



SAW Components

Data Sheet M 1971 M

Data Sheet

An abstract, grayscale graphic featuring a globe with a grid pattern. Overlaid on the globe is the word "EPCOS" in a large, white, sans-serif font, which is slightly tilted and has a glowing effect. The background is dark and textured.



SAW Components

M 1971 M

IF Filter for Intercarrier Applications

45,75 MHz

Data Sheet

Standard

Plastic package **SIP5K**

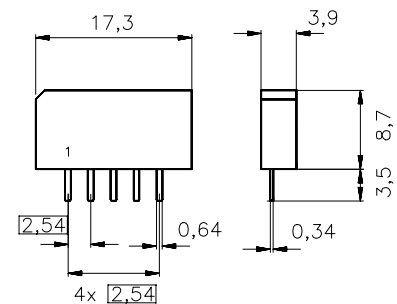
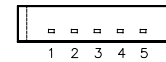
■ M/N

Features

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

Terminals

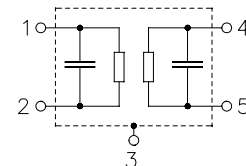
- Tinned CuFe alloy



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 1971 M	B39458-M1971-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: $T_A = 25 (45) ^\circ \text{C}$
 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	44,06 (44,00) MHz	10,8	12,3	13,8	dB
Relative attenuation	α_{rel}				
Picture carrier	45,81 (45,75) MHz	5,3	6,0	6,7	dB
Color carrier	42,23 (42,17) MHz	1,0	2,0	3,0	dB
Sound carrier	41,31 (41,25) MHz	15,6	17,1	18,6	dB
Adjacent picture carrier	39,81 (39,75) MHz	46,5	60,0	—	dB
Adjacent sound carrier	47,31 (47,25) MHz	46,5	55,0	—	dB
Lower sidelobe	35,06 ... 39,81 (35,00 ... 39,75) MHz	36,5	41,0	—	dB
Upper sidelobe	47,31 ... 55,06 (47,25 ... 55,00) MHz	38,5	44,0	—	dB
Reflected wave signal suppression					
1,1 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,0 μs ... 0,9 μs before main pulse (test pulse 250 ns, carrier frequency 44,06 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$	—	40	—	ns
Impedance at 44,06 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,5 \parallel 10,6	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	1,0 \parallel 3,6	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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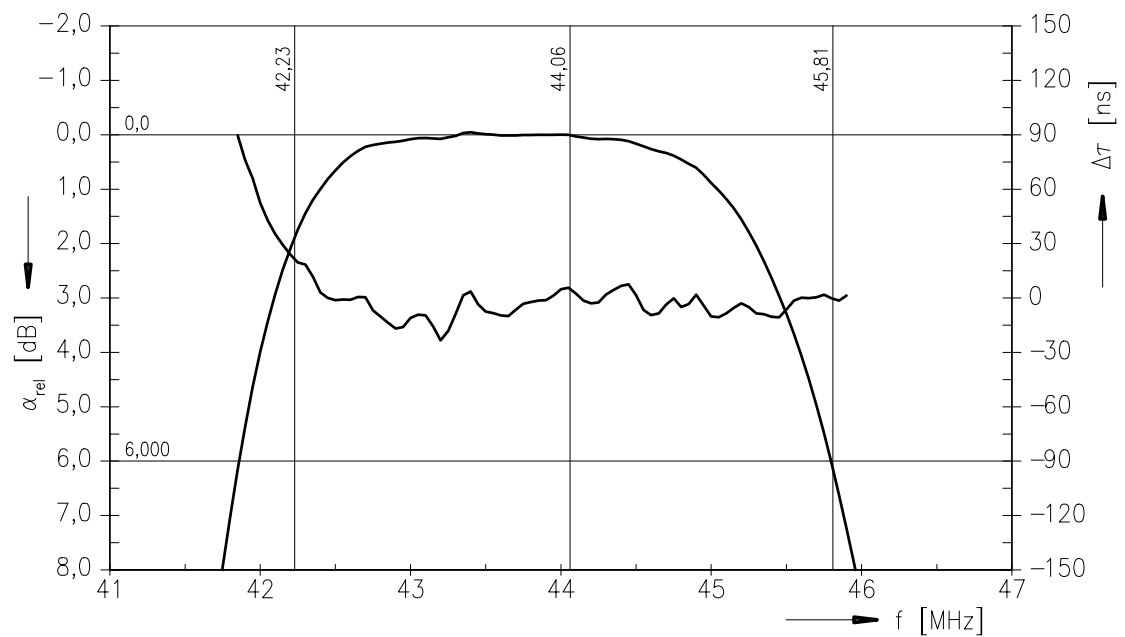
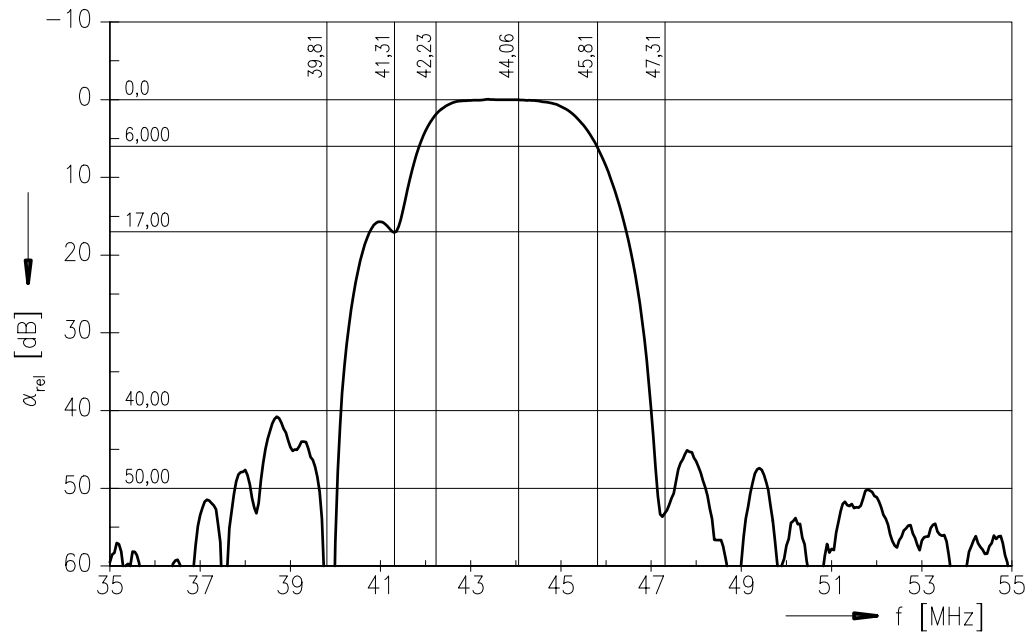
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Frequency response





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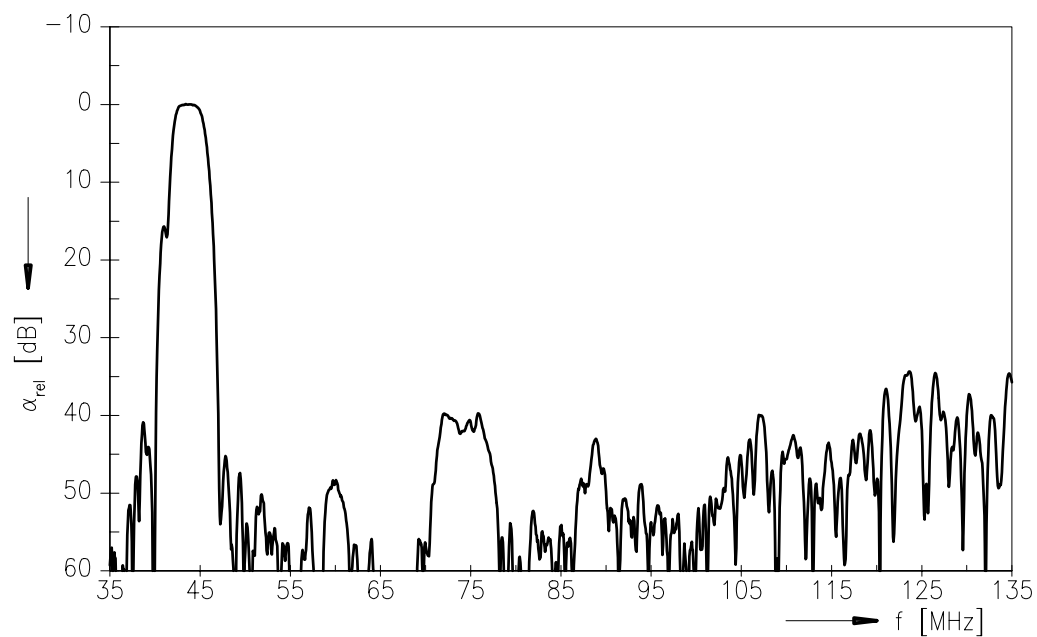
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IF Filter for Intercarrier Applications

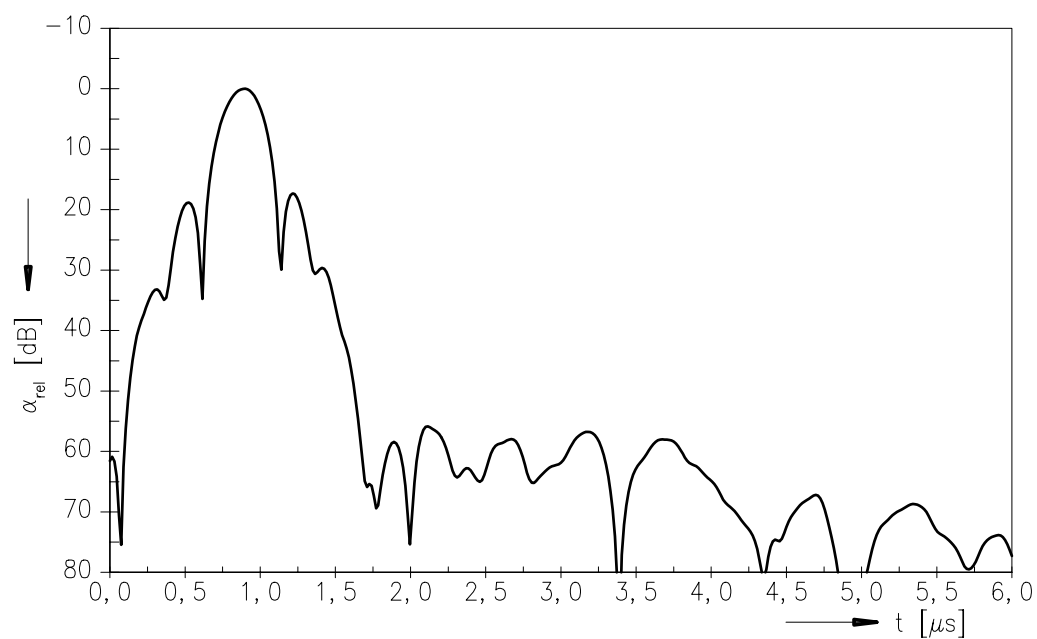
45,75 MHz

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Frequency response



Time domain response





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