

Data Sheet J 1981 M





J 1981 M

IF Filter for Intercarrier Applications

38,90 MHz

Data Sheet

Standard

00,00 111112

Plastic package SIP5K

I

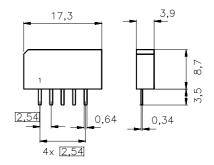
Features

- TV IF filter with Nyquist slope and sound shelf
- High color carrier level
- Constant group delay
- Extended sound shelf for NICAM reception
- Suitable for CENELEC EN 55020

Terminals

■ Tinned CuFe alloy

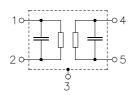
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Dimensions in mm, approx. weight 1,0 g

Pin configuration

- 1 Input
- 2 Input ground
- 3 Chip carrier ground
- 4 Output
- 5 Output



| Туре | Ordering code | Marking and package according to | Packing according to | | |
|----------|-------------------|----------------------------------|----------------------|--|--|
| J 1981 M | B39389-J1981-M100 | C61157-A1-A15 | F61074-V8067-Z000 | | |

Maximum ratings

| Operable temperature range | T_{A} | -25/+65 | °C | |
|----------------------------|---------------|---------|----|-----------------------|
| Storage temperature range | $T_{\rm stg}$ | -40/+85 | °C | |
| DC voltage | V_{DC} | 12 | V | between any terminals |
| AC voltage | $V_{\sf pp}$ | 10 | V | between any terminals |



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Characteristics

Reference temperature: $T_{\rm A} = 25\,^{\circ}{\rm C}$ Terminating source impedance: $Z_{\rm S} = 50\,\Omega$ Terminating load impedance: $Z_{\rm L} = 2\,{\rm k}\Omega\,||\,3\,{\rm pF}$

| | | | | min. | typ. | max. | |
|--------------------------------------|--|-----|-----------------|----------|-------------|------|-------------------------|
| Insertion attenuation | | (| α | | | | |
| Reference level for the 37,40 MHz | | MHz | | 13,9 | 15,4 | 16,9 | dB |
| following data | | | | | | | |
| Relative attenuation | | | α_{rel} | | | | |
| Picture carrier 38,90 MHz | | MHz | | 4,8 | 5,8 | 6,8 | dB |
| Color carrier | 34,47 | MHz | | -0,2 | 0,8 | 1,8 | dB |
| Sound carrier | 32,90 | MHz | | 12,7 | 13,7 | 14,7 | dB |
| | 32,35 | MHz | | 11,4 | 12,4 | _ | dB |
| Adjacent picture carrier | 30,90 | MHz | | 50,0 | 57,0 | _ | dB |
| | 30,40 | MHz | | 50,0 | 62,0 | _ | dB |
| | 31,40 | MHz | | 46,0 | 60,0 | _ | dB |
| Adjacent sound carrier | 40,90 | MHz | | 50,0 | 58,0 | _ | dB |
| | 40,35 | MHz | | 43,0 | 50,0 | _ | dB |
| Lower sidelobe | 25,00 30,90 | | | 42,0 | 46,0 | _ | dB |
| Upper sidelobe | 40,90 45,00 | MHz | | 42,0 | 46,0 | _ | dB |
| Reflected wave signal s | suppression | | | | | | |
| 1,2 μs 6,0 μs after mai | n pulse | | | 42,0 | 52,0 | _ | dB |
| (test pulse 250 ns, | | | | | | | |
| carrier frequency 37,40 N | ЛHz) | | | | | | |
| Feedthrough signal sup | pression | | | | | | |
| 1,2 μs 1,1 μs before m | ain pulse | | | 50,0 | 56,0 | _ | dB |
| (test pulse 250 ns, | | | | | | | |
| carrier frequency 37,40 N | ЛHz) | | | | | | |
| Group delay ripple (p-p) | | | Δτ | <u> </u> | 40 | | ns |
| Impedance at 37,40 MHz | | | | | | | |
| Input: $Z_{IN} = R_{IN} C_{IN}$ | | | | _ | 1,6 15,4 | _ | k $\Omega \parallel$ pF |
| Output: | $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$ | UT | | _ | 2,5 3,9 | _ | kΩ pF |
| Temperature coefficient of frequency | | | TC _f | | -72 | | ppm/K |



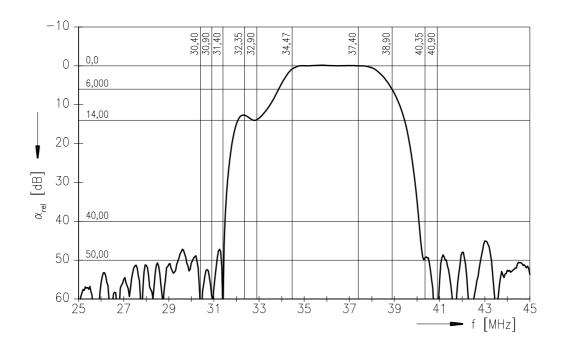
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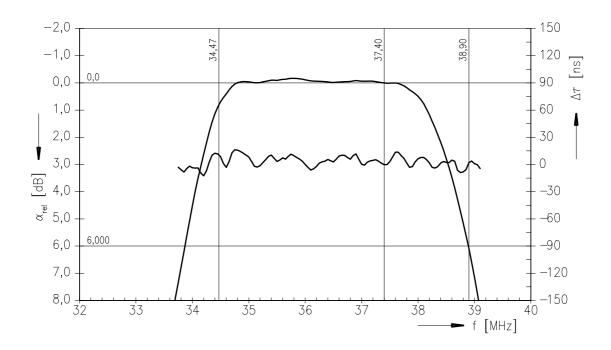
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Frequency response







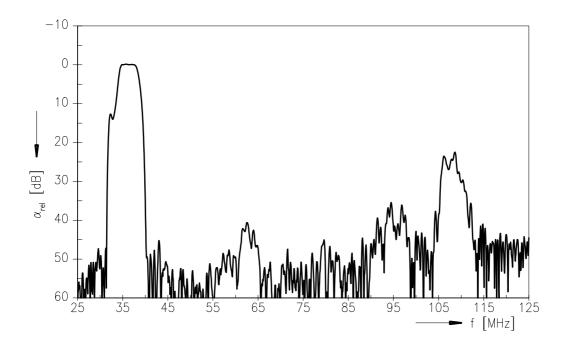
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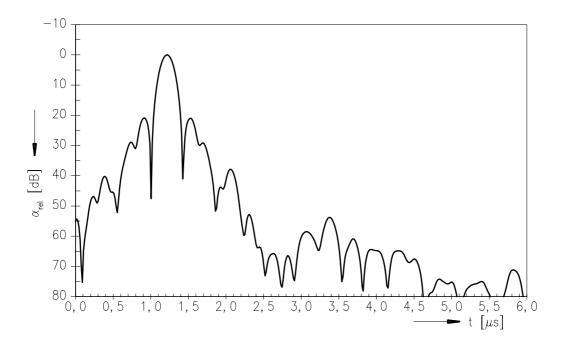
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Frequency response



Time domain response





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