EPCOS

# *SAW Components*

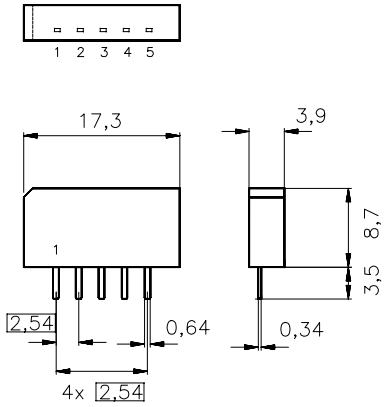
*Data Sheet J 1981 M*

Data Sheet

**Standard**

- I

Plastic package **SIP5K**




Dimensions in mm, approx. weight 1,0 g

**Features**

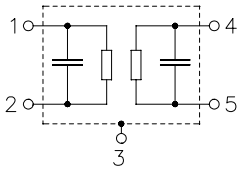
- TV IF filter with Nyquist slope and sound shelf
- High color carrier level
- Constant group delay
- Extended sound shelf for NICAM reception
- Suitable for CENELEC EN 55020

**Terminals**

- Tinned CuFe alloy

**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 |
|---|---|---|---|
| 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 | $T_{stg}$ | –40/+85 | ˚C | |
| DC voltage | $V_{DC}$ | 12 | V | between any terminals |
| AC voltage | $V_{pp}$ | 10 | V | between any terminals |

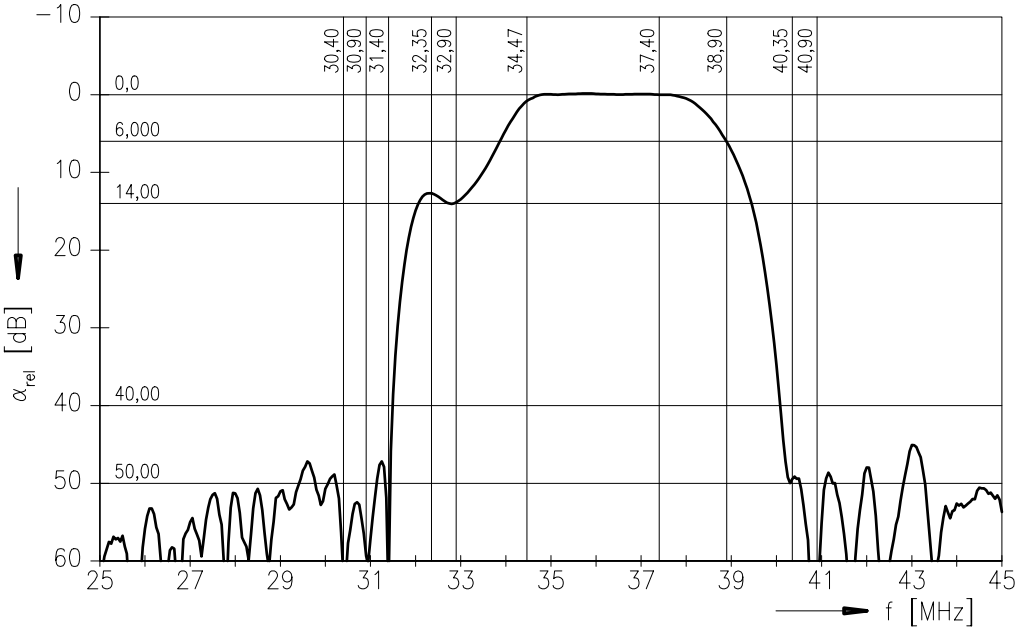
Data Sheet

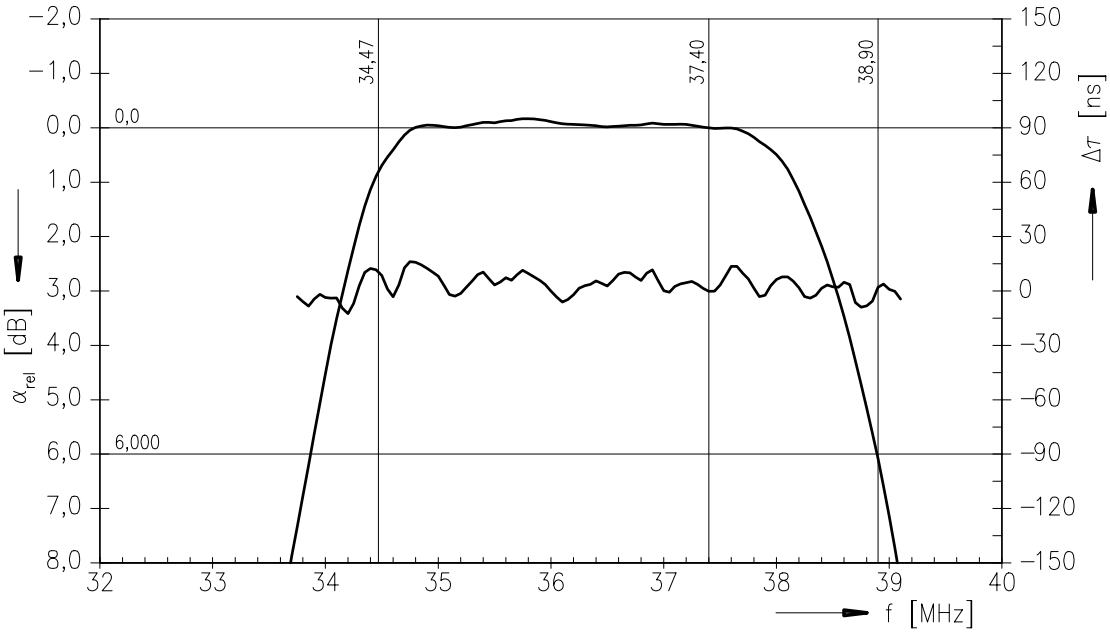
## Characteristics

Reference temperature: $T_A$ = 25 °C
Terminating source impedance: $Z_S$ = 50 Ω
Terminating load impedance: $Z_L$ = 2 kΩ || 3 pF

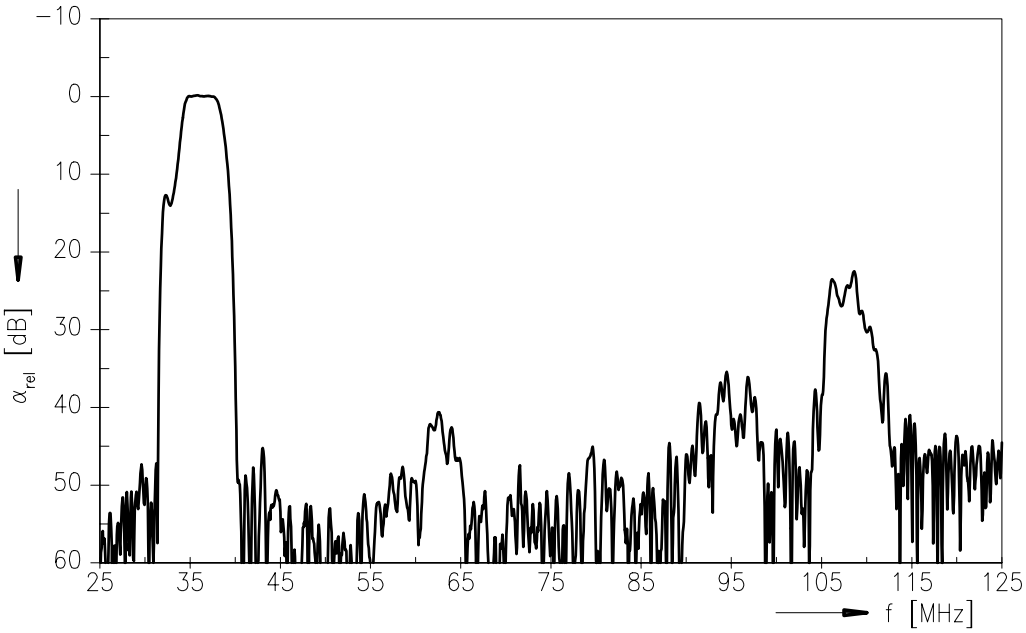
| | | | | min. | typ. | max. | |
|---|---|---|---|---|---|---|---|
| **Insertion attenuation** | | | α | | | | |
| Reference level for the following data | | 37,40 MHz | | 13,9 | 15,4 | 16,9 | dB |
| **Relative attenuation** | | | $\alpha_{rel}$ | | | | |
| Picture carrier | | 38,90 MHz | | 4,8 | 5,8 | 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 MHz | | 42,0 | 46,0 | — | dB |
| Upper sidelobe | 40,90 ... | 45,00 MHz | | 42,0 | 46,0 | — | dB |
| **Reflected wave signal suppression** | | | | | | | |
| 1,2 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz) | | | | 42,0 | 52,0 | — | dB |
| **Feedthrough signal suppression** | | | | | | | |
| 1,2 µs ... 1,1 µs before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz) | | | | 50,0 | 56,0 | — | dB |
| **Group delay ripple** (p-p) | | | Δτ | — | 40 | — | ns |
| **Impedance** at 37,40 MHz | | | | | | | |
| Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ | | | | — | 1,6 ‖ 15,4 | — | kΩ ‖ pF |
| Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | | | | — | 2,5 ‖ 3,9 | — | kΩ ‖ pF |
| **Temperature coefficient of frequency** | | | $TC_f$ | — | –72 | — | ppm/K |

**Frequency response**

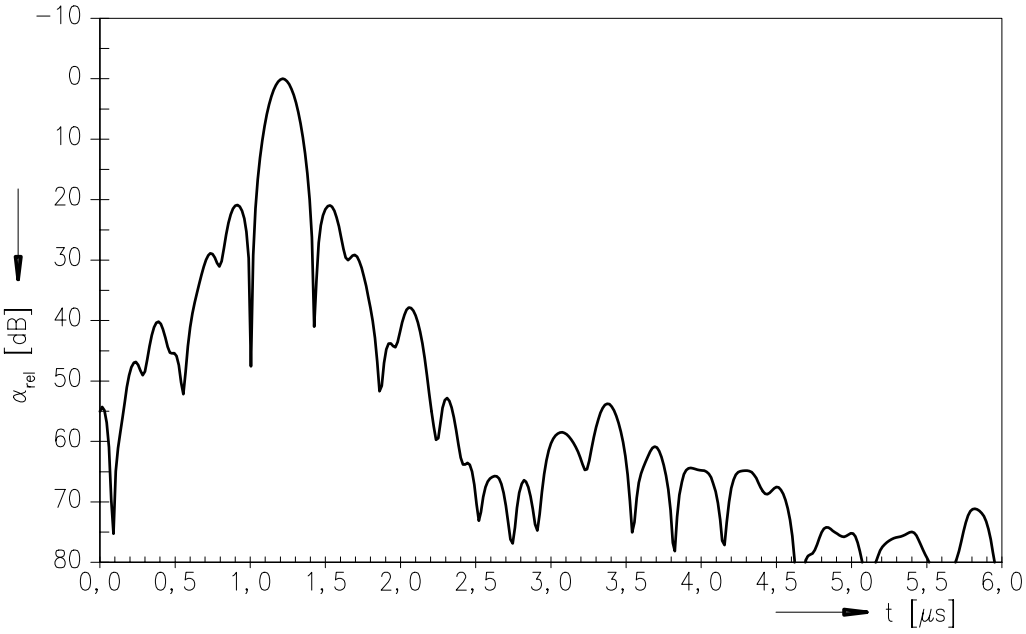


**Frequency response**




**Time domain response**



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