



# SAW Components

Data Sheet G 1985 M





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## IF Filter for Intercarrier Applications

38,90 MHz

### Data Sheet

#### Standard

Plastic package **SIP5K**

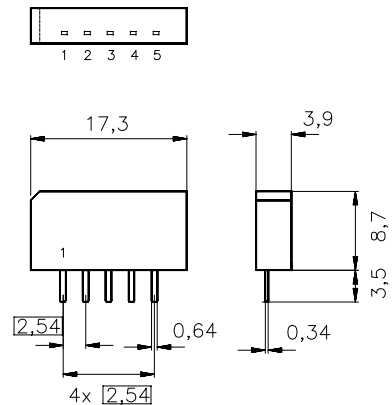
- B/G

#### Features

- TV IF filter with Nyquist slope and sound shelf
- High color carrier level
- Reduced group delay predistortion as compared with standard B/G, half
- Extended sound shelf for NICAM reception
- Suitable for CENELEC EN 55020

#### Terminals

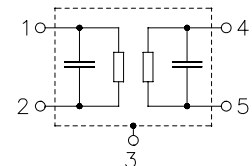
- Tinned CuFe alloy



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
G 1985 M	B39389-G1985-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:

$$T_A = 25\text{ }^{\circ}\text{C}$$

Terminating source impedance:

$$Z_S = 50\text{ }\Omega$$

Terminating load impedance:

$$Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$$

		min.	typ.	max.	
<b>Insertion attenuation</b> $\alpha$					
Reference level for the following data	37,40 MHz	11,6	13,1	14,6	dB
<b>Relative attenuation</b> $\alpha_{\text{rel}}$					
Picture carrier	38,90 MHz	5,2	6,2	7,2	dB
Color carrier	34,47 MHz	-0,8	0,2	1,2	dB
Sound carrier	33,40 MHz	12,9	14,4	15,9	dB
NICAM sound carrier	33,05 MHz	—	14,5	—	dB
Adjacent picture carrier	30,90 MHz	49,0	56,0	—	dB
	31,40 MHz	50,0	60,0	—	dB
	31,90 MHz	50,0	63,0	—	dB
	32,40 MHz	36,0	43,0	—	dB
	40,15 MHz	44,0	56,0	—	dB
Adjacent sound carrier	40,40 MHz	50,0	60,0	—	dB
	41,40 MHz	47,0	60,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz	43,0	48,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	44,0	50,0	—	dB
<b>Reflected wave signal suppression</b>					
1,2 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b>					
1,2 $\mu\text{s}$ ... 1,1 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		50,0	56,0	—	dB
<b>Group delay predistortion</b> $\Delta\tau$ (reference frequency 38,90 MHz)					
	36,90 MHz	—	-90	—	ns
	34,47 MHz	—	70	—	ns
<b>Impedance</b> at 37,40 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,3 $\parallel$ 18,4	—	k $\Omega$ $\parallel$ pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	1,9 $\parallel$ 4,2	—	k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b> $TC_f$					
		—	-72	—	ppm/K



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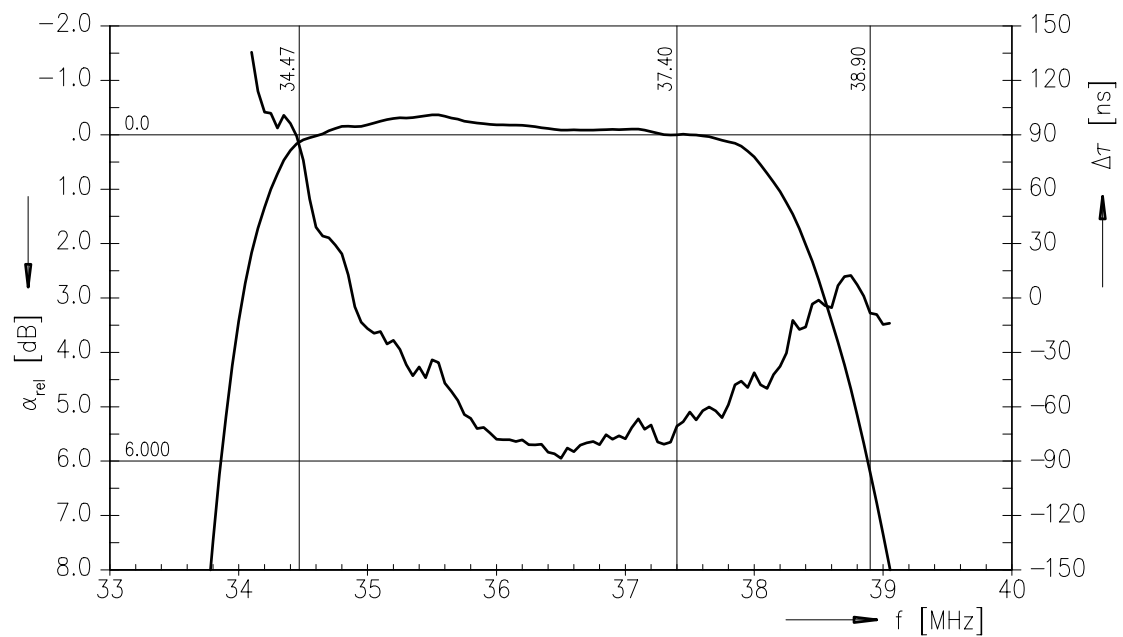
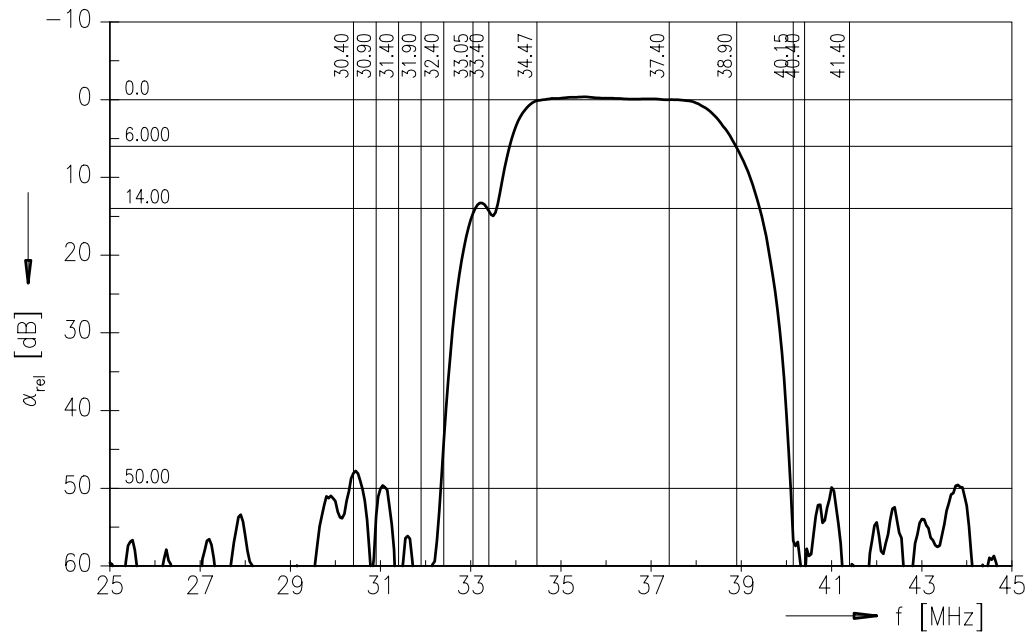
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Frequency response





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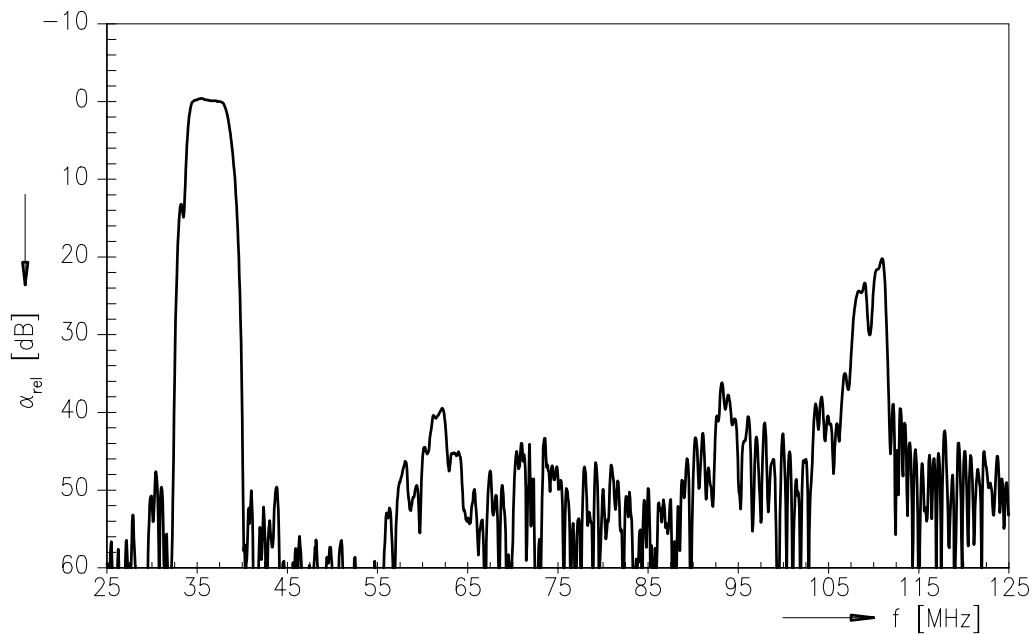
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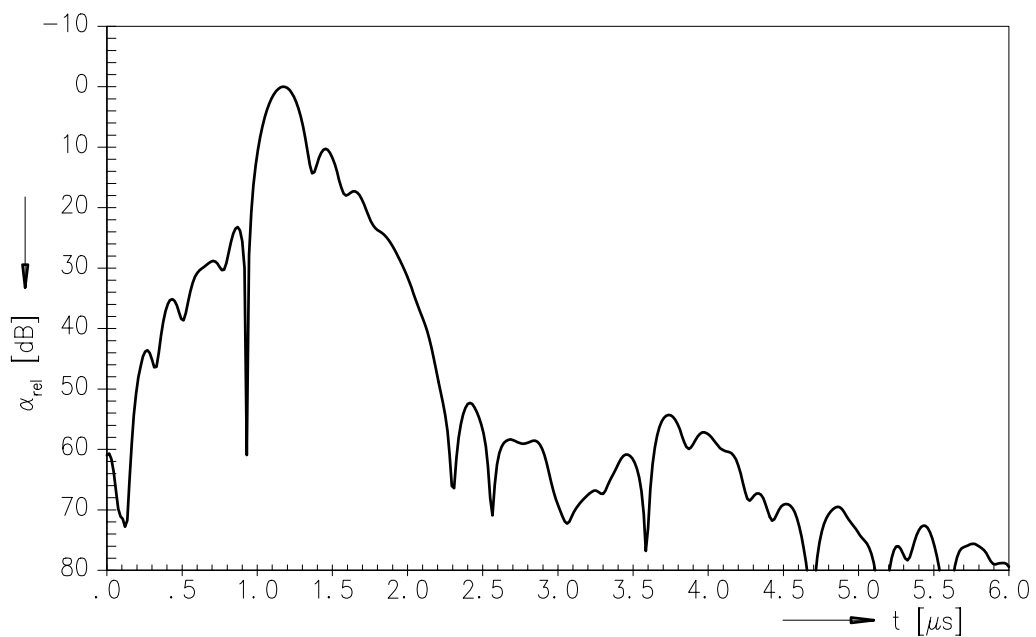
38,90 MHz

## Data Sheet

### Frequency response



### Time domain response





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