



SAW multimedia filters

Series/Type: X6966D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39361X6966N201		2011-01-14	2011-09-30	2012-09-30
B39361X6966D100	X6966N	2004-07-23	2004-09-30	

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

SAW Components

X 6966 D

Bandpass Filter

36,125 MHz

Data Sheet

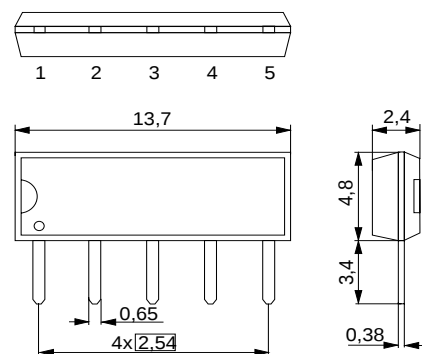
Duroplast package **SIP5D**

Features

- IF filter for digital cable TV
- Standard IC package

Terminals

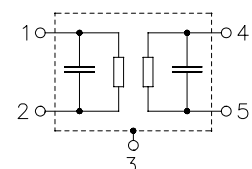
- Tinned CuFe alloy



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 6966 D	B39361-X6966-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

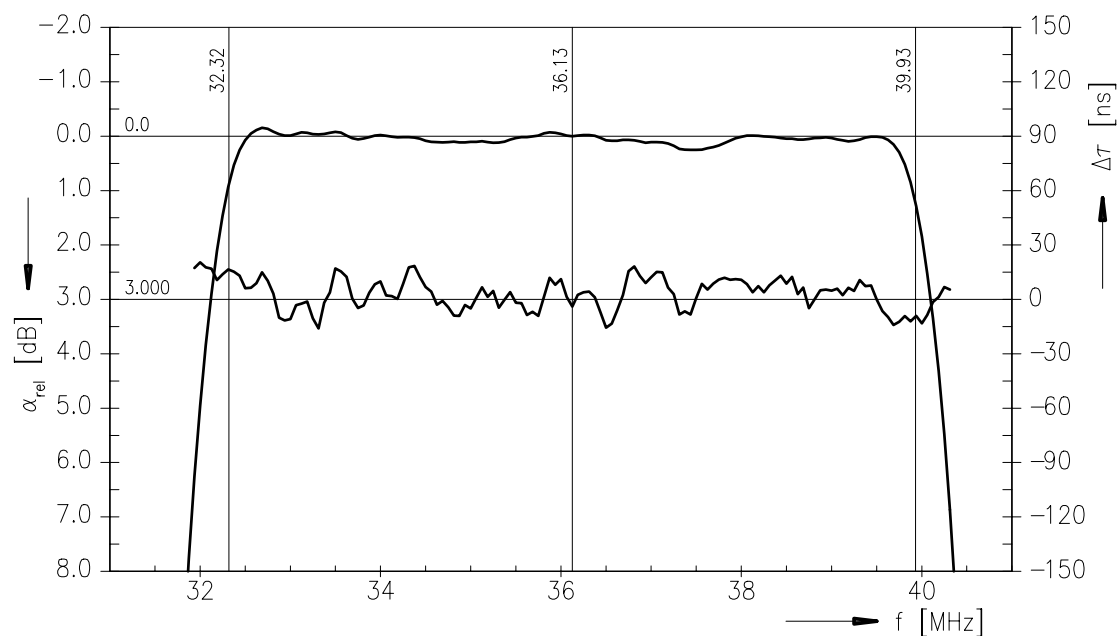
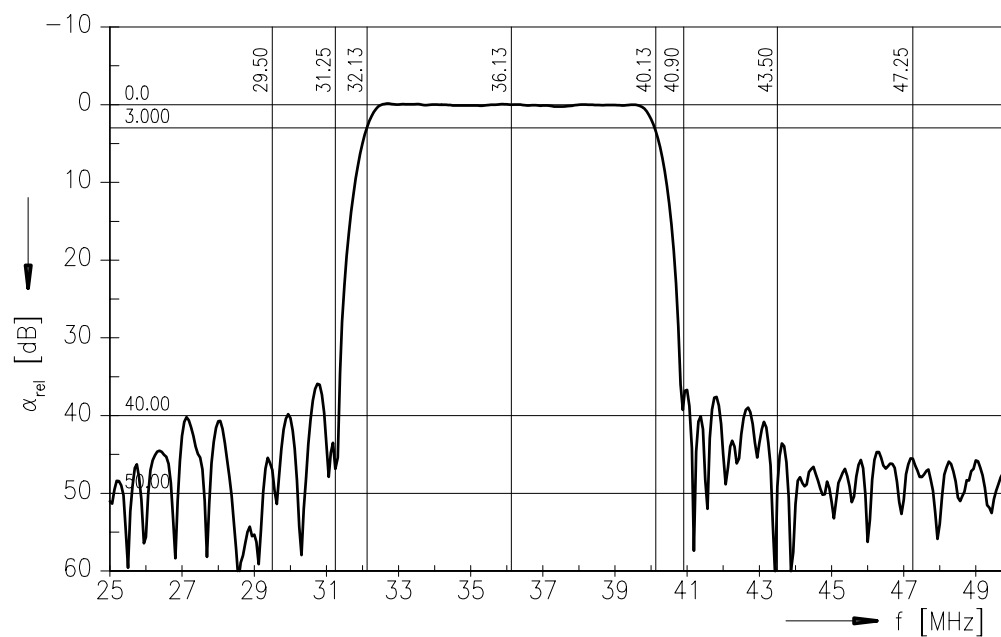
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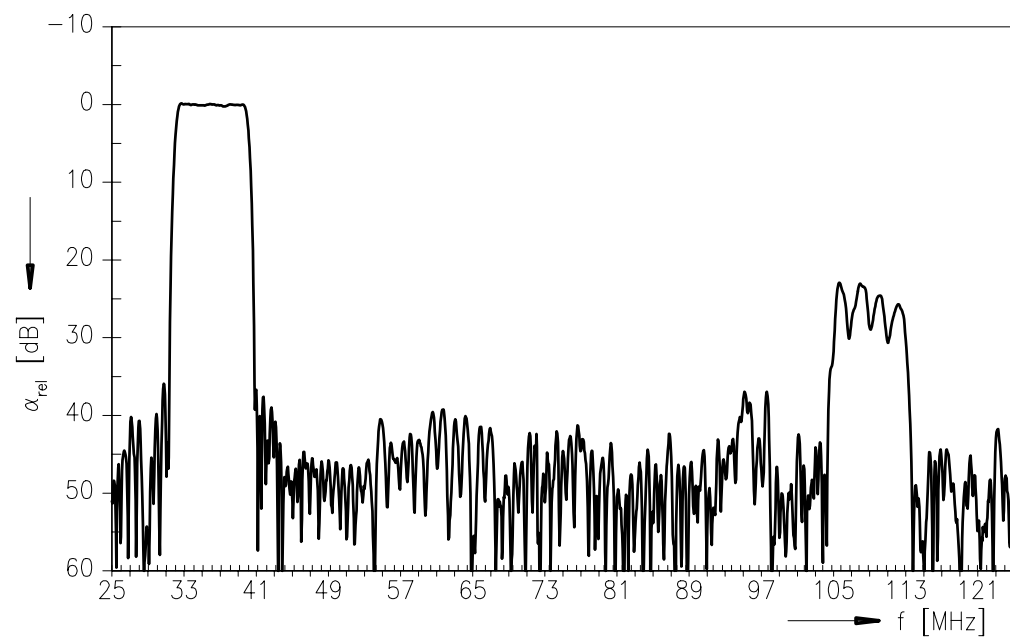
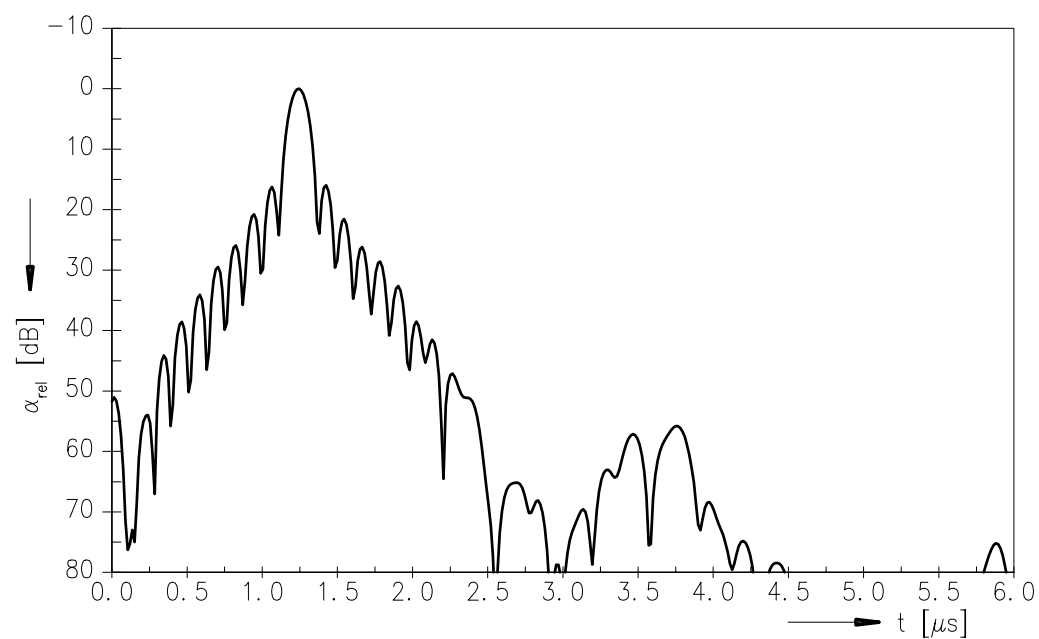
Data Sheet

Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	36,07	36,125	36,18	MHz
(center between 10 dB points)					
Insertion attenuation	α				
Reference level for the following data	36,13 MHz	18,8	20,3	21,8	dB
Pass bandwidth					
$\alpha_{\text{rel}} \leq 1\text{ dB}$	$B_{1\text{dB}}$	—	7,5	—	MHz
$\alpha_{\text{rel}} \leq 3\text{ dB}$	$B_{3\text{dB}}$	—	8,0	—	MHz
$\alpha_{\text{rel}} \leq 30\text{ dB}$	$B_{30\text{dB}}$	—	9,4	—	MHz
Relative attenuation	α_{rel}				
	32,32 MHz	—	1,2	—	dB
	39,93 MHz	0,1	1,1	2,1	dB
	32,13 MHz	1,9	3,1	4,3	dB
	40,13 MHz	2,0	3,2	4,4	dB
	31,25 MHz	35,0	50,0	—	dB
	47,25 MHz	42,0	50,0	—	dB
Lower sidelobe	25,00 ... 29,50 MHz	36,0	42,0	—	dB
	29,50 ... 31,25 MHz	32,0	38,0	—	dB
Upper sidelobe	40,90 ... 43,50 MHz	32,0	38,0	—	dB
	43,50 ... 50,00 MHz	36,0	44,0	—	dB
Reflected wave signal suppression					
1,2 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)	$\Delta\tau$				
32,13 ... 40,13 MHz		—	40	—	ns
Impedance at 36,13 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	2,9 $\parallel$ 14,1	—	k Ω $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	2,4 $\parallel$ 4,4	—	k Ω $\parallel$ pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

Data Sheet
Frequency response


Data Sheet
Frequency response

Time domain response


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Data Sheet

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This brochure replaces the previous edition.

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