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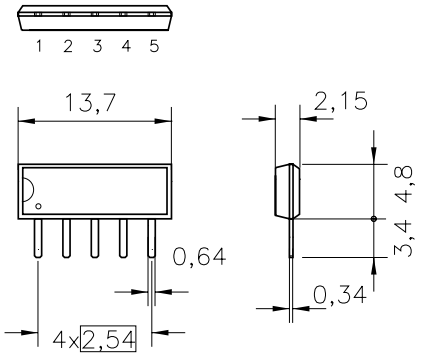
SAW Components

Data Sheet X 6966 D

Duroplast package **SIP5D**

Features

- IF filter for digital cable TV
- Standard IC package



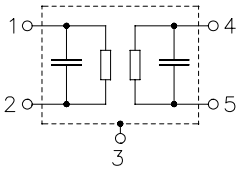
Terminals

- 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-D100	C61157-A1-A18	F61074-V8049-Z000

Maximum ratings

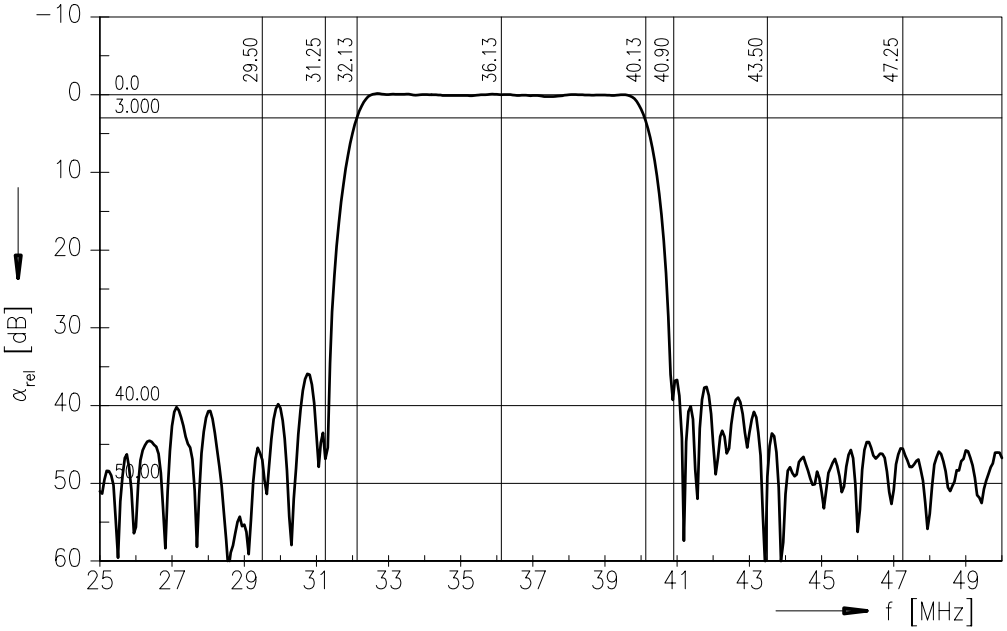
Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	12	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

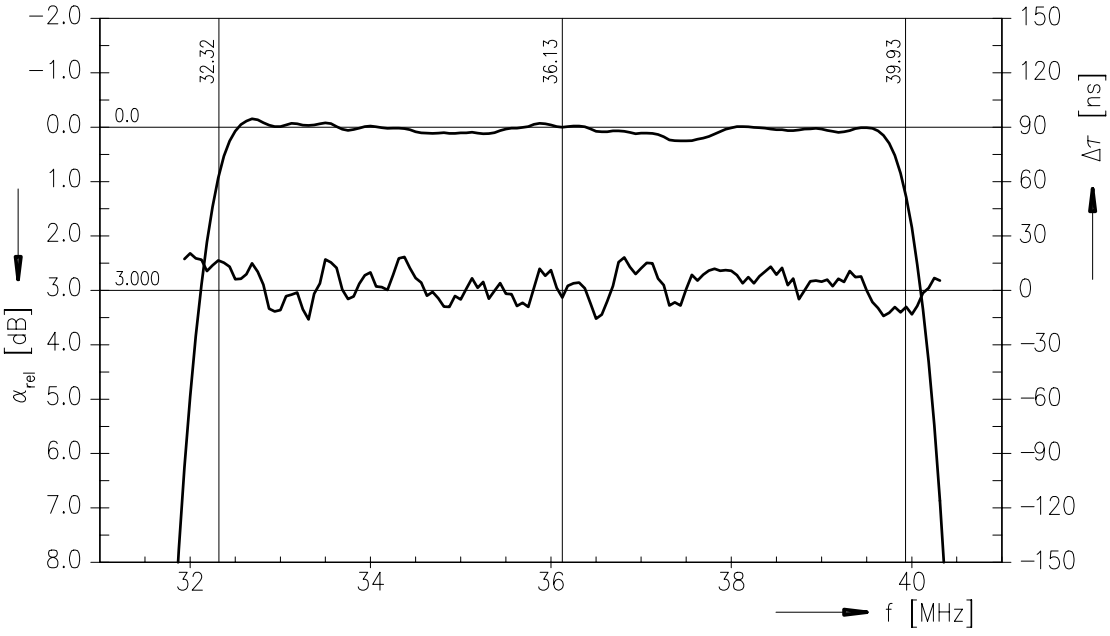
Characteristics

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

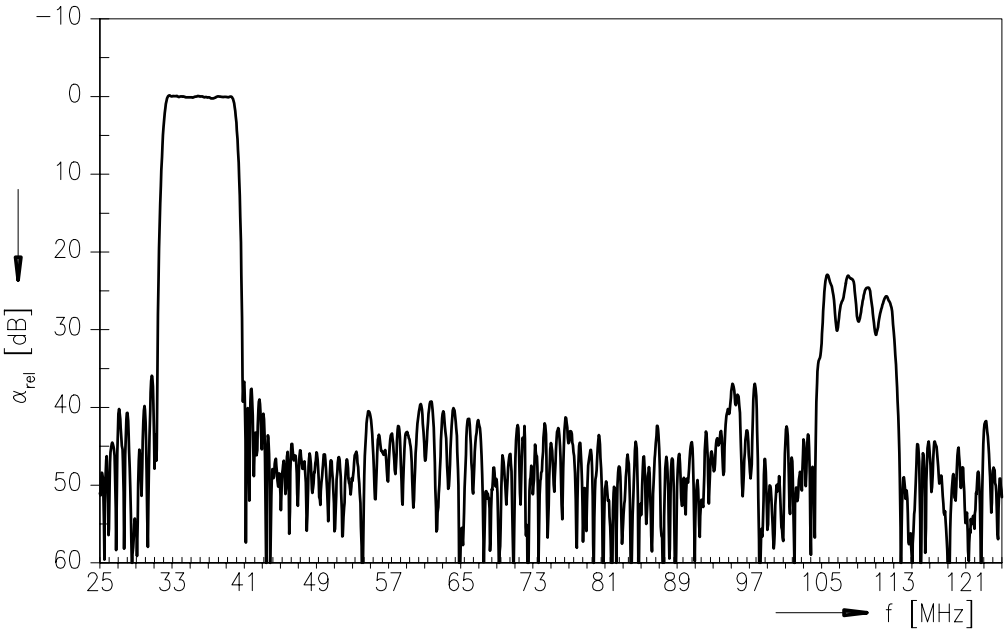
			min.	typ.	max.	
Center frequency (center between 3 dB points)		f_C	36,07	36,125	36,18	MHz
Insertion attenuation		α				
Reference level for the following data	36,125 MHz		18,8	20,3	21,8	dB
Pass bandwidth						
$\alpha_{rel} \leq$ 1dB		B_{1dB}	—	7,5	—	MHz
$\alpha_{rel} \leq$ 3dB		B_{3dB}	—	8,0	—	MHz
$\alpha_{rel} \leq$ 30dB		B_{30dB}	—	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 36,125 MHz)			42,0	52,0	—	dB
Feedthrough signal suppression 1,3 µs ... 1,2 µs before main pulse (test pulse 250 ns, carrier frequency 36,125 MHz)			50,0	56,0	—	dB
Group delay ripple (p-p)		Δτ				
	32,13 ... 40,13 MHz		—	40	—	ns
Impedance at 36,125 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	2,9 ‖ 14,1	—	kΩ ‖ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	2,4 ‖ 4,4	—	kΩ ‖ pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

Frequency response

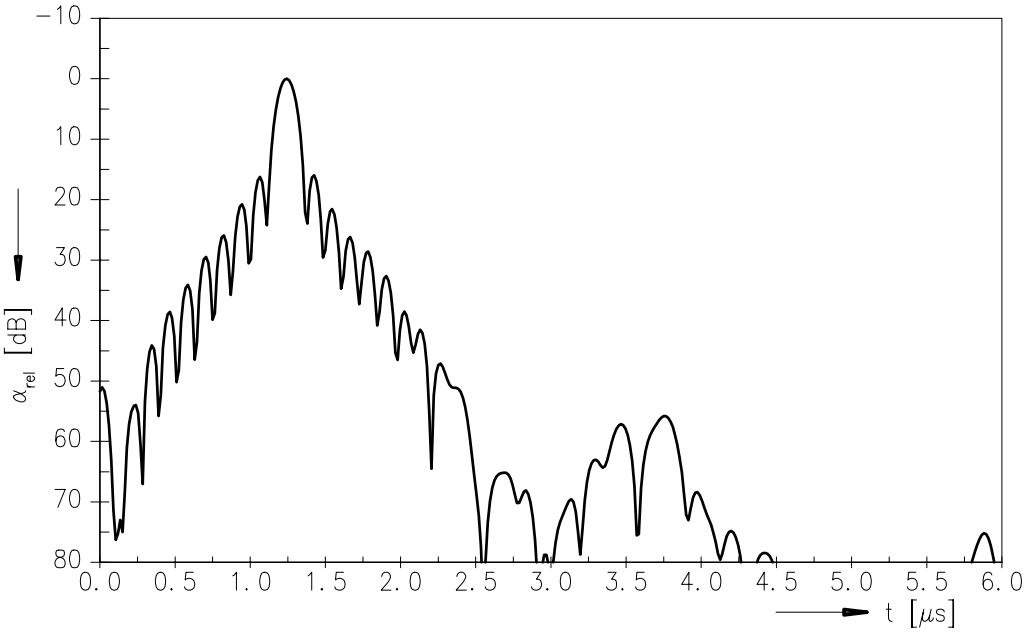




Frequency response



Time domain response



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