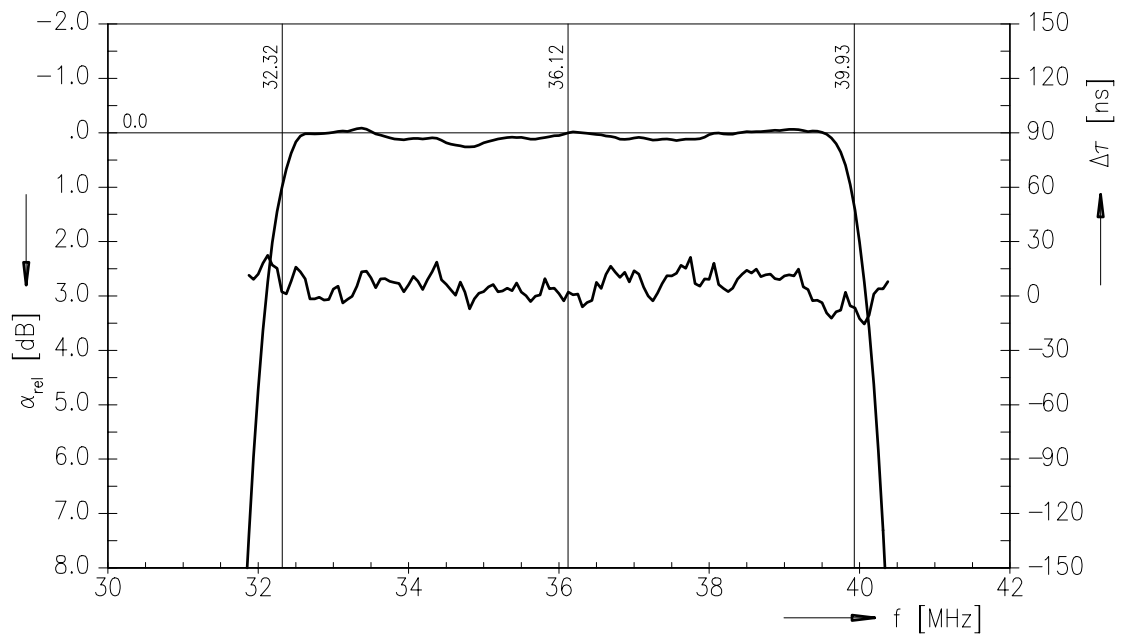
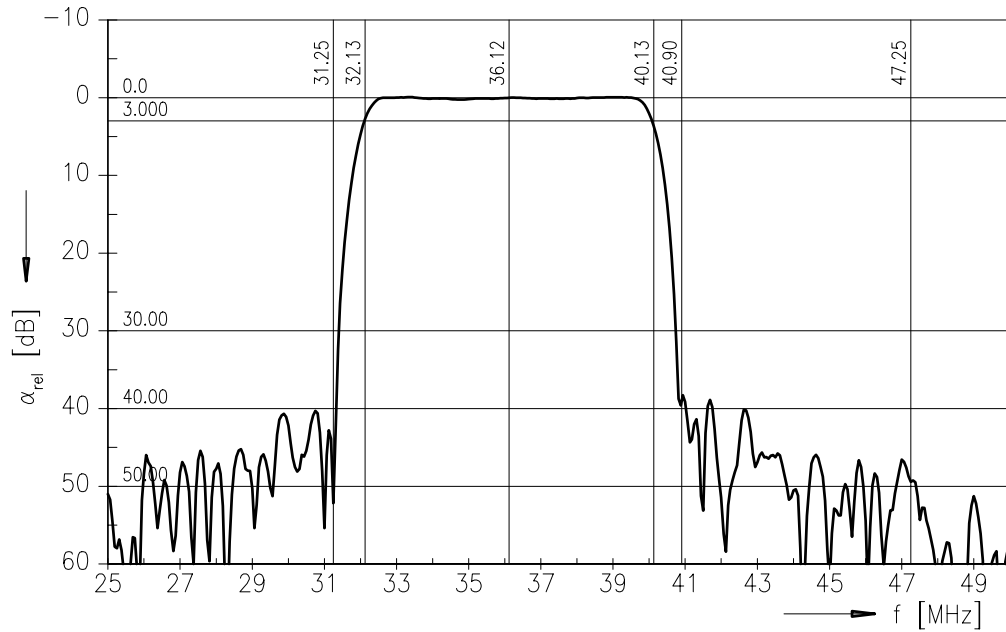
X 6966 M

Bandpass Filter

36,125 MHz

Data Sheet

Frequency response





SAW Components

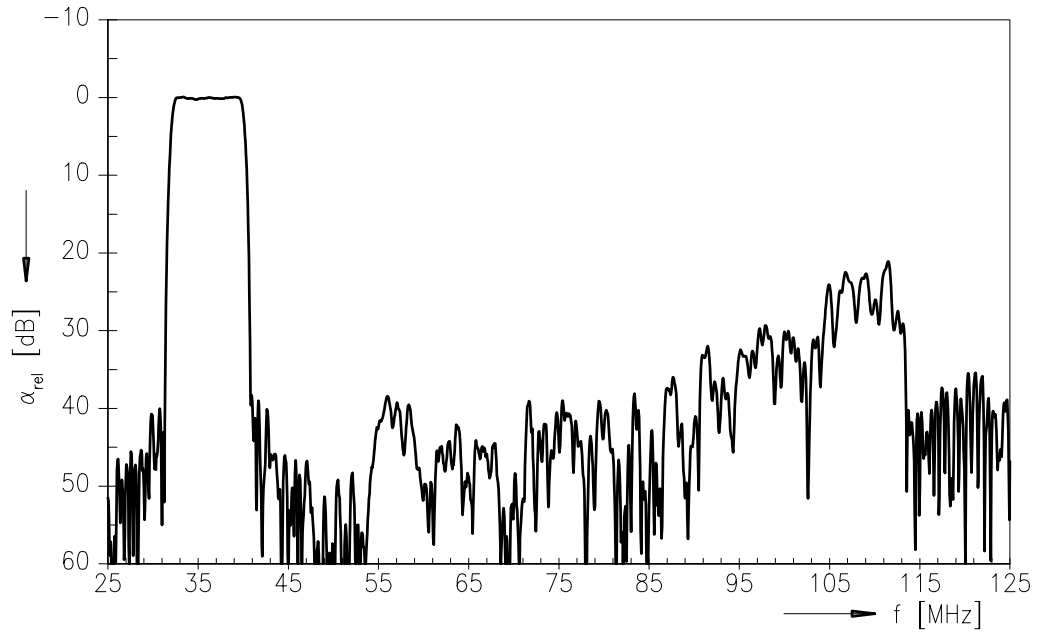
X 6966 M

Bandpass Filter

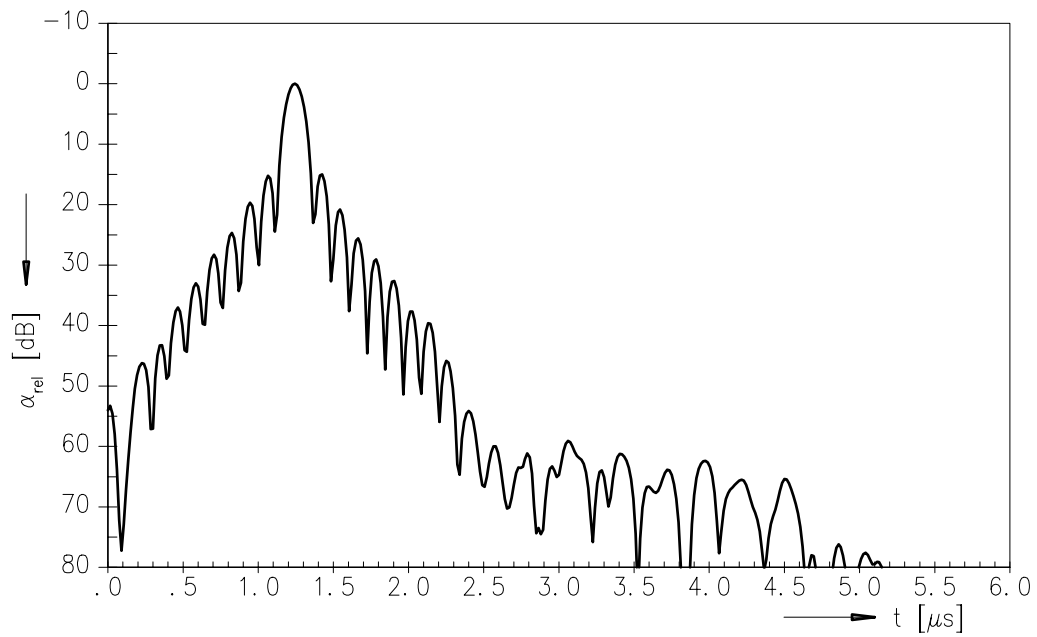
36,125 MHz

Data Sheet

Frequency response



Time domain response





SAW Components

X 6966 M

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, D-81617 München

© EPCOS AG 2001. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.

Terms of delivery and rights to change design reserved.

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.