



SAW Components

Data Sheet K 2959 M

Data Sheet

EPCOS



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IF Filter for Intercarrier Applications

38,00 MHz

Data Sheet

Standard

- B/G
- D/K

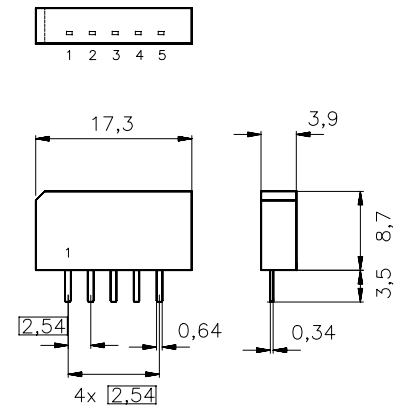
Plastic package **SIP5K**

Features

- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 31,50 MHz and 32,50 MHz
- High color carrier level
- Constant group delay

Terminals

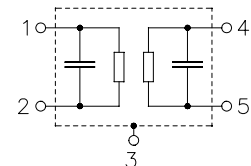
- Tinned CuFe alloy



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
K 2959 M	B39380-K2959-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	36,50 MHz	16,5	18,0	19,5	dB
Relative attenuation	α_{rel}				
Picture carrier	38,00 MHz	4,1	5,1	6,1	dB
Color carrier	33,57 MHz	0,0	1,0	2,0	dB
Sound carrier	31,50 MHz	17,9	19,4	—	dB
	32,50 MHz	15,5	17,0	18,5	dB
Adjacent picture carrier	30,00 MHz	46,0	55,0	—	dB
	31,00 MHz	40,0	56,0	—	dB
Adjacent sound carrier	39,50 MHz	42,0	52,0	—	dB
	40,50 MHz	43,0	54,0	—	dB
Lower sidelobe	25,00 ... 30,00 MHz	40,0	46,0	—	dB
Upper sidelobe	39,50 ... 45,00 MHz	35,0	41,0	—	dB
Reflected wave signal suppression					
1,1 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 36,50 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 36,50 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$	—	30	—	ns
Impedance at 36,50 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	3,0 $\parallel$ 10,8	—	k Ω $\parallel$ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	3,6 $\parallel$ 2,7	—	k Ω $\parallel$ pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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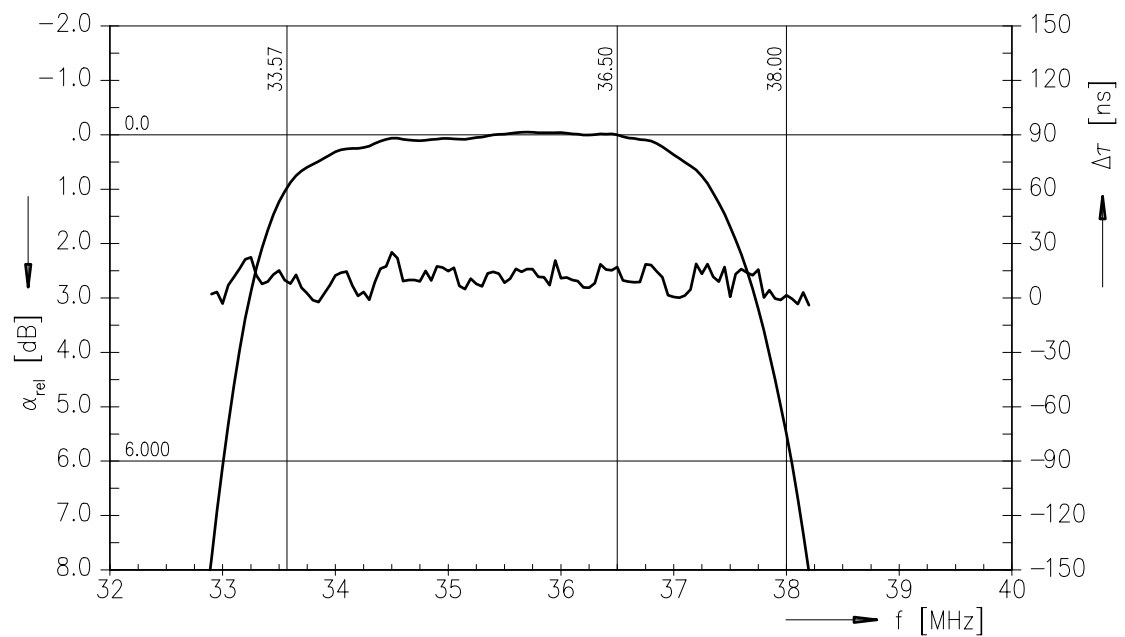
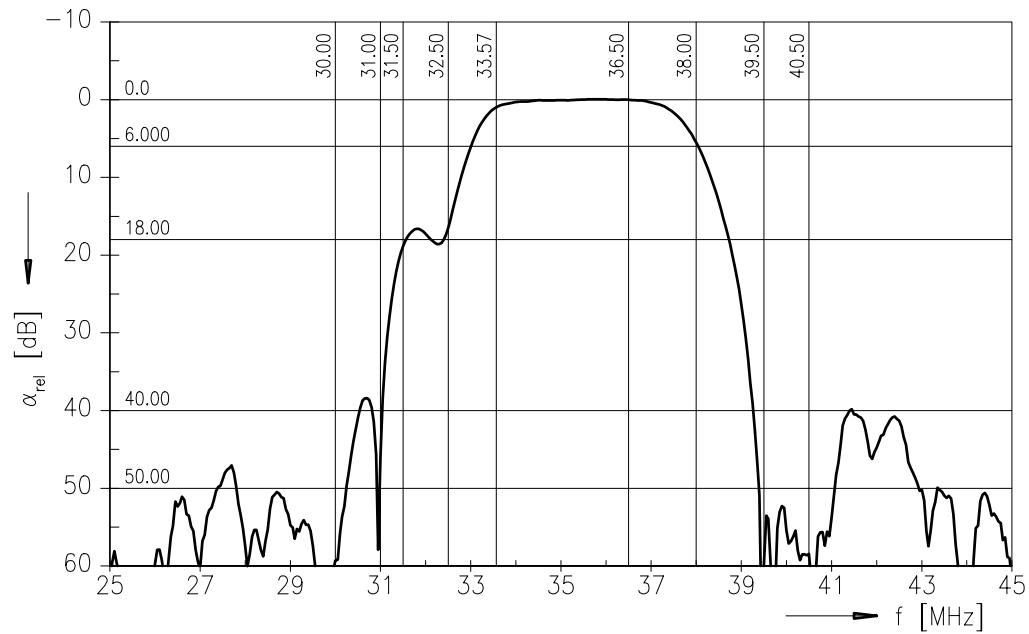
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Frequency response





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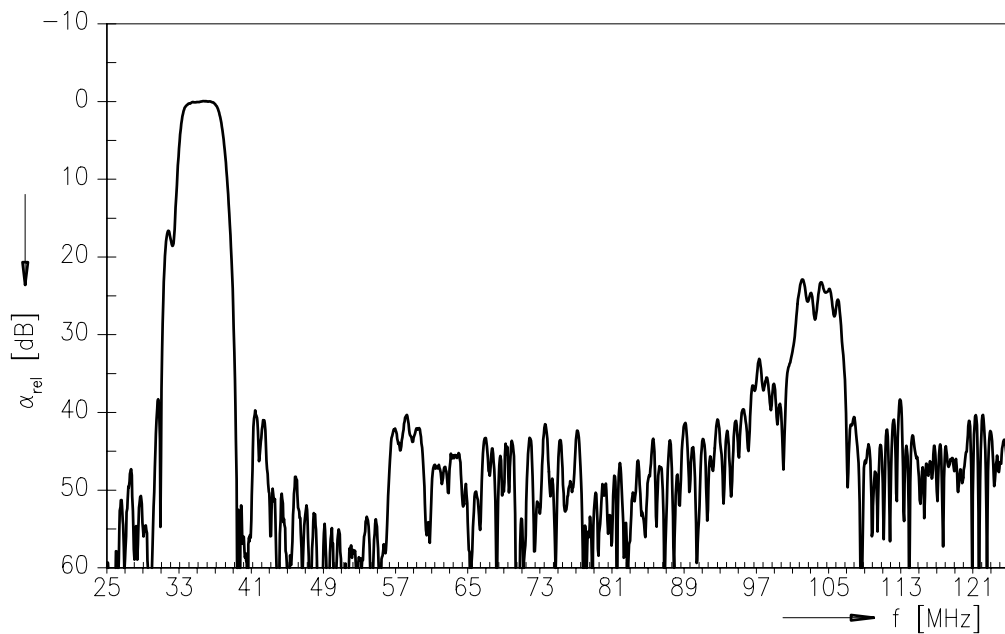
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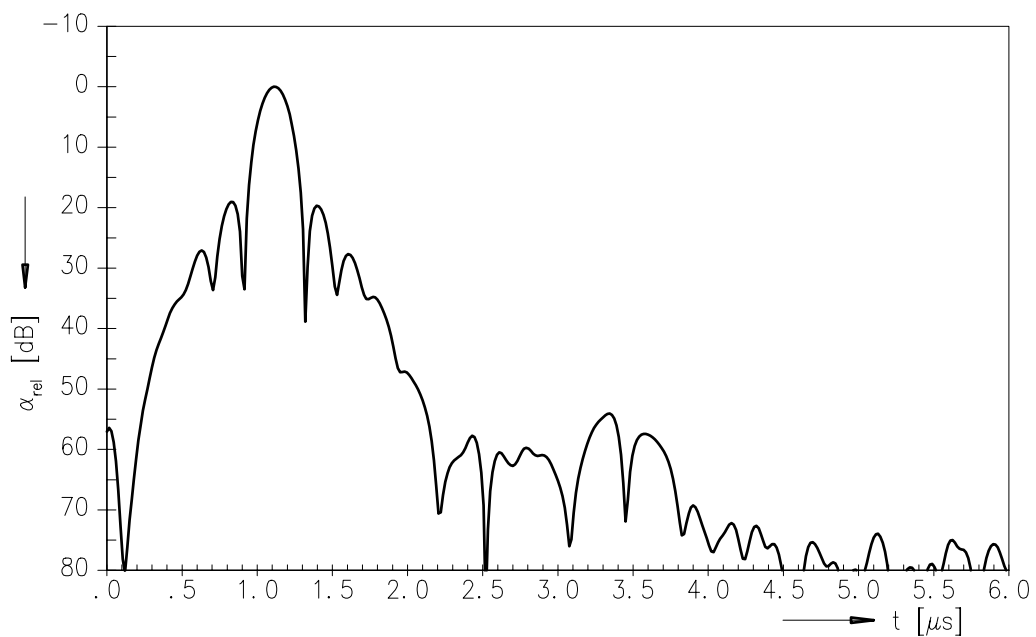
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Frequency response



Time domain response





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