



SAW Components

Data Sheet J 1981 M

Data Sheet

A large, stylized, 3D-rendered graphic of the word "EPCOS" in a light gray, sans-serif font. The letters are slightly tilted and appear to be floating or attached to a curved, metallic-looking surface. The background is dark and textured, suggesting a technical or industrial theme.

EPCOS



SAW Components

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IF Filter for Intercarrier Applications

38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

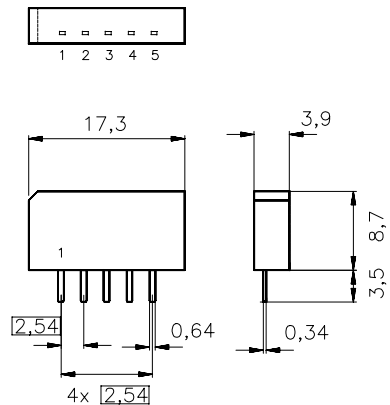
- I

Features

- TV IF filter with Nyquist slope and sound shelf
- High color carrier level
- Constant group delay
- Extended sound shelf for NICAM reception
- Suitable for CENELEC EN 55020

Terminals

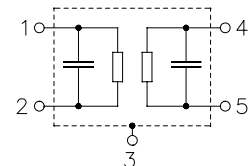
- Tinned CuFe alloy



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 1981 M	B39389-J1981-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

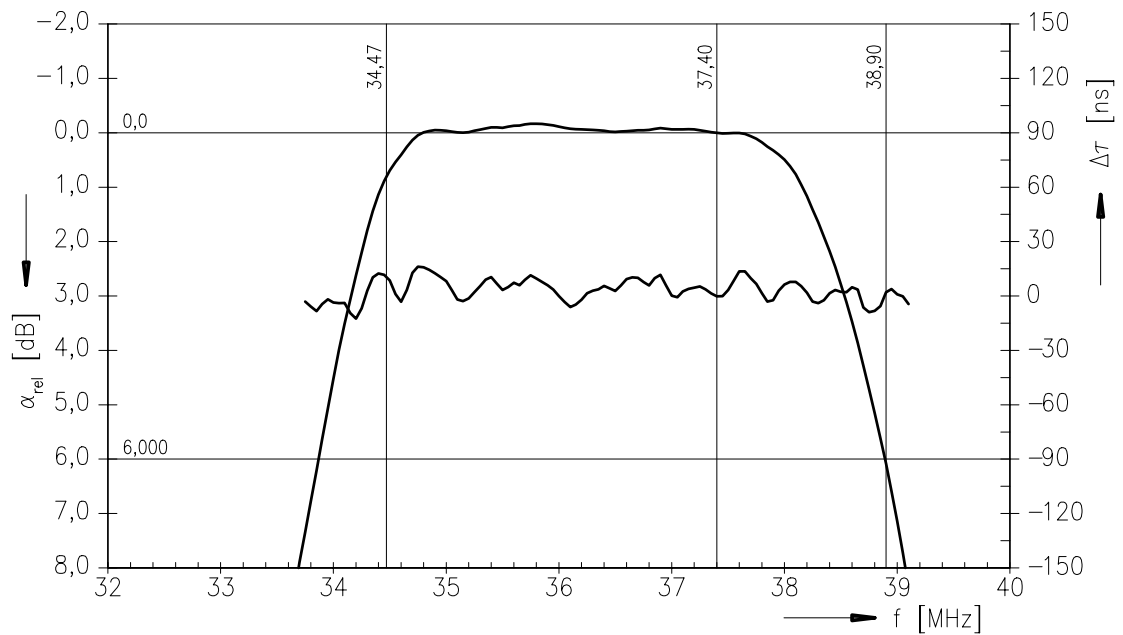
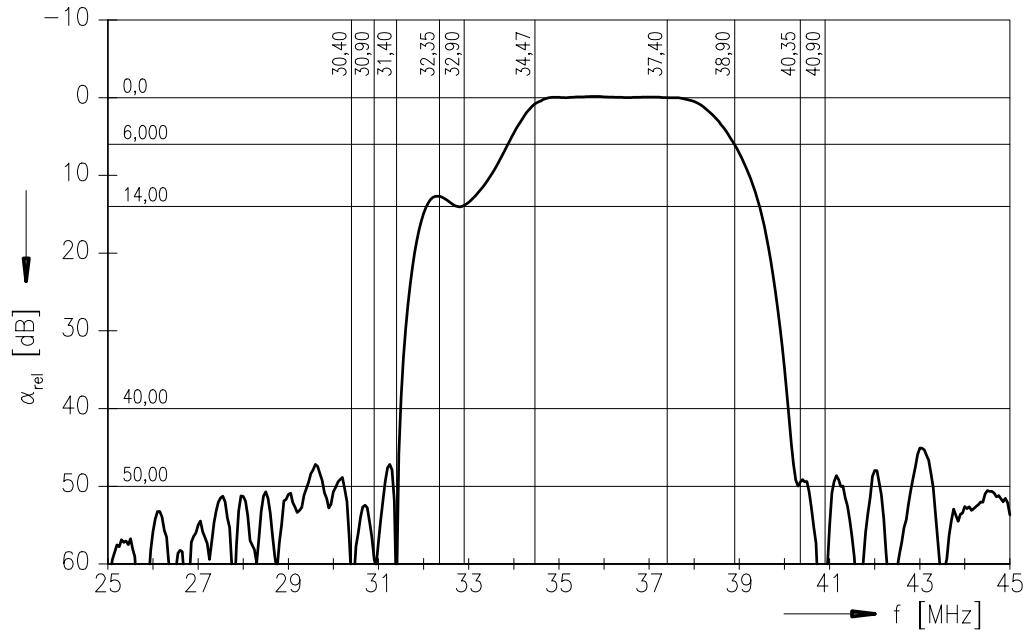
Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	37,40 MHz	13,9	15,4	16,9	dB
Relative attenuation					
	α_{rel}				
Picture carrier	38,90 MHz	4,8	5,8	6,8	dB
Color carrier	34,47 MHz	-0,2	0,8	1,8	dB
Sound carrier	32,90 MHz	12,7	13,7	14,7	dB
	32,35 MHz	11,4	12,4	—	dB
Adjacent picture carrier	30,90 MHz	50,0	57,0	—	dB
	30,40 MHz	50,0	62,0	—	dB
	31,40 MHz	46,0	60,0	—	dB
Adjacent sound carrier	40,90 MHz	50,0	58,0	—	dB
	40,35 MHz	43,0	50,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz	42,0	46,0	—	dB
Upper sidelobe	40,90 ... 45,00 MHz	42,0	46,0	—	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					
1,2 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)	$\Delta\tau$	—	40	—	ns
Impedance at 37,40 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,6 \parallel 15,4	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	2,5 \parallel 3,9	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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Frequency response





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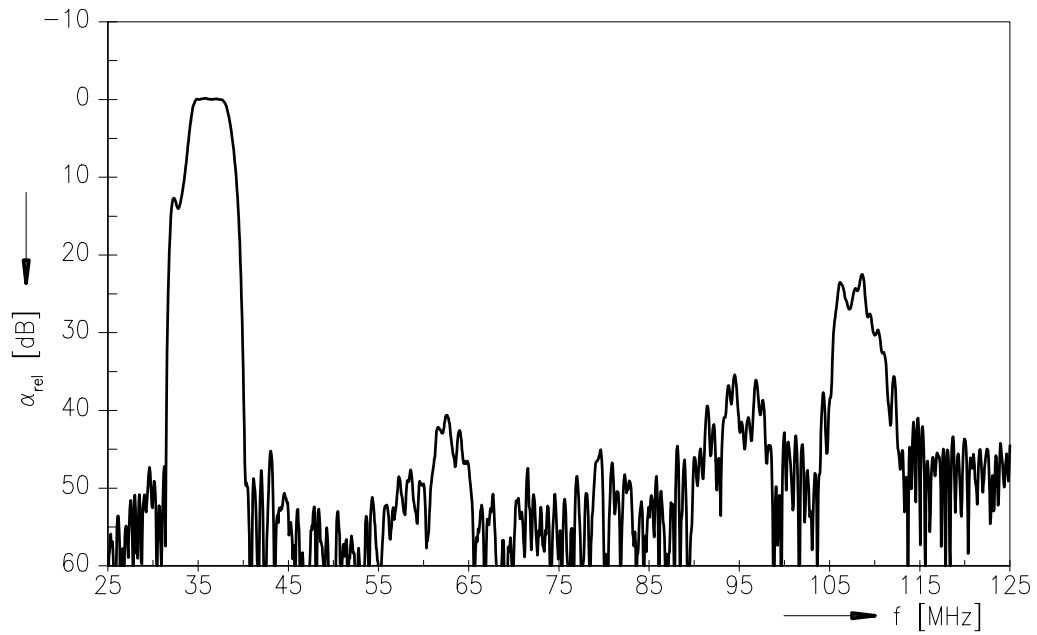
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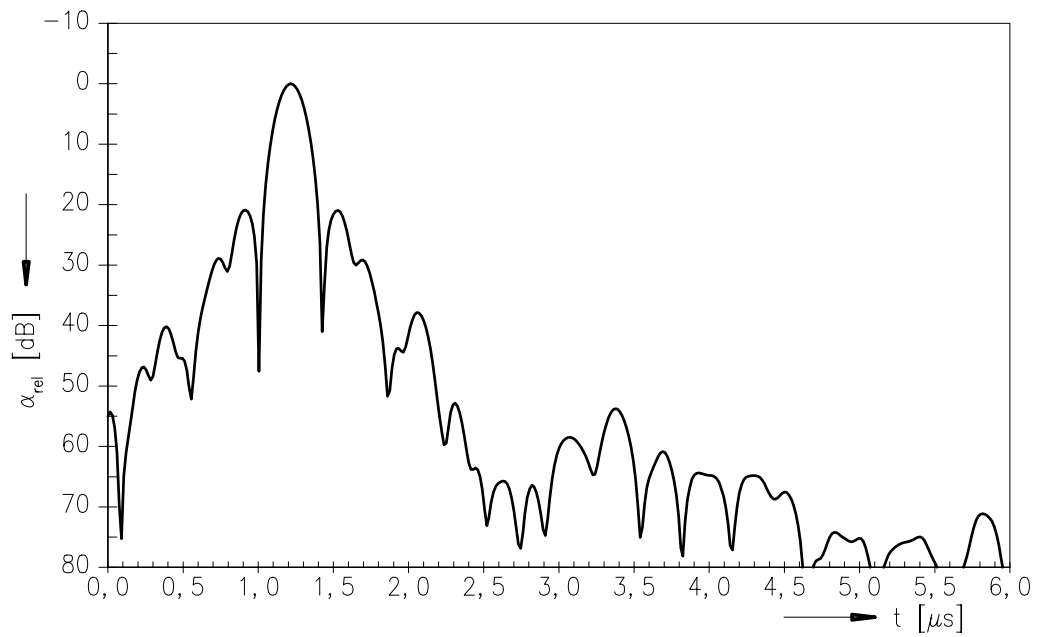
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Frequency response



Time domain response





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