



SAW Components

Data Sheet G 3956 M





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G 3956 M

IF Filter for Video Applications

38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

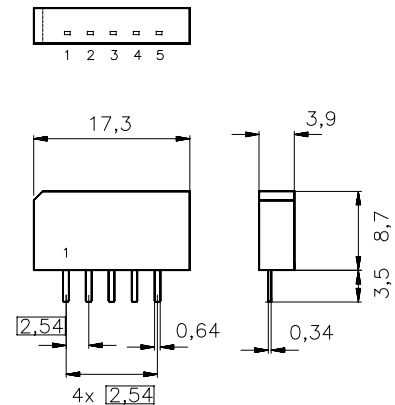
- B/G

Features

- TV IF filter with Nyquist slope and sound suppression
- High color carrier level
- Reduced group delay predistortion as compared with standard B/G, half
- Suitable for CENELEC EN 55020

Terminals

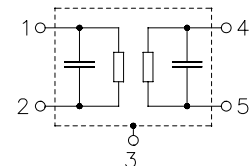
- Tinned CuFe alloy



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
G 3956 M	B39389-G3956-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:

$$Z_S = 50\ \Omega$$

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	12,2	13,7	15,2	dB
Relative attenuation α_{rel}					
Picture carrier	38,90 MHz	5,1	6,1	7,1	dB
Color carrier	34,47 MHz	0,0	1,0	2,0	dB
Sound carrier	33,40 MHz	26,0	39,0	—	dB
	33,15 MHz	—	25,0	—	dB
	33,90 MHz	—	7,0	—	dB
	30,90 MHz	48,0	58,0	—	dB
Adjacent picture carrier UHF	31,90 MHz	48,0	56,0	—	dB
	31,40 MHz	44,0	52,0	—	dB
	32,40 MHz	48,0	60,0	—	dB
	40,15 MHz	42,0	51,0	—	dB
Adjacent sound carrier VHF	40,40 MHz	45,0	57,0	—	dB
	41,40 MHz	44,0	57,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	42,0	49,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	40,0	46,0	—	dB
Reflected wave signal suppression					
1,3 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,0 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
Group delay predistortion $\Delta\tau$					
(reference frequency 38,90 MHz)					
	36,90 MHz	—	–85	—	ns
	34,47 MHz	—	70	—	ns
Impedance at 37,40 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,3 \parallel 16,6	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	1,4 \parallel 4,5	—	k Ω \parallel pF
Temperature coefficient of frequency TC_f					
		—	–72	—	ppm/K



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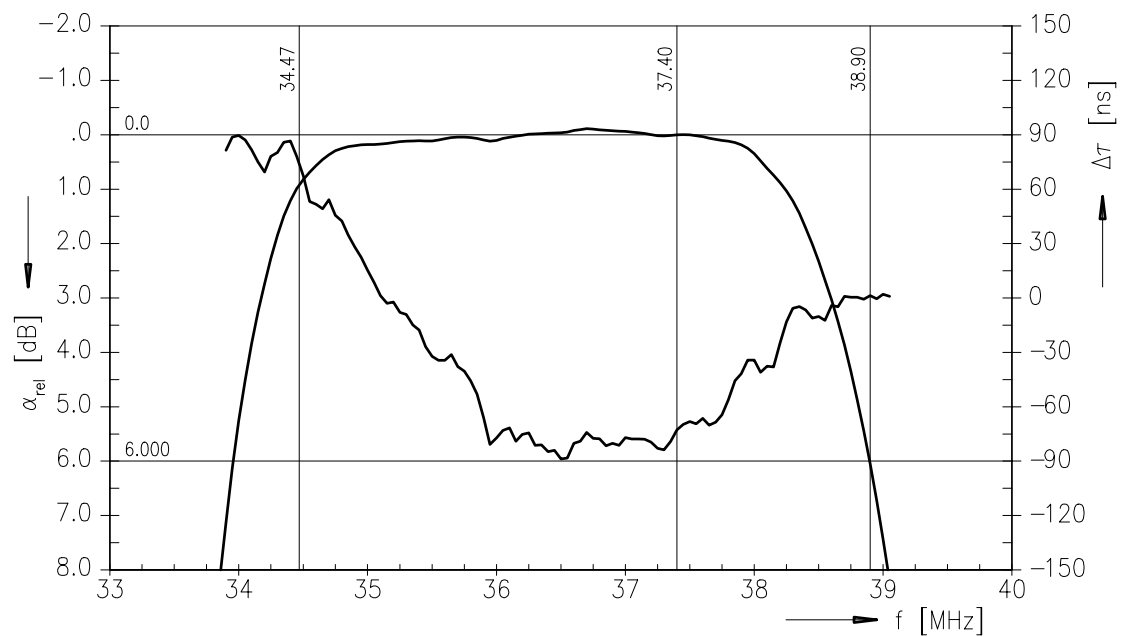
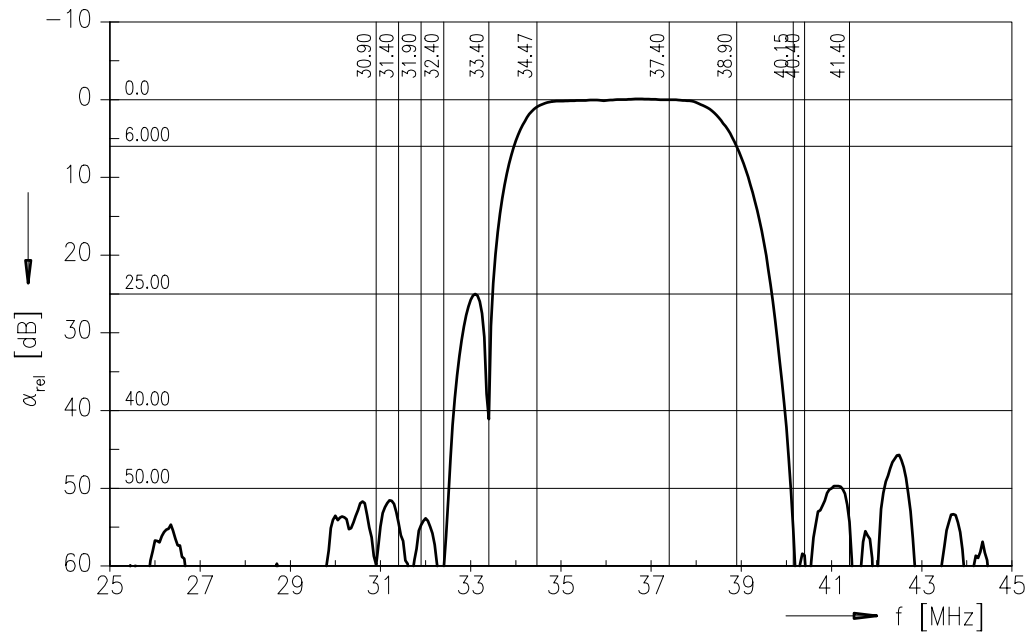
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Frequency response





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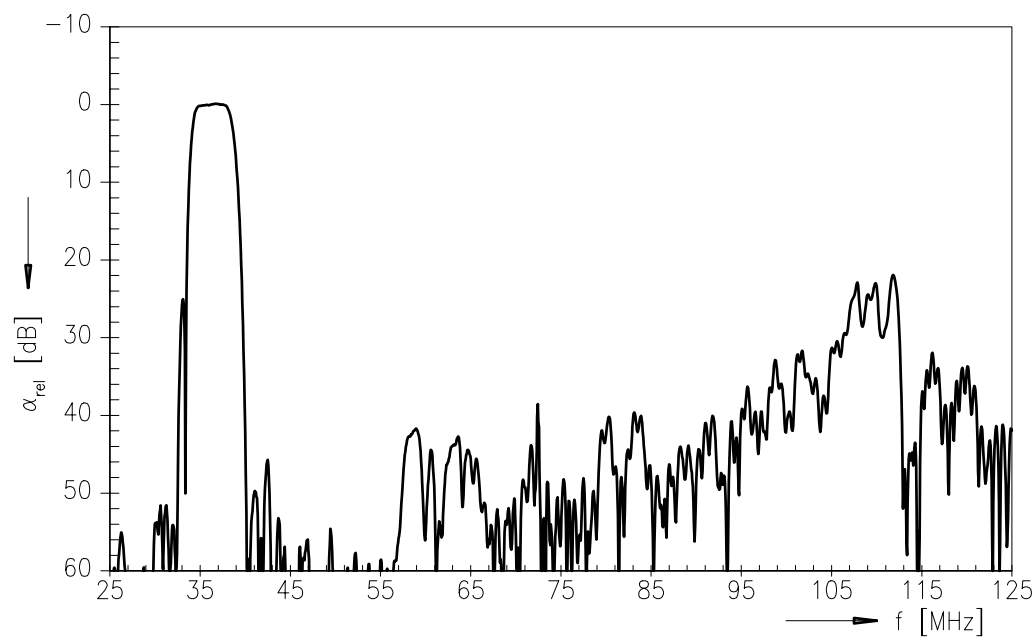
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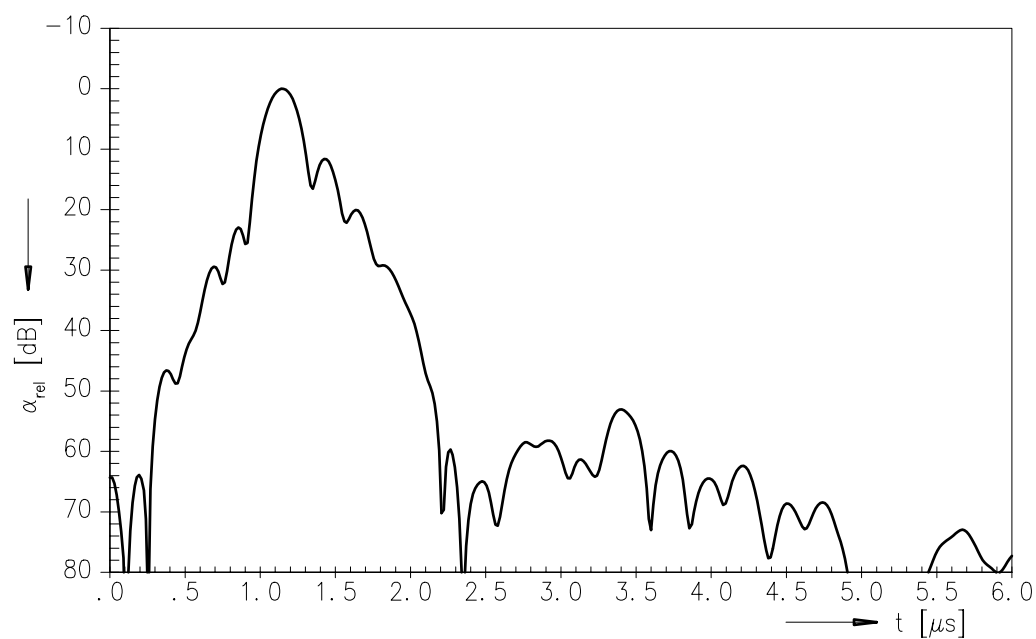
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Frequency response



Time domain response





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