EPCOS

# *SAW Components*

*Data Sheet K 2953 M*

Data Sheet

**Standard**

- B/G
- D/K

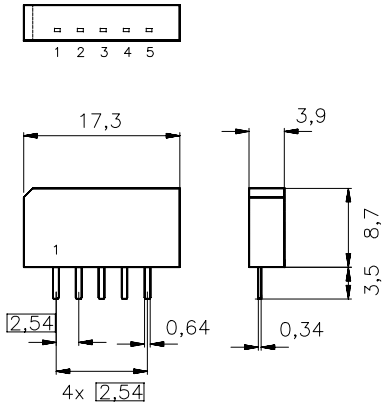
**Features**

- TV IF filter with Nyquist slope and sound shelf
- Broad sound shelf for sound carriers at 31,50 MHz and 32,50 MHz
- Group delay predistortion

**Terminals**

- Tinned CuFe alloy

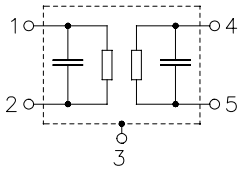
Plastic package **SIP5K**




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 2953 M | B39380-K2953-M100 | C61157-A1-A15 | F61074-V8067-Z000 |

**Maximum ratings**

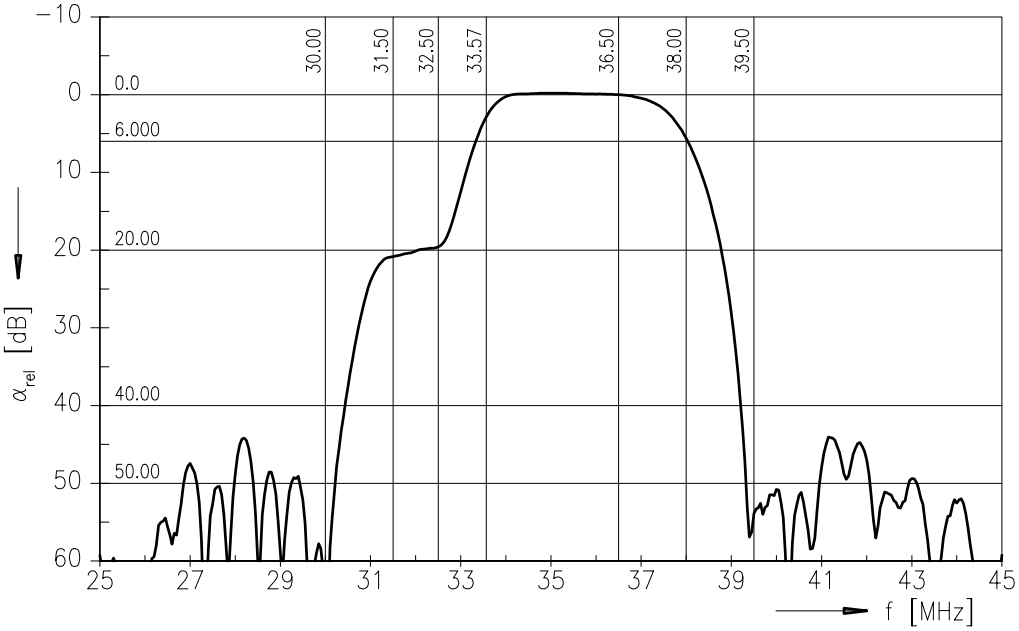
| | | | | |
|---|---|---|---|---|
| Operable temperature range | $T_A$ | –25/+65 | ˚C | |
| Storage temperature range | $T_{stg}$ | –40/+85 | ˚C | |
| DC voltage | $V_{DC}$ | 12 | V | between any terminals |
| AC voltage | $V_{pp}$ | 10 | V | between any terminals |

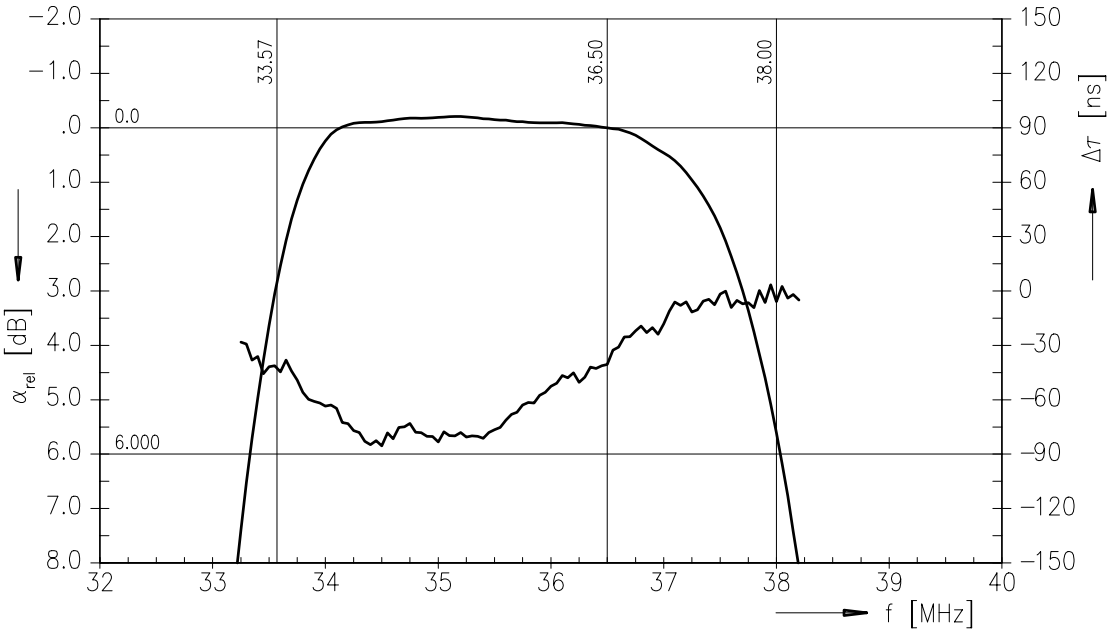
## Characteristics

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

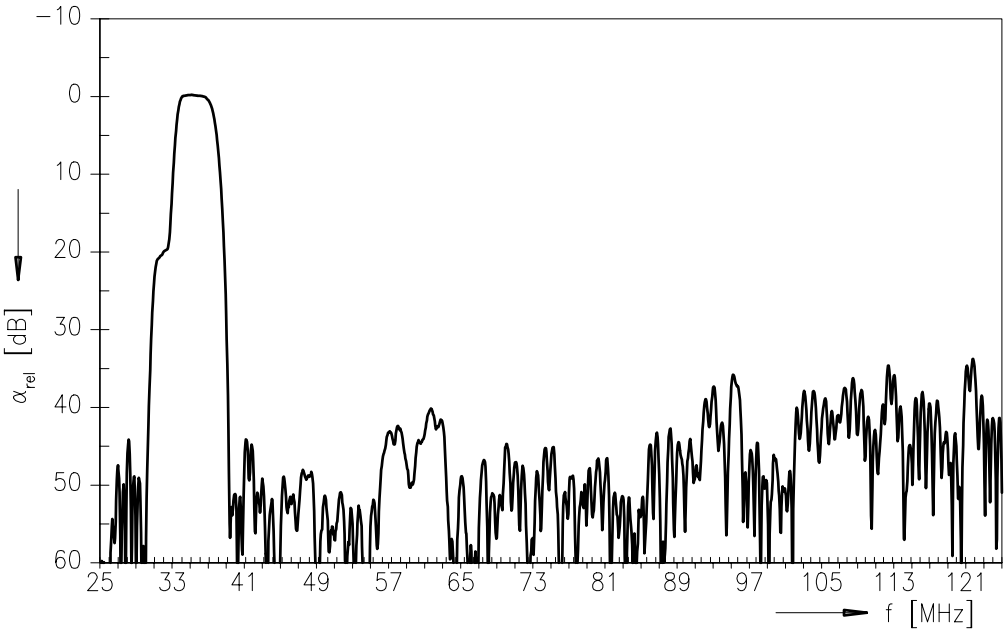
| | | | min. | typ. | max. | |
|---|---|---|---|---|---|---|
| **Insertion attenuation** | | $\alpha$ | | | | |
| Reference level for the following data | 36,50 MHz | | 14,7 | 16,2 | 17,7 | dB |
| **Relative attenuation** | | $\alpha_{rel}$ | | | | |
| Picture carrier | 38,00 MHz | | 4,4 | 5,4 | 6,4 | dB |
| Color carrier | 33,57 MHz | | 2,1 | 3,1 | 4,1 | dB |
| | 33,20 MHz | | — | 8,8 | — | dB |
| Sound carrier | 31,50 MHz | | — | 20,6 | — | dB |
| | 32,50 MHz | | 18,6 | 19,6 | 20,6 | dB |
| Adjacent picture carrier | 30,00 MHz | | 46,0 | 55,0 | — | dB |
| Adjacent sound carrier | 39,50 MHz | | 44,0 | 53,0 | — | dB |
| Lower sidelobe | 25,00 ... 30,00 MHz | | 39,0 | 46,0 | — | dB |
| Upper sidelobe | 39,50 ... 45,00 MHz | | 36,0 | 43,0 | — | dB |
| **Reflected wave signal suppression** | | | | | | |
| 1,1 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz) | | | 44,0 | 55,0 | — | dB |
| **Feedthrough signal suppression** | | | | | | |
| 1,1 µs ... 1,0 µs before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz) | | | 50,0 | 56,0 | — | dB |
| **Group delay predistortion** (reference frequency 38,00 MHz) | | $\Delta\tau$ | | | | |
| | 34,20 MHz | | — | –85 | — | ns |
| | 33,57 MHz | | — | –30 | — | ns |
| **Impedance** at 36,50 MHz | | | | | | |
| Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ | | | — | 1,4 ‖ 13,2 | — | kΩ \|\| pF |
| Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | | | — | 2,5 ‖ 4,0 | — | kΩ \|\| pF |
| **Temperature coefficient of frequency** | | $TC_f$ | — | –72 | — | ppm/K |

**Frequency response**

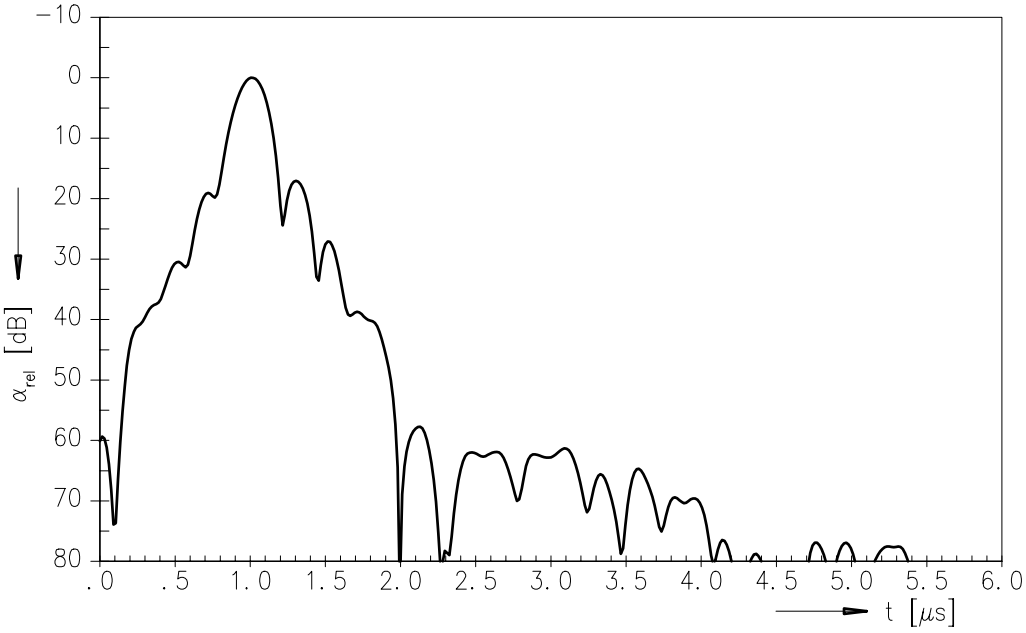


**Frequency response**




**Time domain response**



**Published by EPCOS AG**
**Surface Acoustic Wave Components Division, OFW E UE**
**P.O. Box 80 17 09, D-81617 München**



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