



SAW Components

Data Sheet J 1956 M

Data Sheet

An abstract, grayscale graphic featuring a large, stylized, and slightly blurred "EPCOS" logo. The logo is composed of thick, rounded letters and is set against a background of curved, overlapping bands that create a sense of depth and motion. The overall effect is a dynamic and modern representation of the company's branding.



SAW Components

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IF Filter for Intercarrier Applications

38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

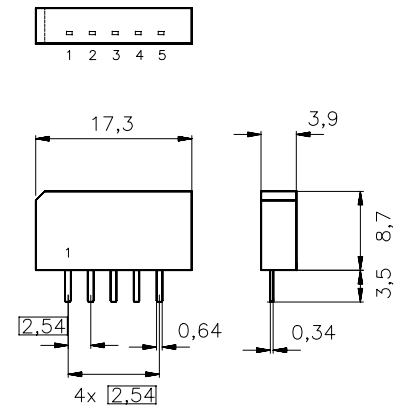
- I

Features

- TV IF filter with Nyquist slope and sound shelf
- Constant group delay
- Suitable for CENELEC EN 55020

Terminals

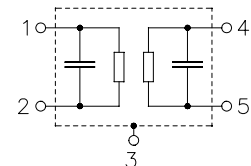
- Tinned CuFe alloy



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
J 1956 M	B39389-J1956-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	13,3	14,8	16,3	dB
Relative attenuation α_{rel}					
Picture carrier	38,90 MHz	5,3	6,3	7,3	dB
Color carrier	34,47 MHz	1,5	2,5	3,5	dB
Sound carrier	32,90 MHz	19,3	20,3	21,3	dB
Adjacent picture carrier	30,90 MHz	48,0	61,0	—	dB
	30,40 MHz	48,0	62,0	—	dB
	31,40 MHz	44,0	65,0	—	dB
Adjacent sound carrier	40,90 MHz	46,0	56,0	—	dB
	40,35 MHz	42,0	49,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz	46,0	52,0	—	dB
Upper sidelobe	40,90 ... 45,00 MHz	42,0	49,0	—	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	52,0	—	dB
Feedthrough signal suppression					
1,1 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 ripple (p-p)	$\Delta\tau$		40		ns
Impedance at 37,40 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,4 $\parallel$ 14,6	—	k Ω $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	2,4 $\parallel$ 3,6	—	k Ω $\parallel$ pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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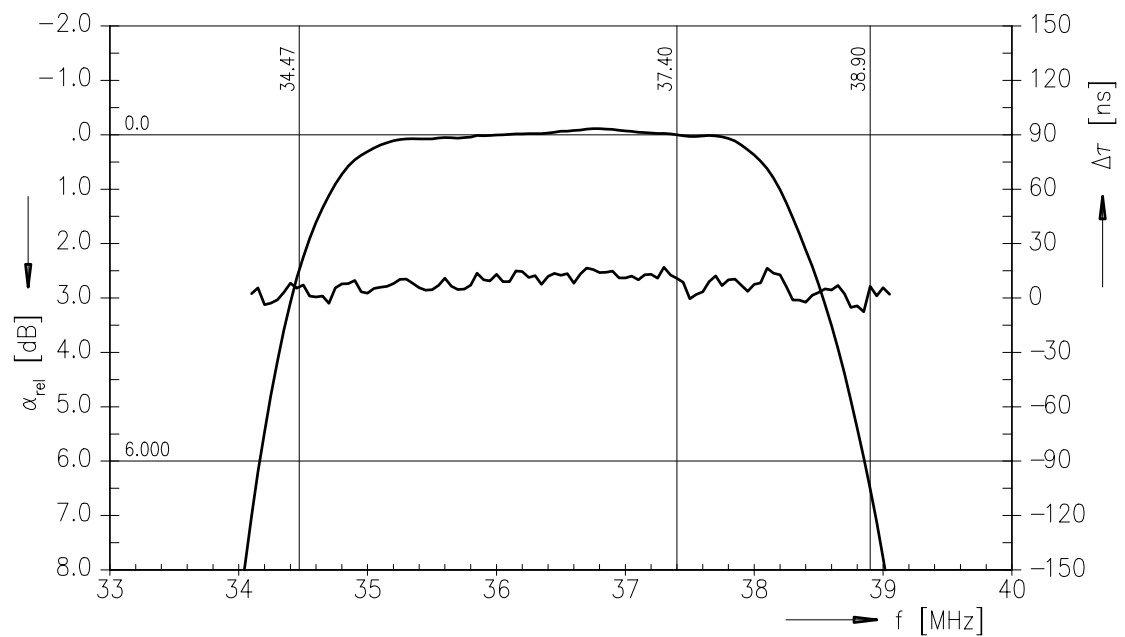
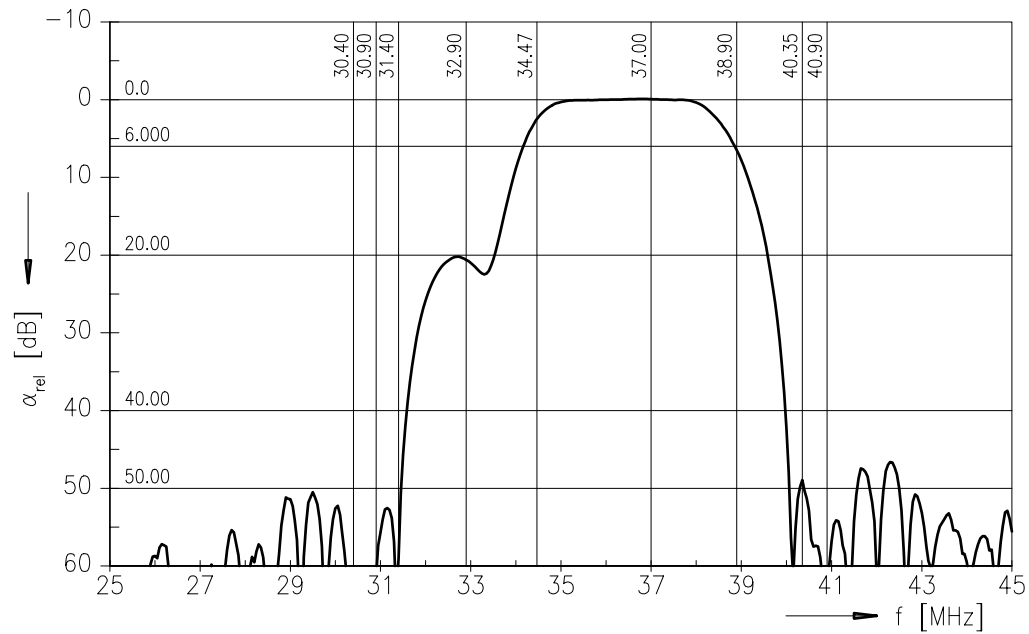
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Frequency response





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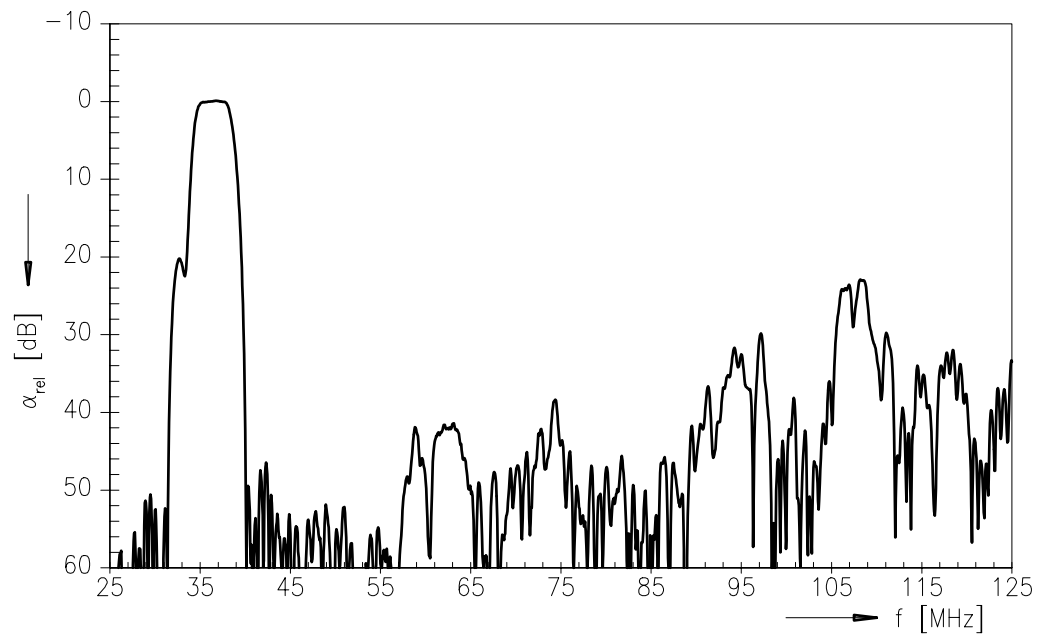
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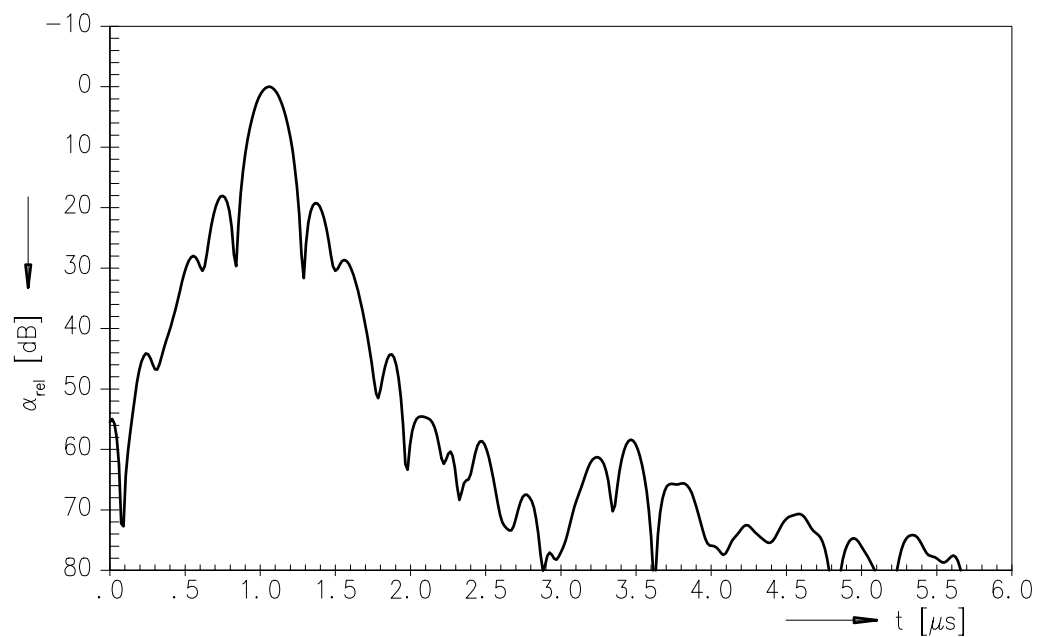
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Frequency response



Time domain response





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