



# SAW Components

Data Sheet G 3956 M

Data Sheet

An abstract, grayscale graphic featuring a stylized, three-dimensional representation of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The background is dark and textured, with light reflecting off the surfaces of the logo.





## SAW Components

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## IF Filter for Video Applications

38,90 MHz

### Data Sheet

#### Standard

Plastic package **SIP5K**

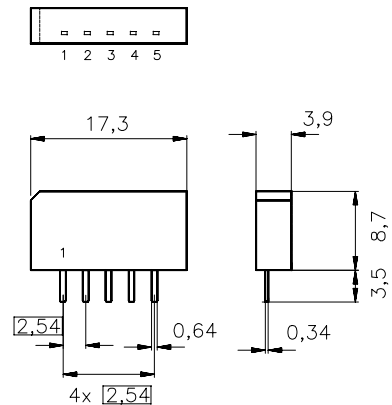
- B/G

#### 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

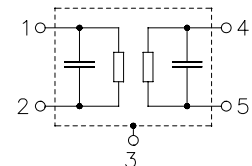
- Tinned CuFe alloy



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	$V_{DC}$	12	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.	
<b>Insertion attenuation</b> $\alpha$					
Reference level for the following data	37,40 MHz	12,2	13,7	15,2	dB
<b>Relative attenuation</b> $\alpha_{rel}$					
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
<b>Reflected wave signal suppression</b>					
1,3 $\mu$ s ... 6,0 $\mu$ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu$ s ... 1,0 $\mu$ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
<b>Group delay predistortion</b> $\Delta\tau$					
(reference frequency 38,90 MHz)					
	36,90 MHz	—	–85	—	ns
	34,47 MHz	—	70	—	ns
<b>Impedance</b> at 37,40 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,3 $\parallel$ 16,6	—	k $\Omega$ $\parallel$ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,4 $\parallel$ 4,5	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b> $TC_f$					
		—	–72	—	ppm/K





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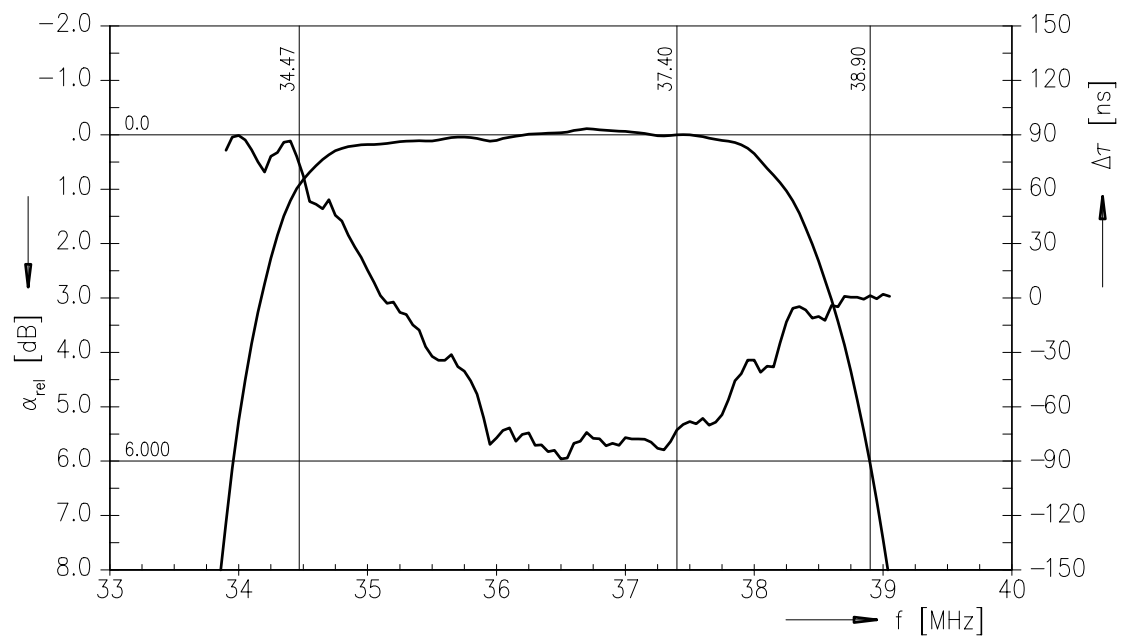
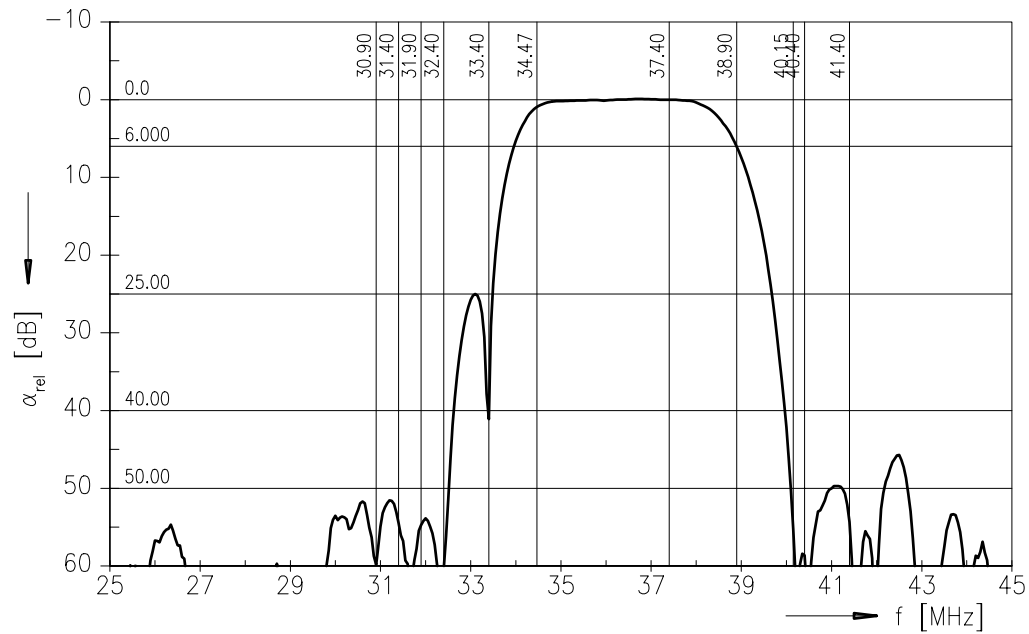
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Frequency response







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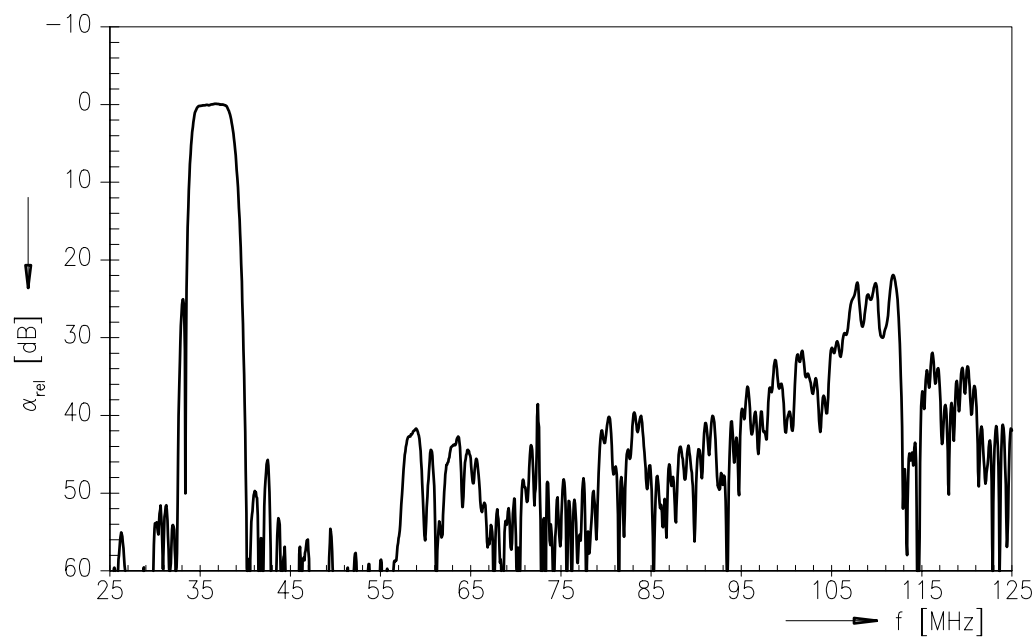
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IF Filter for Video Applications

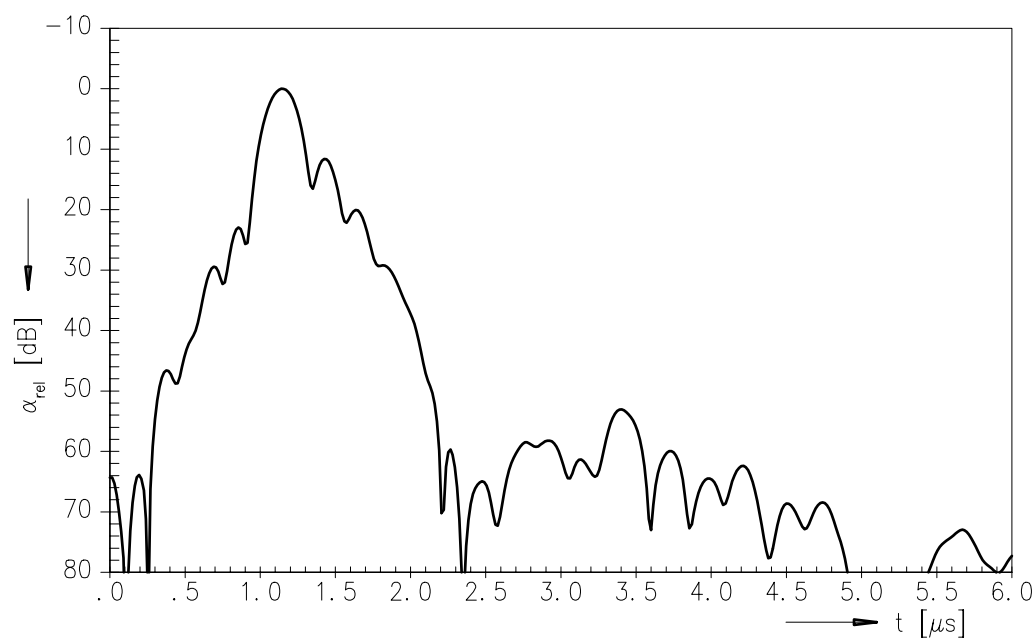
38,90 MHz

## Data Sheet

### Frequency response



### Time domain response







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