



SAW Components

Data Sheet M 3960 M





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M 3960 M

IF Filter for Video Applications

38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

■ M/N

Features

- TV IF filter with Nyquist slope and sound suppression
- Constant group delay

Terminals

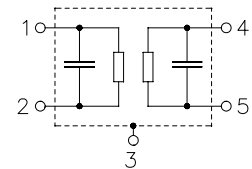
- Tinned CuFe alloy



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
M 3960 M	B39389-M3960-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}	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: $Z_S = 50\text{ }\Omega$
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	37,40 MHz	11,3	12,8	14,3	dB
Relative attenuation α_{rel}					
Picture carrier	38,90 MHz	4,6	5,3	6,0	dB
Color carrier	35,32 MHz	2,3	3,3	4,3	dB
Sound carrier	34,40 MHz	36,0	45,0	—	dB
Adjacent picture carrier	32,90 MHz	46,0	55,0	—	dB
Adjacent sound carrier	40,40 MHz	46,0	58,0	—	dB
Lower sidelobe	25,00 ... 32,90 MHz	44,0	52,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	42,0	50,0	—	dB
Reflected wave signal suppression					
1,2 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	53,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p) $\Delta\tau$					
35,32 ... 38,90 MHz		—	35	60	ns
Impedance at 37,40 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,1 \parallel 16,2	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,6 \parallel 4,1	—	k Ω \parallel pF
Temperature coefficient of frequency TC_f					
		—	-72	—	ppm/K



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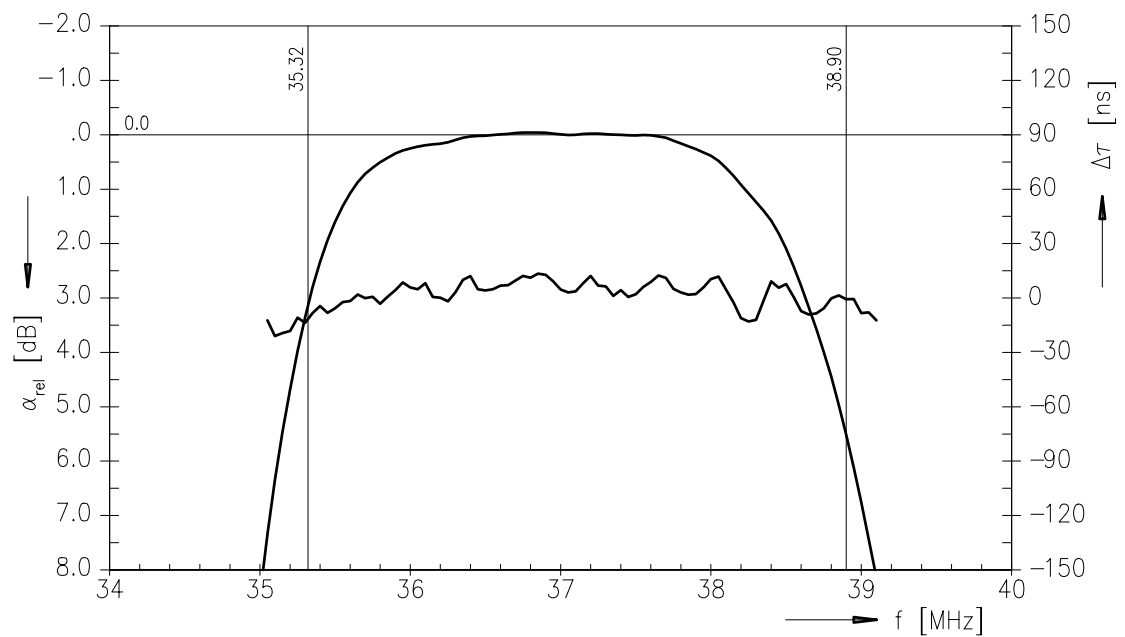
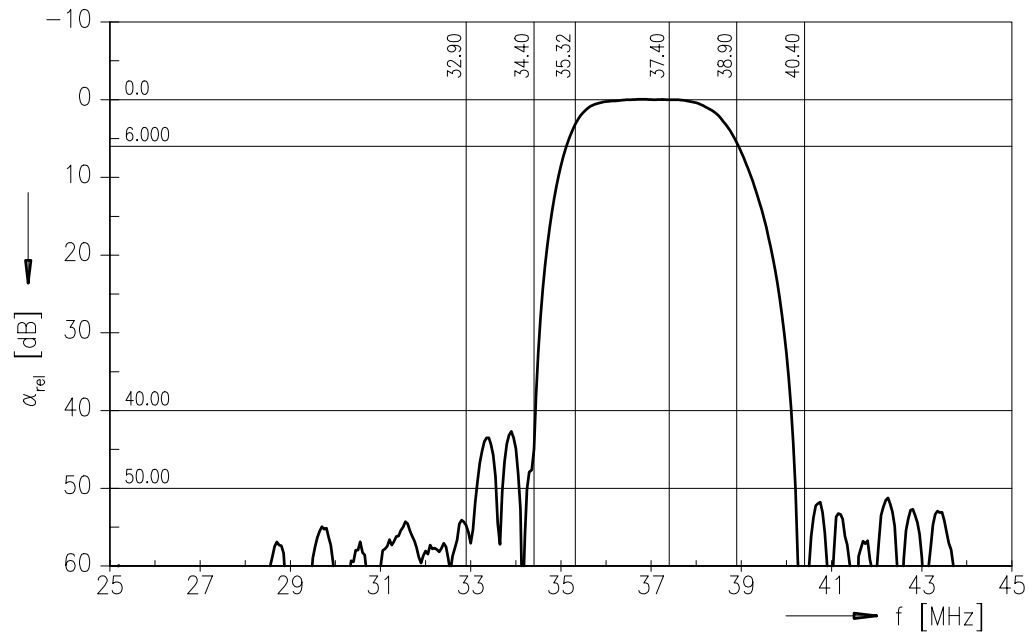
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Frequency response





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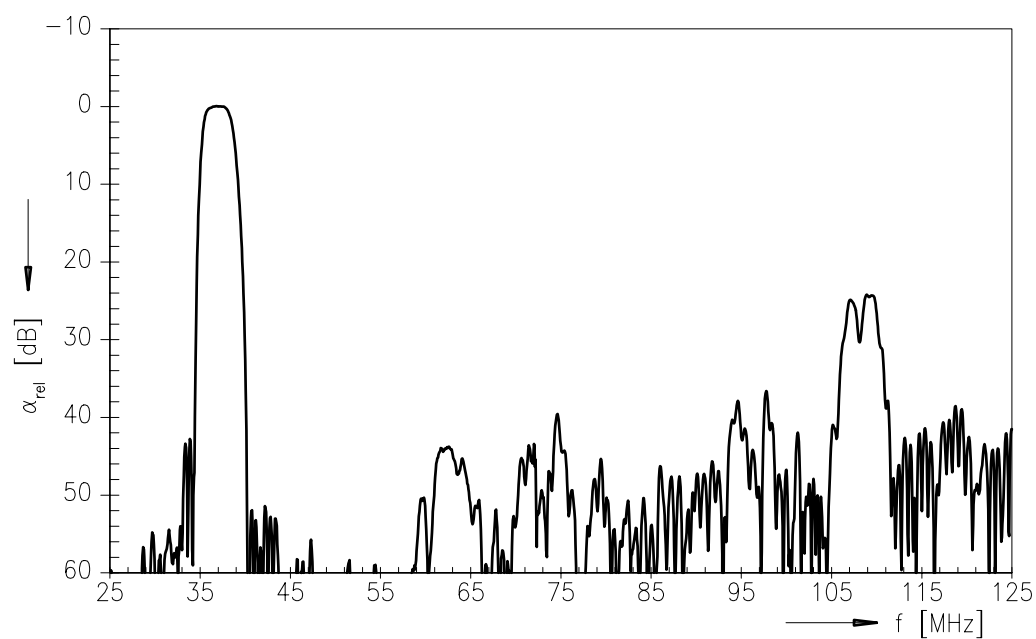
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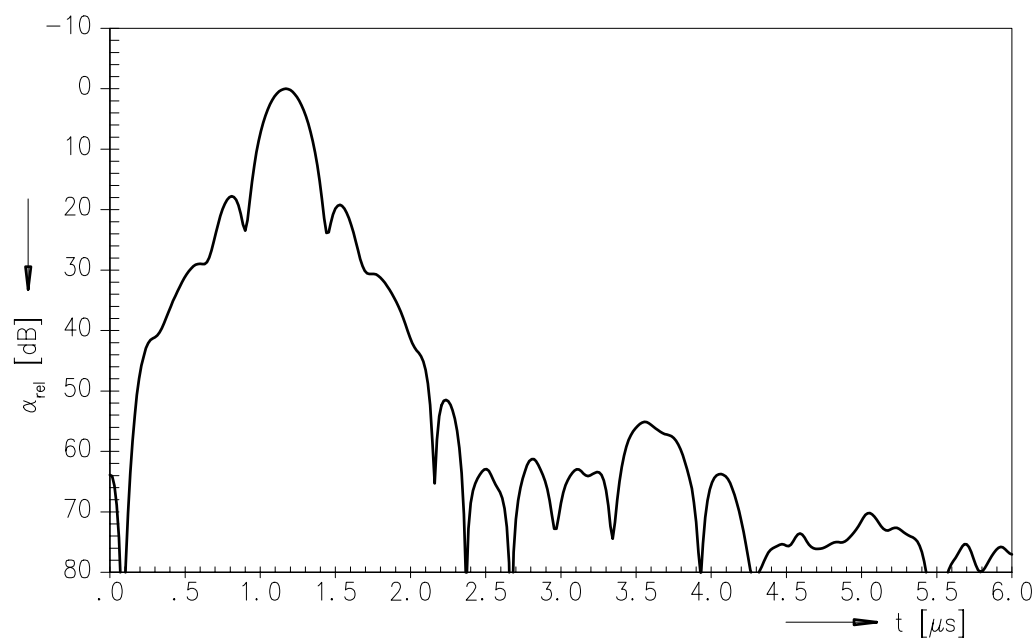
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Frequency response



Time domain response





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