



SAW Components

Data Sheet X 6865 D





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X 6865 D

Bandpass Filter

36,125 MHz

Data Sheet

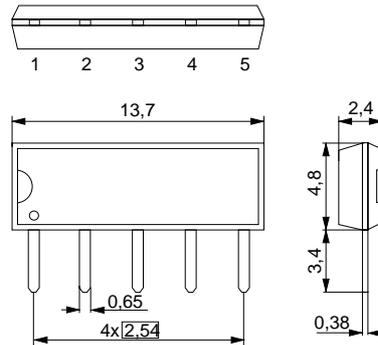
Duroplast package **SIP5D**

Features

- 3 dB bandwidth: 6,0 MHz
- Standard IC package

Terminals

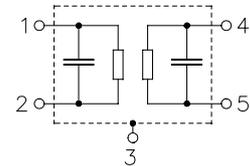
- Tinned CuFe alloy



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 6865 D	B39361-X6865-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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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.	
Center frequency (center between 3 dB points)	f_C	—	36,125	—	MHz
Insertion attenuation Reference level for the following data	α 36,13 MHz	16,1	17,6	19,1	dB
Pass bandwidth $\alpha_{rel} \leq 3\text{ dB}$	B_{3dB}	5,8	6,0	6,2	MHz
$\alpha_{rel} \leq 30\text{ dB}$	B_{30dB}	7,4	7,6	7,8	MHz
Relative attenuation 33,59 MHz	α_{rel}	-1,1	0,1	1,3	dB
38,65 MHz		-0,8	0,4	1,6	dB
33,12 MHz		1,3	2,5	3,7	dB
39,12 MHz		1,9	3,1	4,3	dB
Lower sidelobe 25,00 ... 32,12 MHz		38,0	44,0	—	dB
Upper sidelobe 40,12 ... 41,42 MHz		36,0	40,0	—	dB
41,42 ... 45,00 MHz		38,0	45,0	—	dB
Reflected wave signal suppression 1,3 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 36,13 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression 1,3 μ s ... 1,2 μ s before main pulse (test pulse 250 ns, carrier frequency 36,13 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p) 33,12 ... 39,12 MHz	$\Delta\tau$	—	40	—	ns
Impedance at 36,13 MHz Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	2,2 \parallel 15,3 1,4 \parallel 5,6	—	k Ω \parallel pF k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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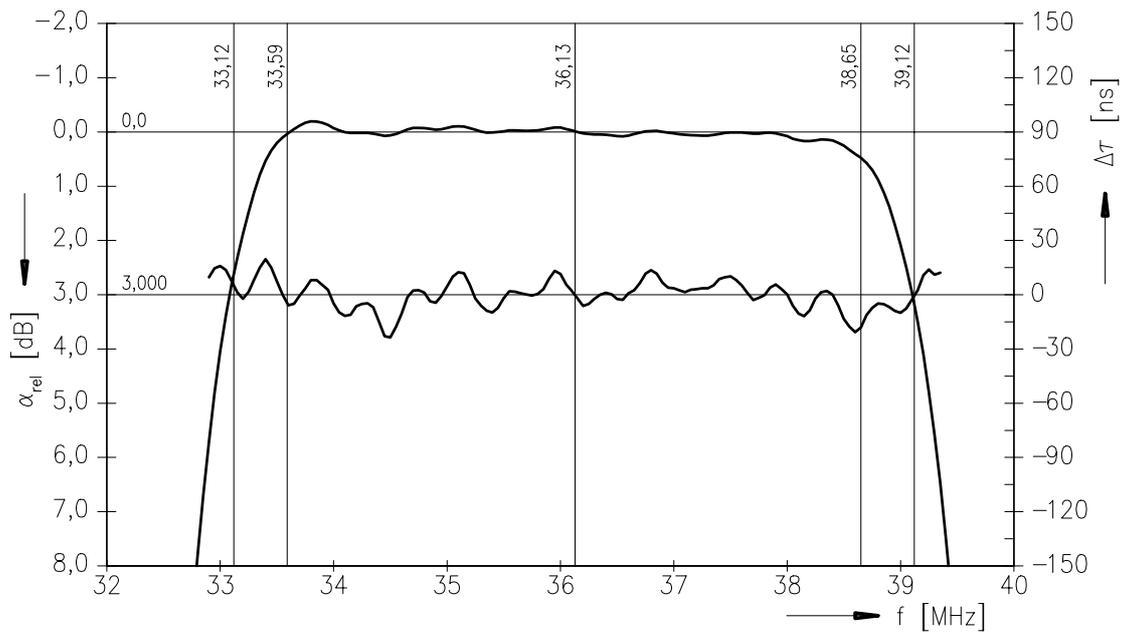
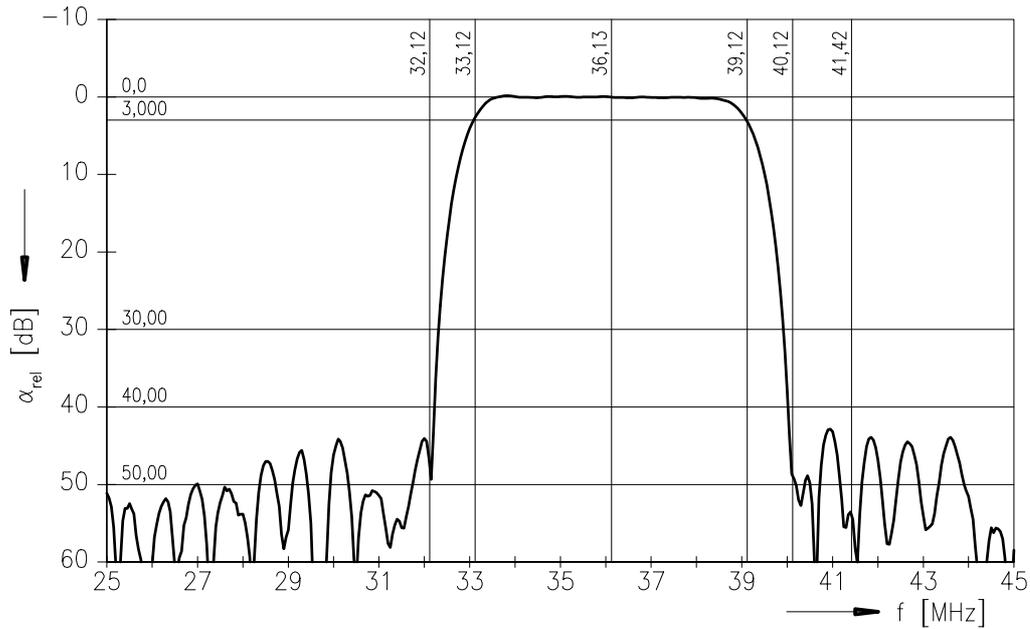
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Frequency response





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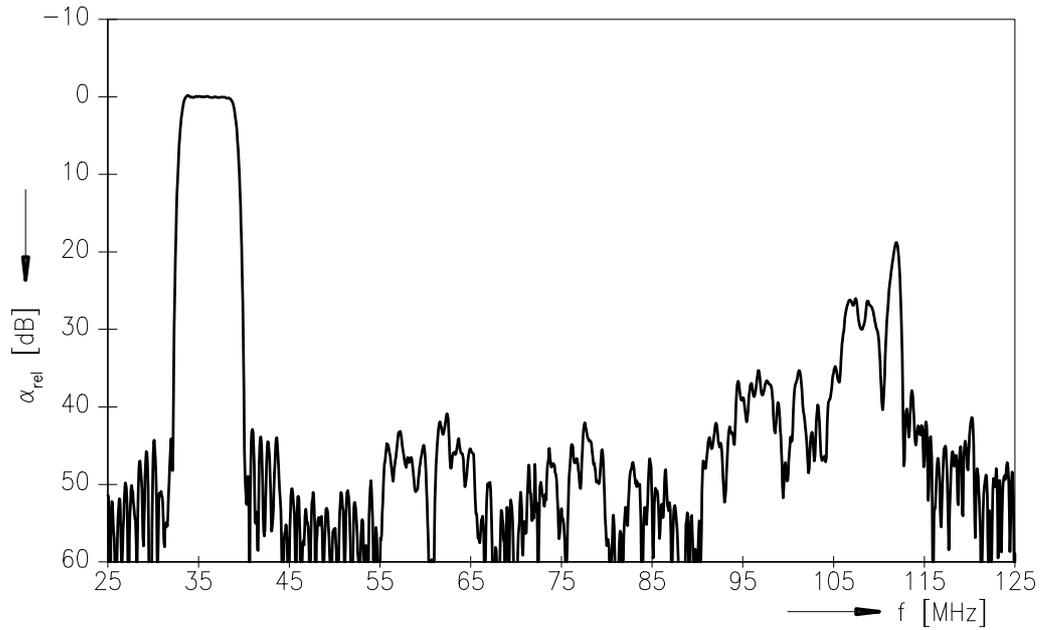
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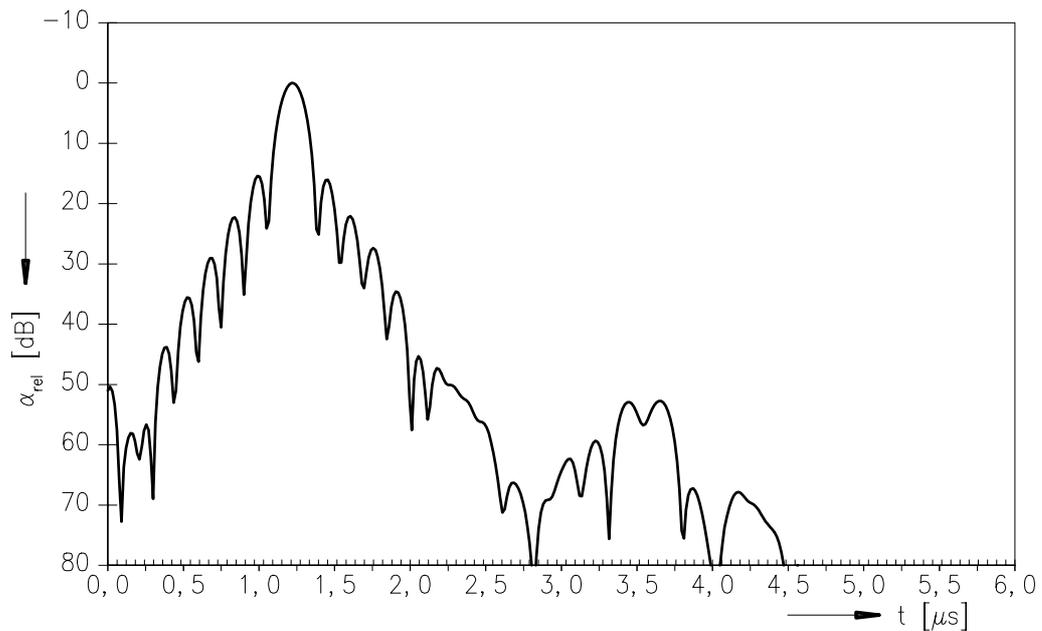
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Frequency response



Time domain response





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