



# SAW Components

Data Sheet K 9661 D

Data Sheet

A large, stylized graphic of a globe is shown in grayscale. The globe is tilted and has a grid of latitude and longitude lines. Overlaid on the globe is the word "EPCOS" in a large, white, sans-serif font. The letters are slightly transparent, allowing the globe's grid to be seen through them. The overall image has a dark, moody background.



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## IF Filter for Audio Applications

33,90 MHz and 38,90 MHz

### Data Sheet

#### Standard

Duroplast package **SIP5D**

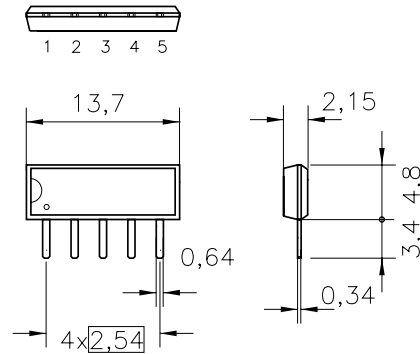
- L'
- M/N

#### Features

- TV IF audio filter with two channels
- Channel 1 (L') with one pass band for sound carrier at 40,40 MHz
- Channel 2 (M/N) with one pass band for sound carrier at 34,40 MHz
- Standard IC package

#### Terminals

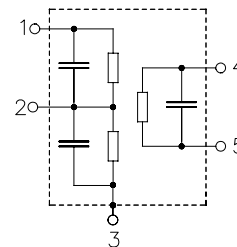
- Tinned CuFe alloy



Dimensions in mm, approx. weight 0,5 g

#### Pin configuration

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



| Type     | Ordering code     | Marking and package according to | Packing according to |
|----------|-------------------|----------------------------------|----------------------|
| K 9661 D | B39389-K9661-D100 | C61157-A1-A18                    | F61074-V8049-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 of channel 1 (switching pin 2 connected to ground)

Reference temperature:  $T_A = 25\text{ °C}$   
 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                             | 40,40 MHz             | 11,6 | 13,1                 | 14,6 | dB                        |
| <b>Relative attenuation</b>  | $\alpha_{\text{rel}}$ |      |                      |      |                           |
| Picture carrier  | 33,90 MHz             | 41,0 | 53,0                 | —    | dB                        |
|  | 38,40 MHz             | 35,0 | 53,0                 | —    | dB                        |
| Adjacent picture carrier   | 41,90 MHz             | 31,0 | 36,0                 | —    | dB                        |
| Adjacent sound carrier   | 32,40 MHz             | 45,0 | 66,0                 | —    | dB                        |
| Lower sidelobe   | 25,00 ... 32,40 MHz   | 40,0 | 48,0                 | —    | dB                        |
| Upper sidelobe   | 41,90 ... 45,00 MHz   | 29,0 | 34,0                 | —    | dB                        |
| <b>Impedance</b> at 40,40 MHz                                      |                       |      |                      |      |                           |
| Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$     |                       | —    | 0,3 $\parallel$ 10,4 | —    | k $\Omega$ $\parallel$ pF |
| Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$ |                       | —    | 0,5 $\parallel$ 11,3 | —    | k $\Omega$ $\parallel$ pF |
| <b>Temperature coefficient of frequency</b>                        | $TC_f$                | —    | -72                  | —    | ppm/K                     |



## SAW Components

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#### Characteristics of channel 2 (switching pin 2 connected to pin 1)

Reference temperature:  $T_A = 25\text{ °C}$   
 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        | 34,40 MHz           | 10,6 | 12,1                 | 13,6 | dB                        |
| <b>Relative attenuation</b>                   | $\alpha_{rel}$      |      |                      |      |                           |
| Picture carrier                               | 38,90 MHz           | 40,0 | 52,0                 | —    | dB                        |
| Color carrier                                 | 35,32 MHz           | 25,0 | 32,0                 | —    | dB                        |
| Adjacent picture carrier                      | 32,90 MHz           | 40,0 | 63,0                 | —    | dB                        |
| Adjacent sound carrier                        | 40,40 MHz           | 34,0 | 41,0                 | —    | dB                        |
| Lower sidelobe                                | 25,00 ... 32,90 MHz | 30,0 | 37,0                 | —    | dB                        |
| Upper sidelobe                                | 38,90 ... 45,00 MHz | 28,0 | 34,0                 | —    | dB                        |
| <b>Impedance</b> at 34,40 MHz                 |                     |      |                      |      |                           |
| Input: $Z_{IN} = R_{IN} \parallel C_{IN}$     |                     | —    | 0,3 $\parallel$ 20,4 | —    | k $\Omega$ $\parallel$ pF |
| Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ |                     | —    | 0,6 $\parallel$ 14,1 | —    | k $\Omega$ $\parallel$ pF |
| <b>Temperature coefficient of frequency</b>   | $TC_f$              | —    | -72                  | —    | ppm/K                     |



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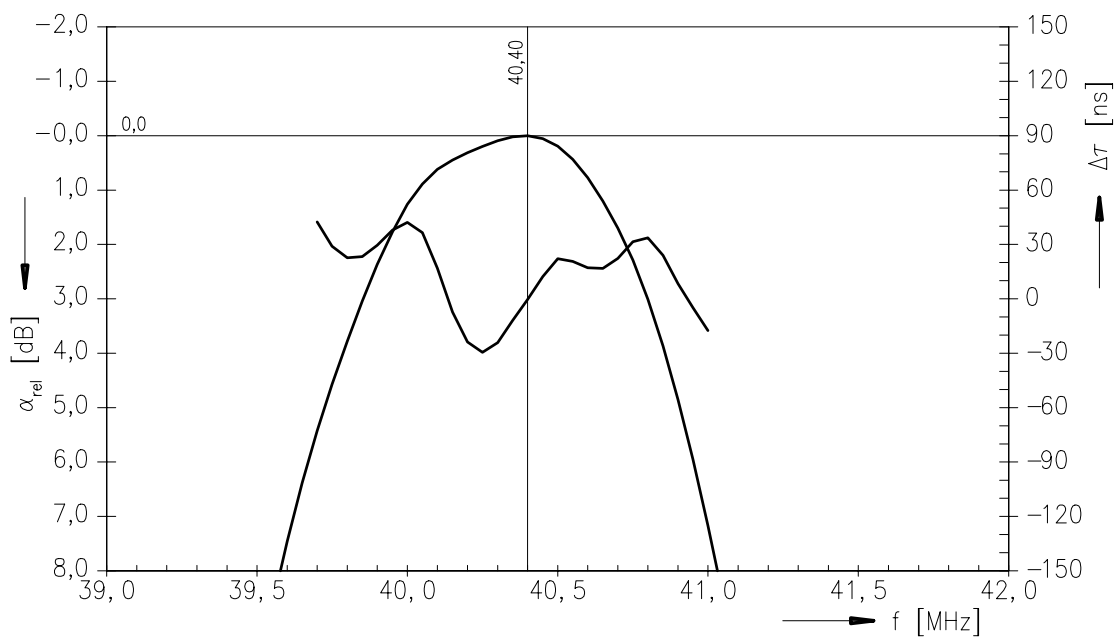
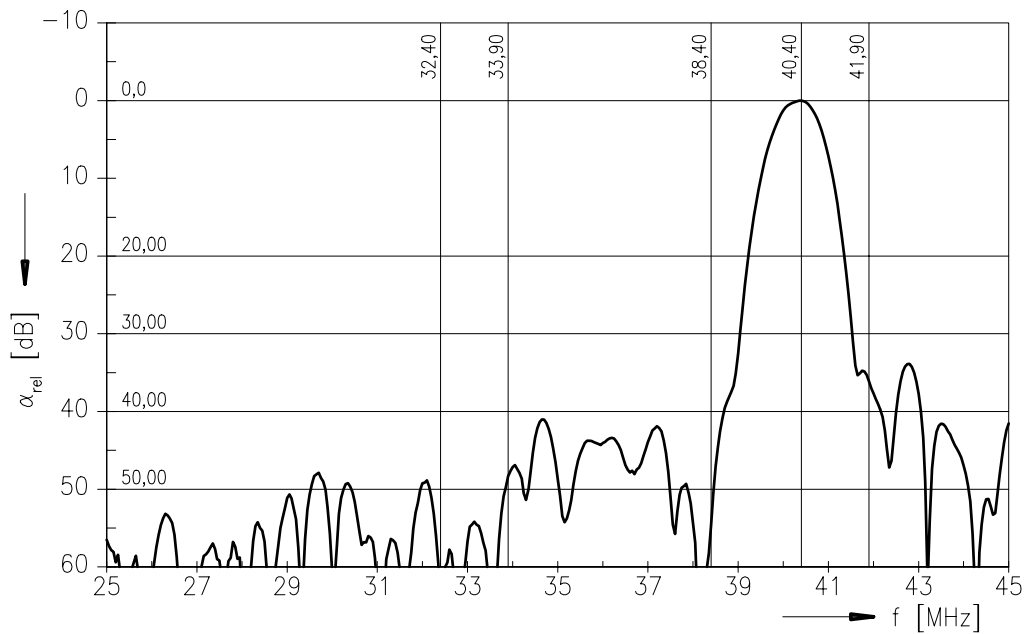
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Data Sheet

Frequency response of channel 1





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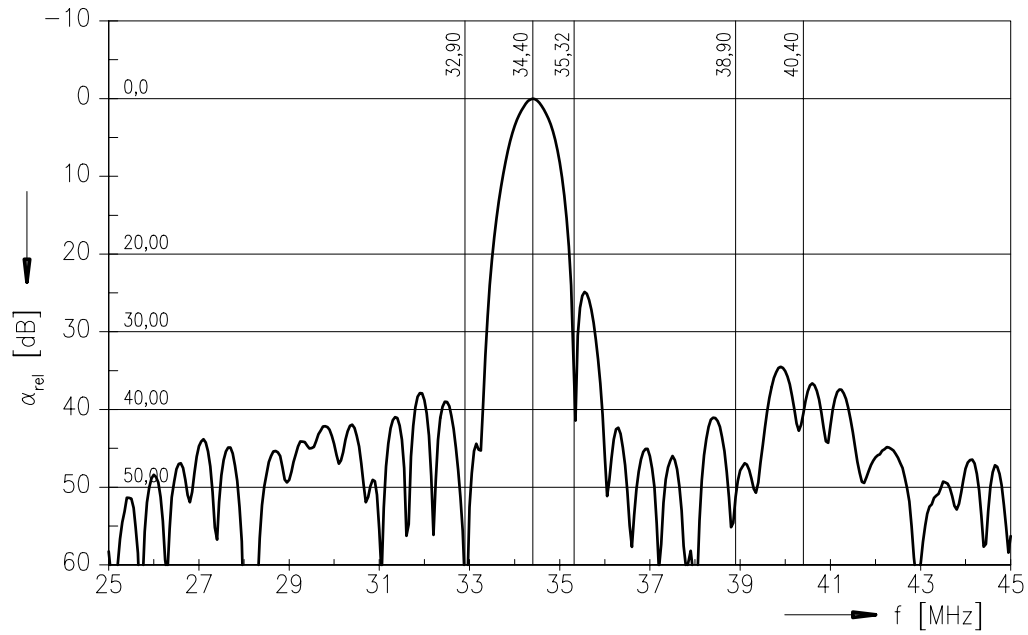
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Data Sheet

Frequency response of channel 2





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