



SAW Components

Data Sheet G 1986 M

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a curved, metallic-looking structure. The background is dark and textured, suggesting a globe or a complex surface.



SAW Components

G 1986 M

IF Filter for Intercarrier Applications

38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

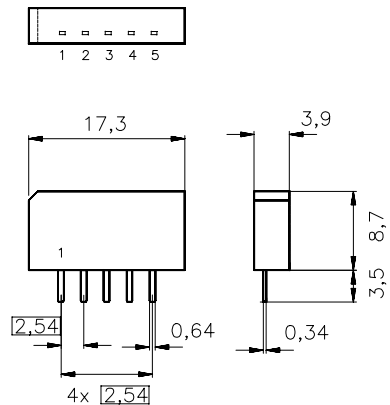
- B/G

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

Terminals

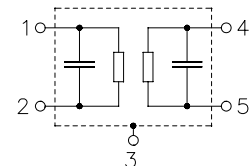
- Tinned CuFe alloy



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 1986 M | B39389-G1986-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

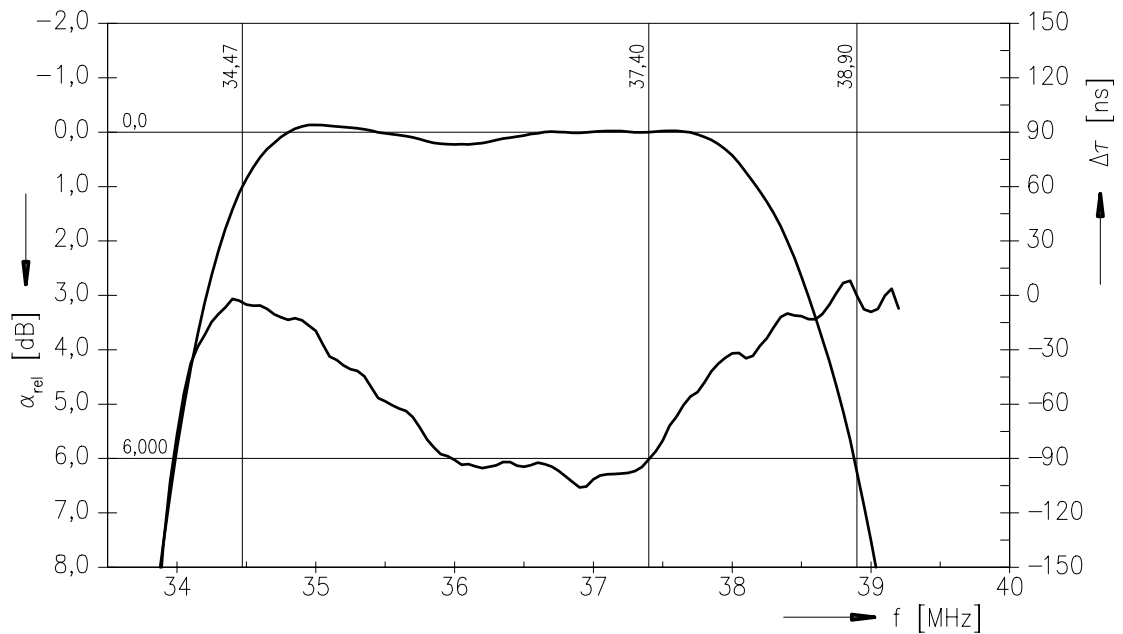
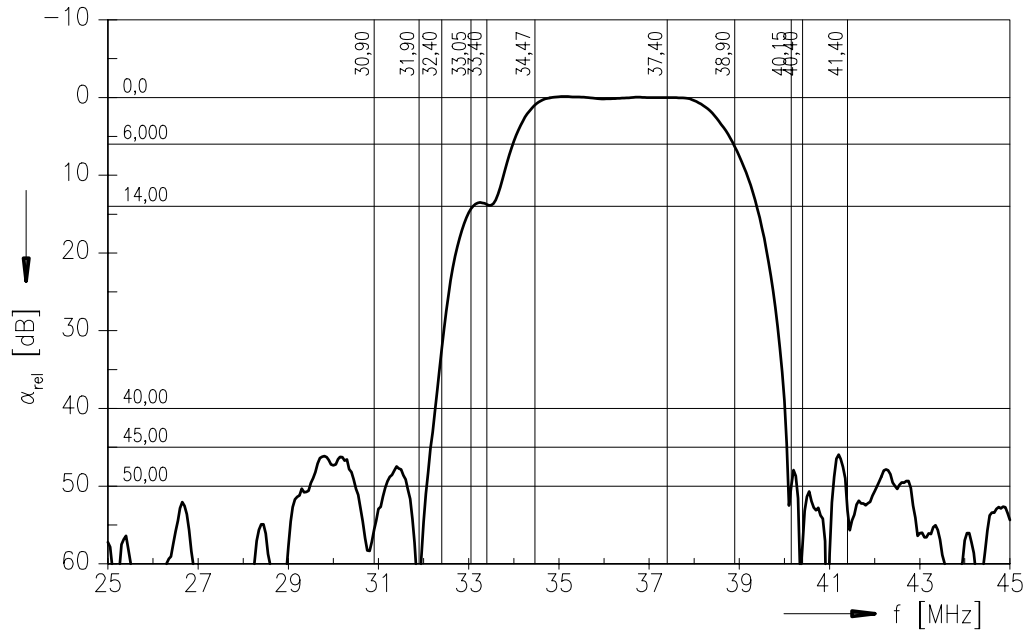
Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

| | | min. | typ. | max. | |
|--|---------------------------------------|------|----------------------|------|---------------------------|
| Insertion attenuation | | | | | |
| | α | | | | |
| Reference level for the following data | 37,40 MHz | 14,3 | 15,8 | 17,3 | dB |
| Relative attenuation | | | | | |
| | α_{rel} | | | | |
| Picture carrier | 38,90 MHz | 5,2 | 6,2 | 7,2 | dB |
| Color carrier | 34,47 MHz | -0,3 | 0,7 | 1,7 | dB |
| Sound carrier | 33,40 MHz | 12,5 | 13,5 | 14,5 | dB |
| | 33,05 MHz | — | 13,8 | — | dB |
| Adjacent picture carrier | 30,90 MHz | 46,0 | 56,0 | — | dB |
| | 31,90 MHz | 48,0 | 60,0 | — | dB |
| | 32,40 MHz | 27,0 | 32,0 | — | dB |
| | 40,15 MHz | 40,0 | 48,0 | — | dB |
| Adjacent sound carrier | 40,40 MHz | 45,0 | 57,0 | — | dB |
| | 41,40 MHz | 44,0 | 56,0 | — | dB |
| Lower sidelobe | 25,00 ... 30,90 MHz | 40,0 | 45,0 | — | dB |
| Upper sidelobe | 40,40 ... 45,00 MHz | 40,0 | 48,0 | — | 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 predistortion | | | | | |
| (reference frequency 38,90 MHz) | | | | | |
| | $\Delta\tau$ | | | | |
| | 36,90 MHz | — | -90 | — | ns |
| | 34,47 MHz | — | 10 | — | ns |
| Impedance at 37,40 MHz | | | | | |
| Input: | $Z_{IN} = R_{IN} \parallel C_{IN}$ | — | 2,1 \parallel 10,4 | — | k Ω \parallel pF |
| Output: | $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | — | 2,5 \parallel 3,5 | — | k Ω \parallel pF |
| Temperature coefficient of frequency | | | | | |
| | TC_f | — | -72 | — | ppm/K |



Data Sheet

Frequency response





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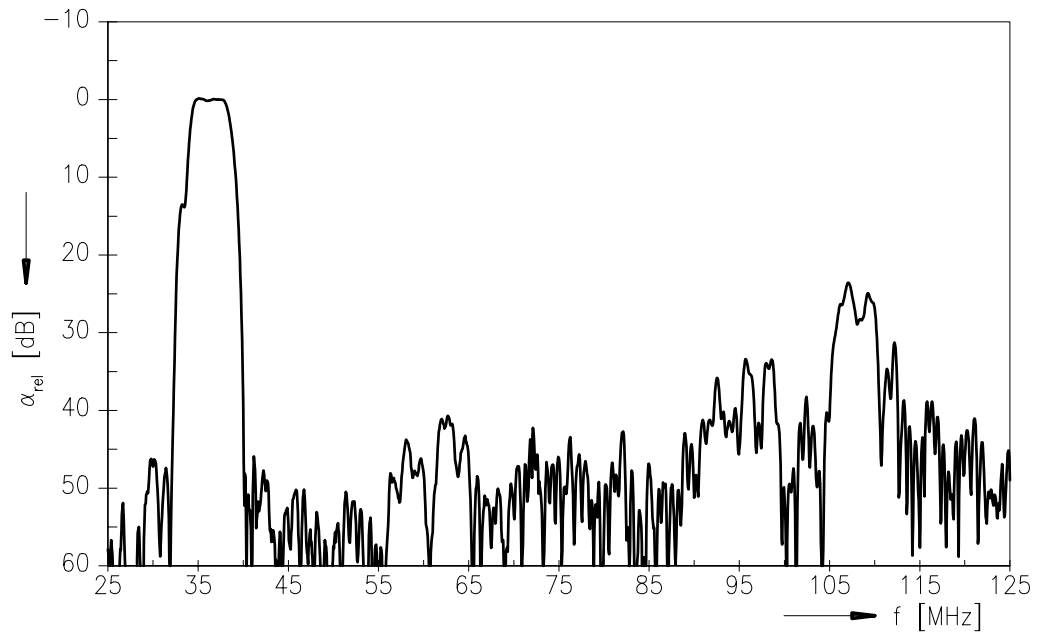
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IF Filter for Intercarrier Applications

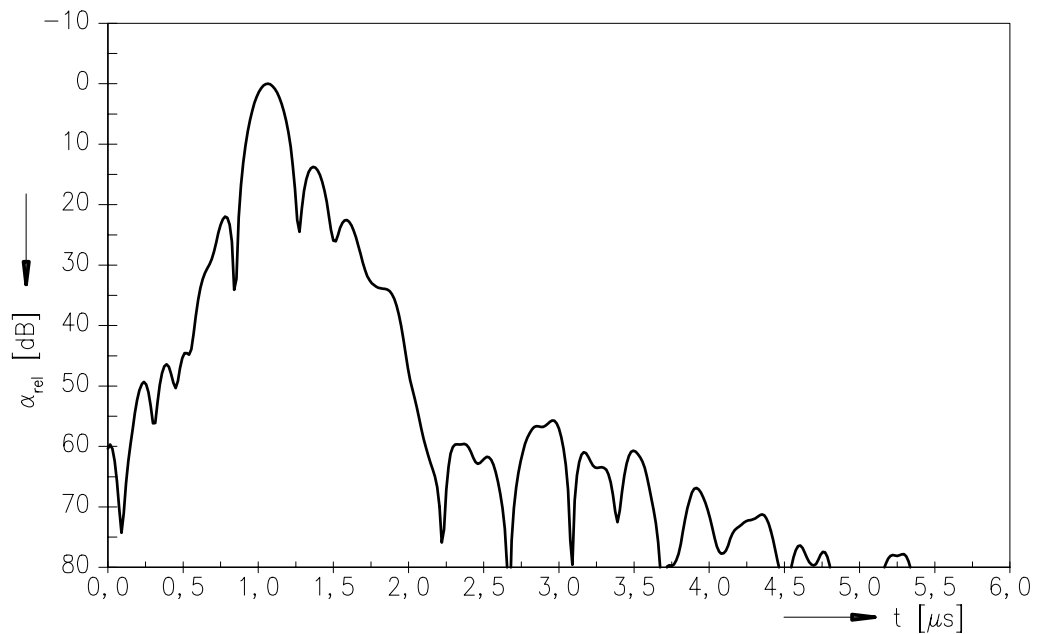
38,90 MHz

Data Sheet

Frequency response



Time domain response





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