



SAW Components

Data Sheet K 2973 M

Data Sheet

EPCOS



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K 2973 M

IF Filter for Intercarrier Applications

38,00 MHz

Data Sheet

Standard

- B/G
- D/K

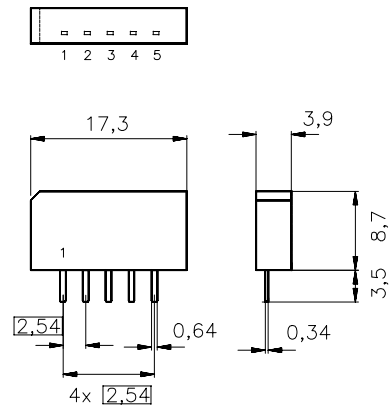
Plastic package **SIP5K**

Features

- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 31,50 MHz and 32,50 MHz
- Group delay predistortion

Terminals

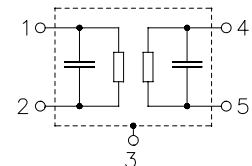
- Tinned CuFe alloy



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
K 2973 M	B39380-K2973-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.	
Insertion attenuation α					
Reference level for the following data	36,50 MHz	15,6	17,1	18,6	dB
Relative attenuation α_{rel}					
Picture carrier	38,00 MHz	5,0	6,0	7,0	dB
Color carrier	33,57 MHz	0,7	1,7	2,7	dB
Sound carrier	31,50 MHz	19,1	20,6	22,1	dB
	32,50 MHz	15,8	17,3	—	dB
Adjacent picture carrier	30,00 MHz	45,0	54,0	—	dB
	31,00 MHz	40,0	60,0	—	dB
Adjacent sound carrier	39,50 MHz	43,0	55,0	—	dB
	40,50 MHz	41,0	51,0	—	dB
Lower sidelobe	25,00 ... 30,00 MHz	42,0	48,0	—	dB
Upper sidelobe	39,50 ... 45,00 MHz	40,0	46,0	—	dB
Reflected wave signal suppression					
1,2 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		42,0	51,0	—	dB
Feedthrough signal suppression					
1,2 μs ... 1,1 μs before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		50,0	56,0	—	dB
Group delay predistortion $\Delta\tau$					
(reference frequency 38,90 MHz)					
	34,50 MHz	—	−80	—	ns
	33,57 MHz	—	0	—	ns
Impedance at 36,50 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	2,3 $\parallel$ 11,8	—	k Ω $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	3,5 $\parallel$ 3,1	—	k Ω $\parallel$ pF
Temperature coefficient of frequency TC_f					
		—	−72	—	ppm/K



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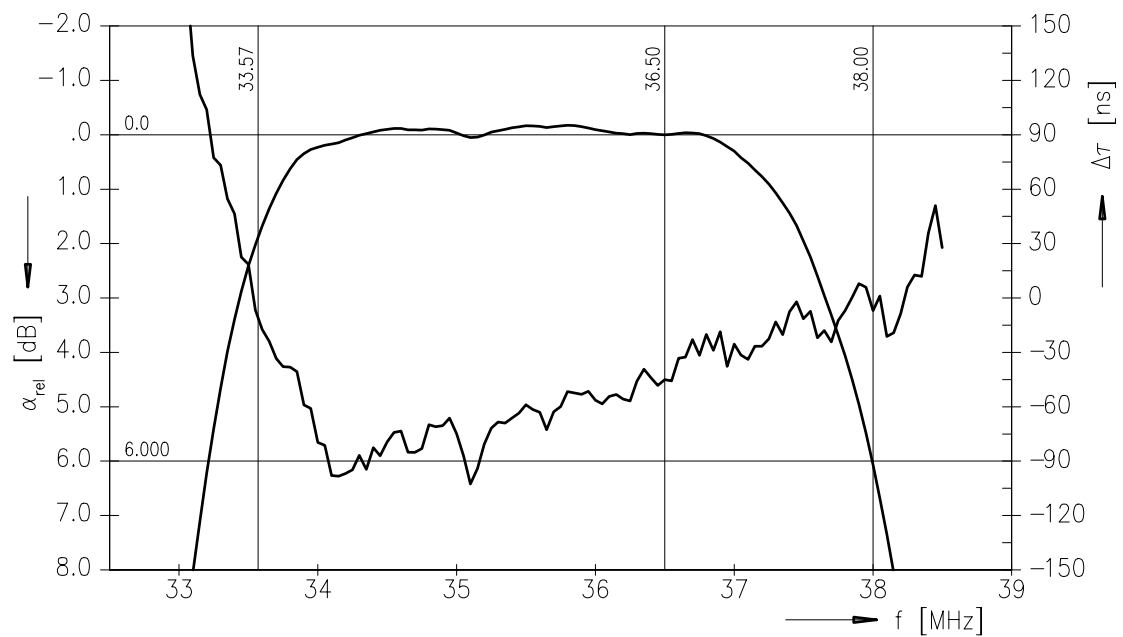
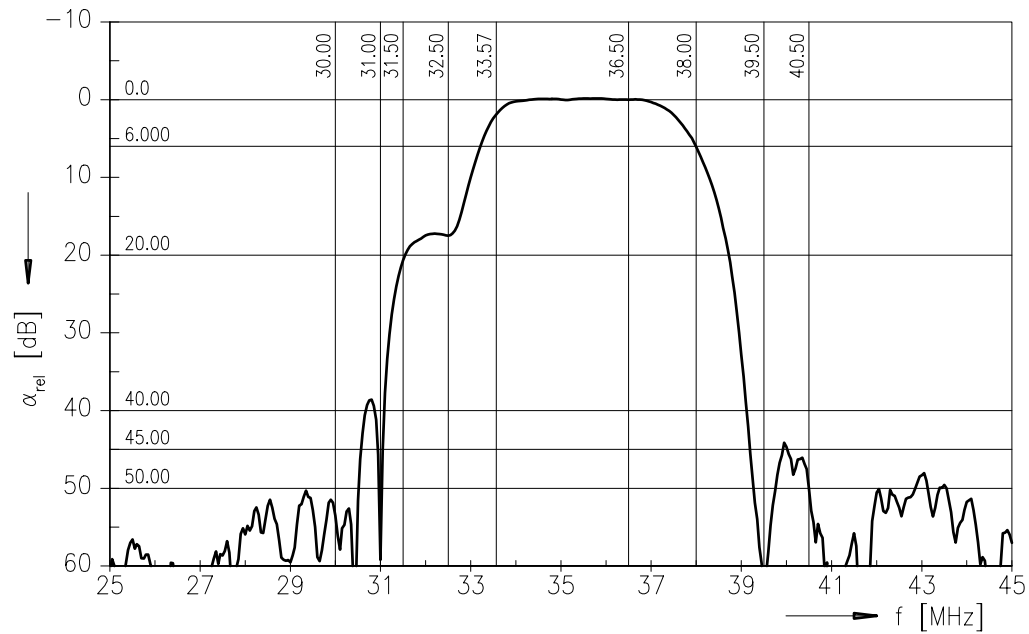
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Frequency response





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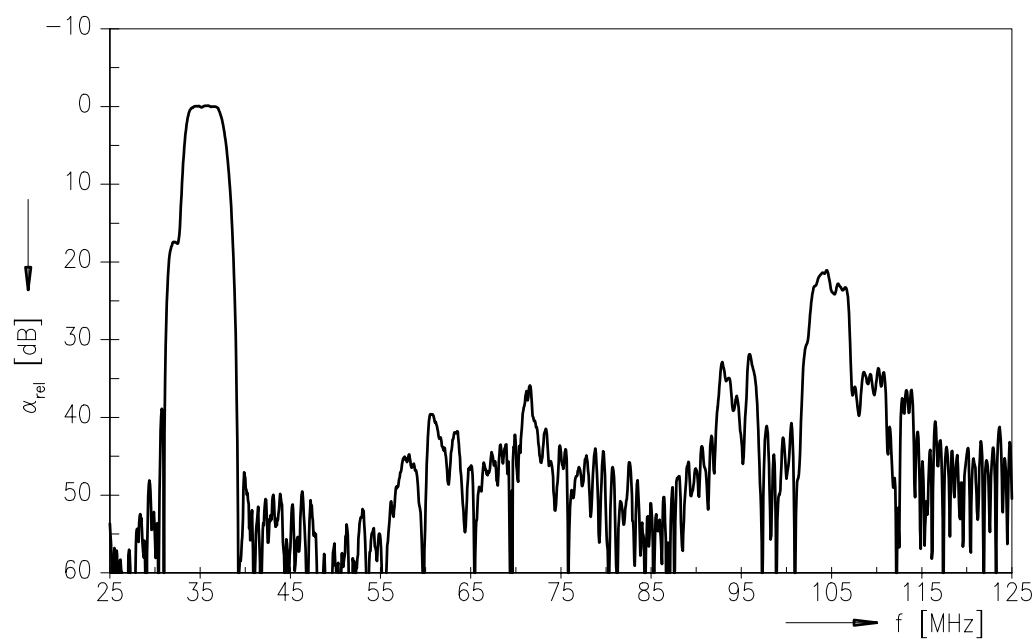
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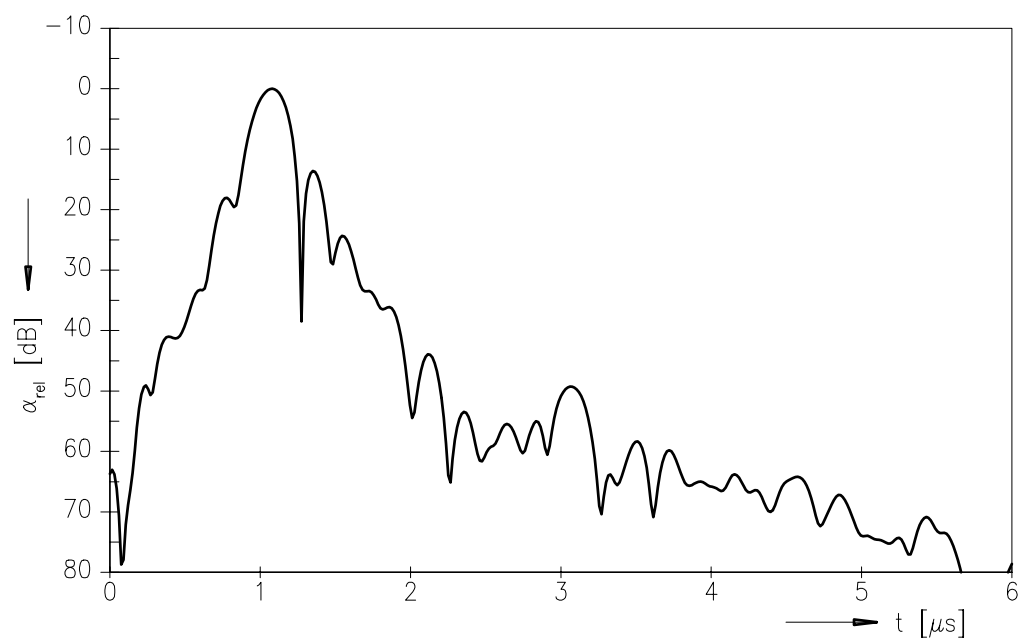
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Frequency response



Time domain response





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Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW CE MM PD

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