



# SAW Components

Data Sheet K 6264 K





**SAW Components**

**K 6264 K**

**IF Filter for Intercarrier/Multistandard Applications**

**38,00 MHz**

**Data Sheet**

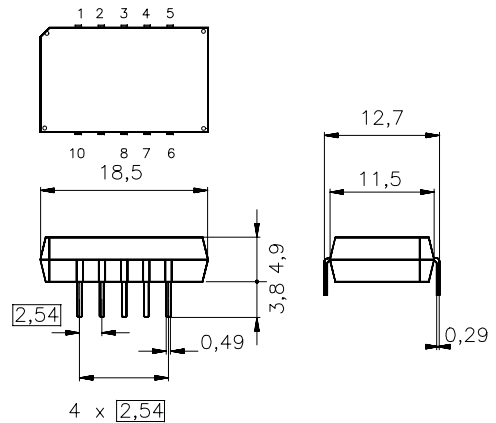
**Standard**

- D/K
- M/N

**Features**

- TV IF filter switchable from M/N mode to D/K mode
- M/N mode with Nyquist slope and sound shelf at 33,50 MHz
- Constant group delay
- D/K mode with Nyquist slope and broad sound shelf for sound carriers at 31,50 MHz and 32,50 MHz
- Group delay predistortion
- Suitable for CENELEC EN 55020

Plastic package **DIP10K**



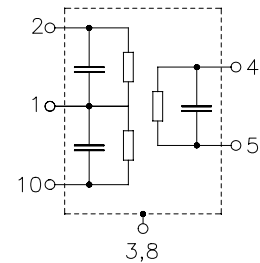
Dimensions in mm, approx. weight 1,8 g

**Terminals**

- Tinned CuFe alloy

**Pin configuration**

- 1 Input
- 2 Input - ground
- 3; 8 Chip carrier - ground
- 4; 5 Output
- 6; 7 Not connected
- 9 Free
- 10 Switching input



| Type     | Ordering code     | Marking and package according to | Packing according to |
|----------|-------------------|----------------------------------|----------------------|
| K 6264 K | B39380-K6264-K100 | C61157-A2-A3                     | F61074-V8068-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 |


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**Characteristics in M/N mode (switching input pin 10 connected to input pin 1)**

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. |                  |
|--|---------------------------------------|------|-------------|------|------------------|
| <b>Insertion attenuation</b>   |                                       |      |             |      |                  |
|  | $\alpha$                              |      |             |      |                  |
| Reference level for the following data   | 36,50 MHz                             | 13,7 | 15,2        | 16,7 | dB               |
| <b>Relative attenuation</b>  |                                       |      |             |      |                  |
|  | $\alpha_{rel}$                        |      |             |      |                  |
| Picture carrier  | 38,00 MHz                             | 5,2  | 6,2         | 7,2  | dB               |
| Color carrier  | 34,42 MHz                             | 3,8  | 4,8         | 5,8  | dB               |
| Sound carrier  | 33,50 MHz                             | 19,6 | 21,1        | 22,6 | dB               |
| Adjacent picture carrier   | 32,00 MHz                             | 42,0 | 50,0        | —    | dB               |
| Adjacent sound carrier   | 39,50 MHz                             | 46,0 | 59,0        | —    | dB               |
| Lower sidelobe   | 25,00 ... 32,00 MHz                   | 40,0 | 47,0        | —    | dB               |
| Upper sidelobe   | 39,50 ... 45,00 MHz                   | 40,0 | 48,0        | —    | dB               |
| <b>Reflected wave signal suppression</b>   |                                       |      |             |      |                  |
| 1,2 $\mu$ s ... 6,0 $\mu$ s after main pulse<br>(test pulse 250 ns,<br>carrier frequency 36,50 MHz)  |                                       | 41,0 | 48,0        | —    | dB               |
| <b>Feedthrough signal suppression</b>  |                                       |      |             |      |                  |
| 1,2 $\mu$ s ... 1,1 $\mu$ s before main pulse<br>(test pulse 250 ns,<br>carrier frequency 36,50 MHz) |                                       | —    | 56,0        | —    | dB               |
| <b>Group delay ripple (p-p)</b>  |                                       |      |             |      |                  |
|  | $\Delta\tau$                          | —4   | 0           | —    | ns               |
| <b>Impedance at 36,50 MHz</b>  |                                       |      |             |      |                  |
| Input:   | $Z_{IN} = R_{IN} \parallel C_{IN}$    | —    | 1,1    20,9 | —    | k $\Omega$    pF |
| Output:  | $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | —    | 1,5    5,8  | —k   | $\Omega$    pF   |
| <b>Temperature coefficient of frequency</b>  |                                       |      |             |      |                  |
|  | $TC_f$                                | —    | -72         | —    | ppm/K            |


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**Characteristics in D/K mode (switching input pin 10 connected to ground input pin 2)**

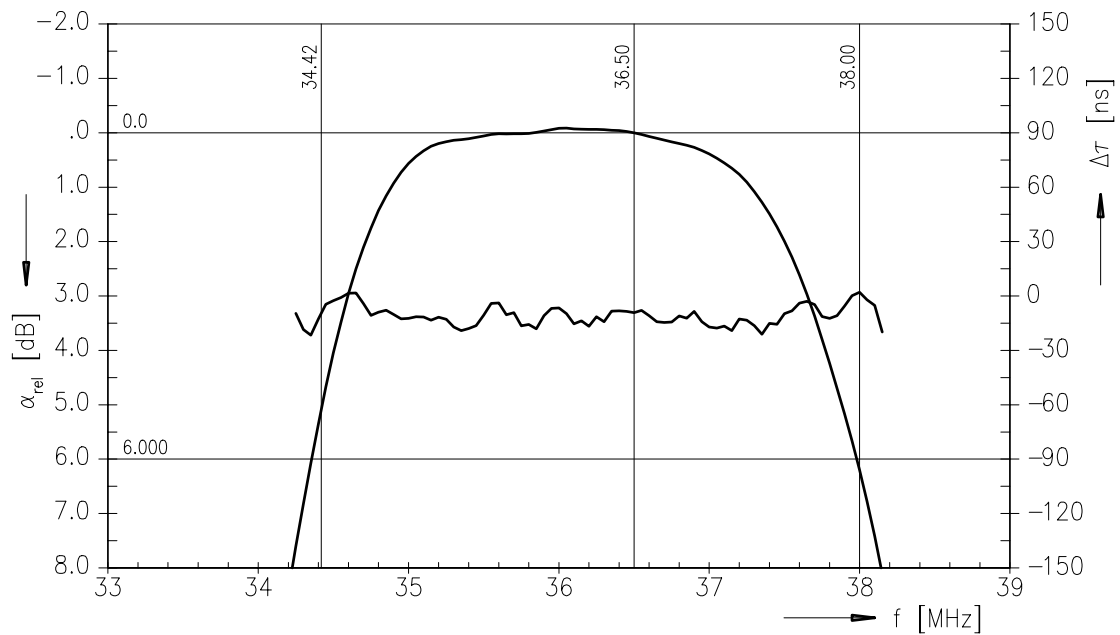
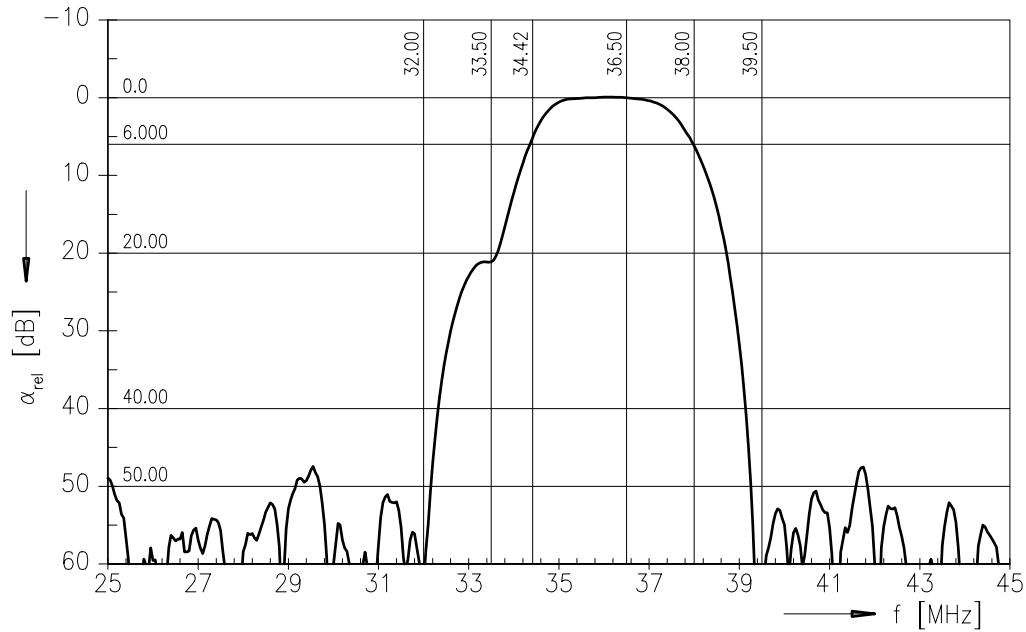
Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

|  |                                       | min. | typ.        | max. |                  |
|--|---------------------------------------|------|-------------|------|------------------|
| <b>Insertion attenuation</b>   |                                       |      |             |      |                  |
|  | $\alpha$                              |      |             |      |                  |
| Reference level for the following data   | 36,50 MHz                             | 13,8 | 15,3        | 16,8 | dB               |
| <b>Relative attenuation</b>  |                                       |      |             |      |                  |
|  | $\alpha_{rel}$                        |      |             |      |                  |
| Picture carrier  | 38,00 MHz                             | 5,0  | 6,0         | 7,0  | dB               |
| Color carrier  | 33,57 MHz                             | 1,2  | 2,2         | 3,2  | dB               |
| Sound carrier  | 31,50 MHz                             | 18,2 | 19,7        | 21,2 | dB               |
|  | 32,50 MHz                             | 17,7 | 19,2        | —    | dB               |
| Adjacent picture carrier   | 30,00 MHz                             | 43,0 | 51,0        | —    | dB               |
| Adjacent sound carrier   | 39,50 MHz                             | 44,0 | 55,0        | —    | dB               |
| Lower sidelobe   | 25,00 ... 30,00 MHz                   | 40,0 | 46,0        | —    | dB               |
| Upper sidelobe   | 39,50 ... 45,00 MHz                   | 38,0 | 45,0        | —    | dB               |
| <b>Reflected wave signal suppression</b>   |                                       |      |             |      |                  |
| 1,2 $\mu$ s ... 6,0 $\mu$ s after main pulse<br>(test pulse 250 ns,<br>carrier frequency 36,50 MHz)  |                                       | 41,0 | 48,0        | —    | dB               |
| <b>Feedthrough signal suppression</b>  |                                       |      |             |      |                  |
| 1,2 $\mu$ s ... 1,1 $\mu$ s before main pulse<br>(test pulse 250 ns,<br>carrier frequency 36,50 MHz) |                                       | —    | 56,0        | —    | dB               |
| <b>Group delay predistortion</b>   |                                       |      |             |      |                  |
| (reference frequency 38,00 MHz)  |                                       |      |             |      |                  |
|  | $\Delta\tau$                          |      |             |      |                  |
|  | 37,00 MHz                             | —    | 15          | —    | ns               |
|  | 33,57 MHz                             | —3   | 5           | —    | ns               |
| <b>Impedance at 36,50 MHz</b>  |                                       |      |             |      |                  |
| Input:   | $Z_{IN} = R_{IN} \parallel C_{IN}$    | —    | 0,8    26,8 | —    | k $\Omega$    pF |
| Output:  | $Z_{OUT} = R_{OUT} \parallel C_{OUT}$ | —    | 1,5    5,7  | —k   | $\Omega$    pF   |
| <b>Temperature coefficient of frequency</b>  |                                       |      |             |      |                  |
|  | $TC_f$                                | —    | -72         | —    | ppm/K            |



Data Sheet

Frequency response M/N mode (switching input pin 10 connected to input pin 1)





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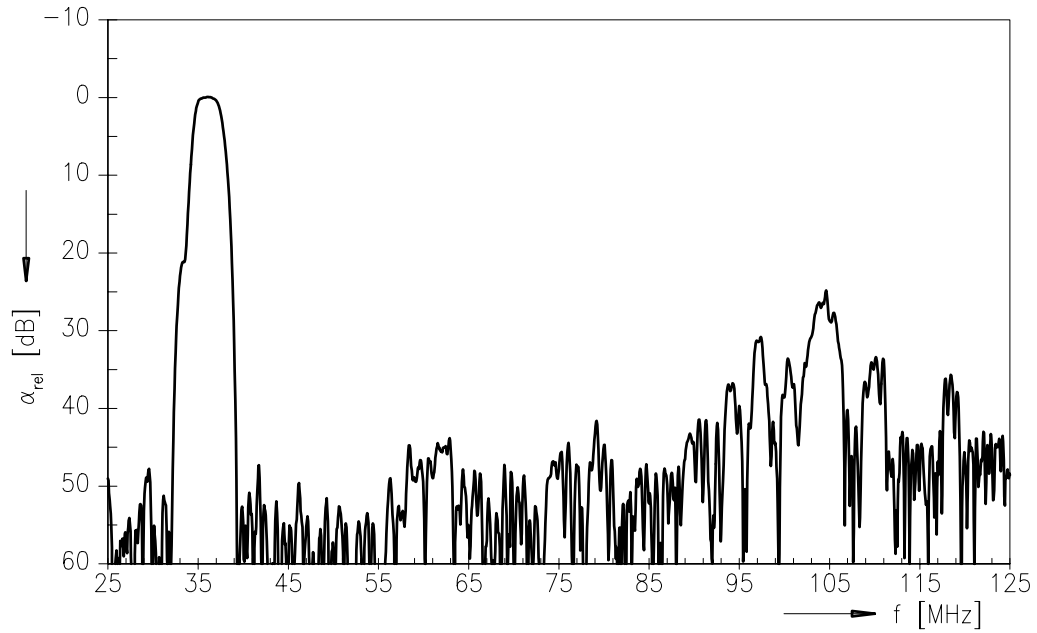
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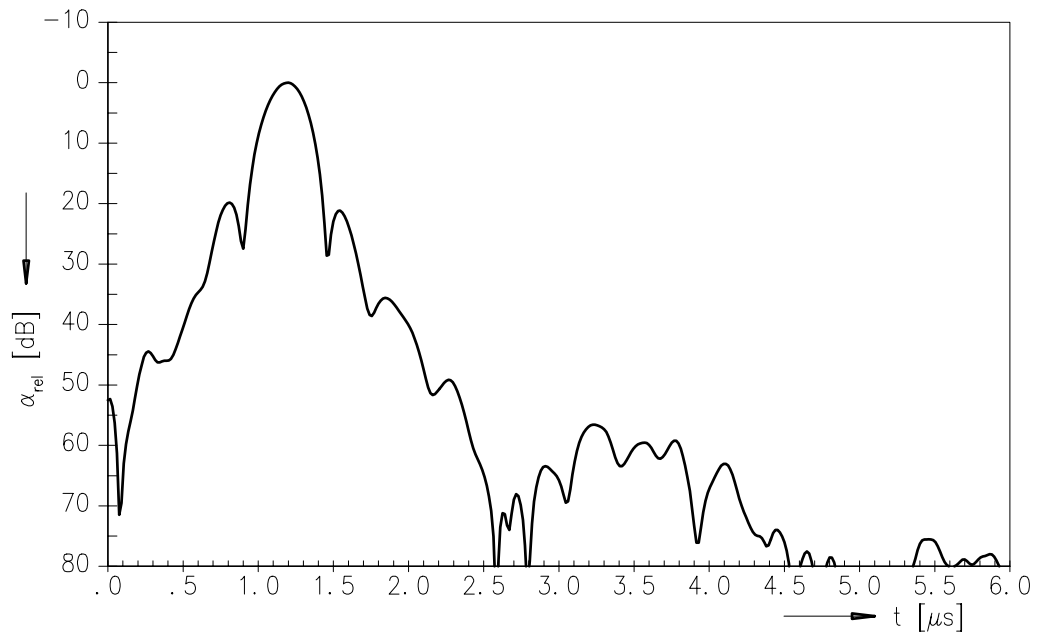
38,00 MHz

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Frequency response M/N mode (switching input pin 10 connected to input pin 1)



Time domain response M/N mode





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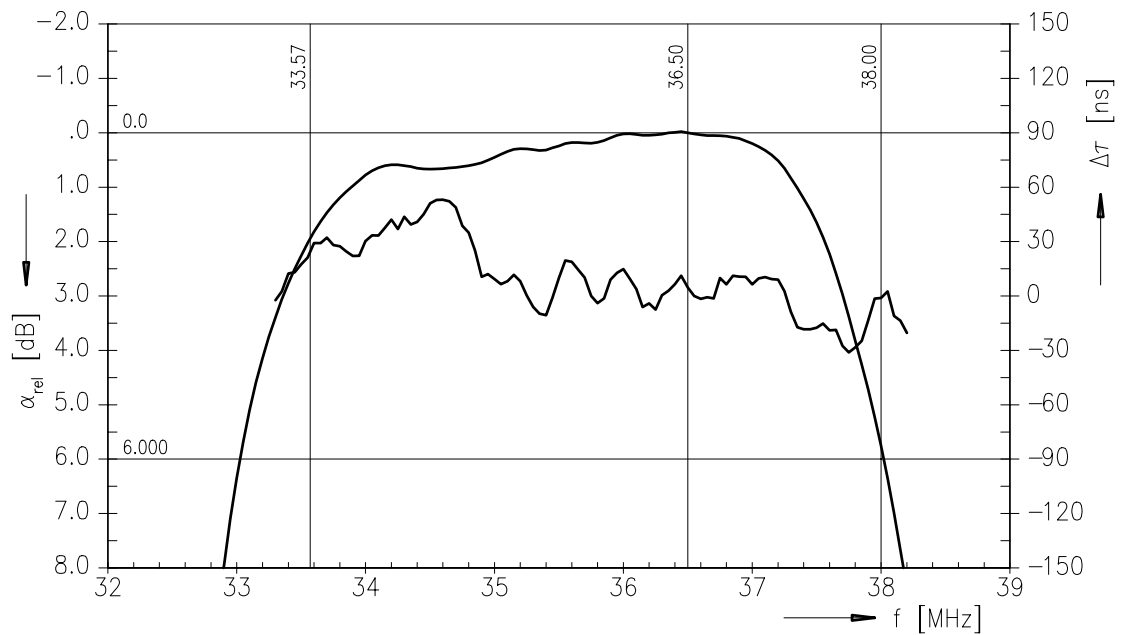
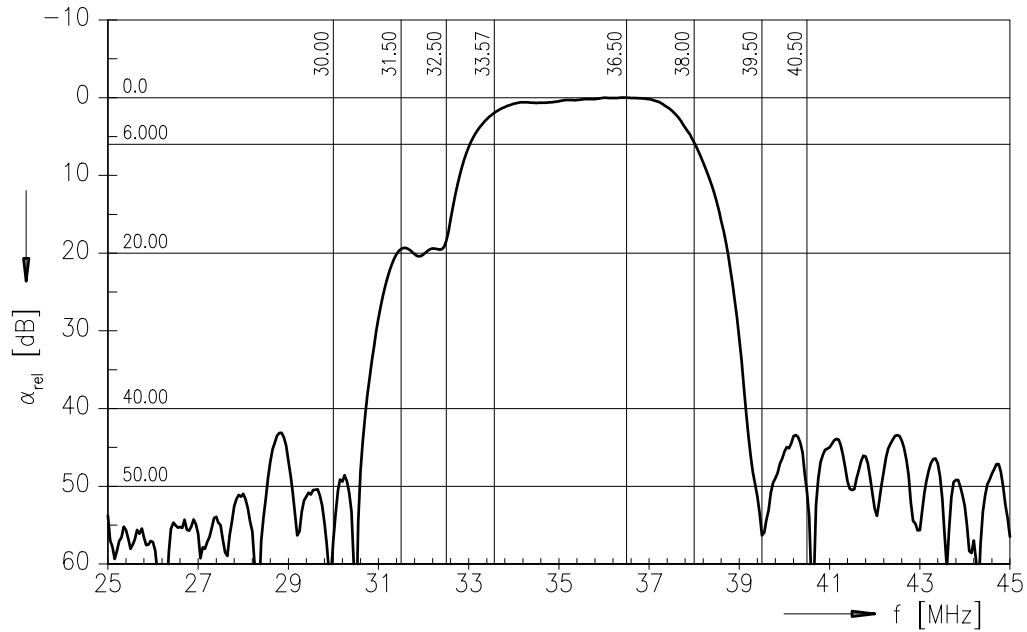
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38,00 MHz

Data Sheet

Frequency response D/K mode (switching input pin 10 connected to ground input pin 2)





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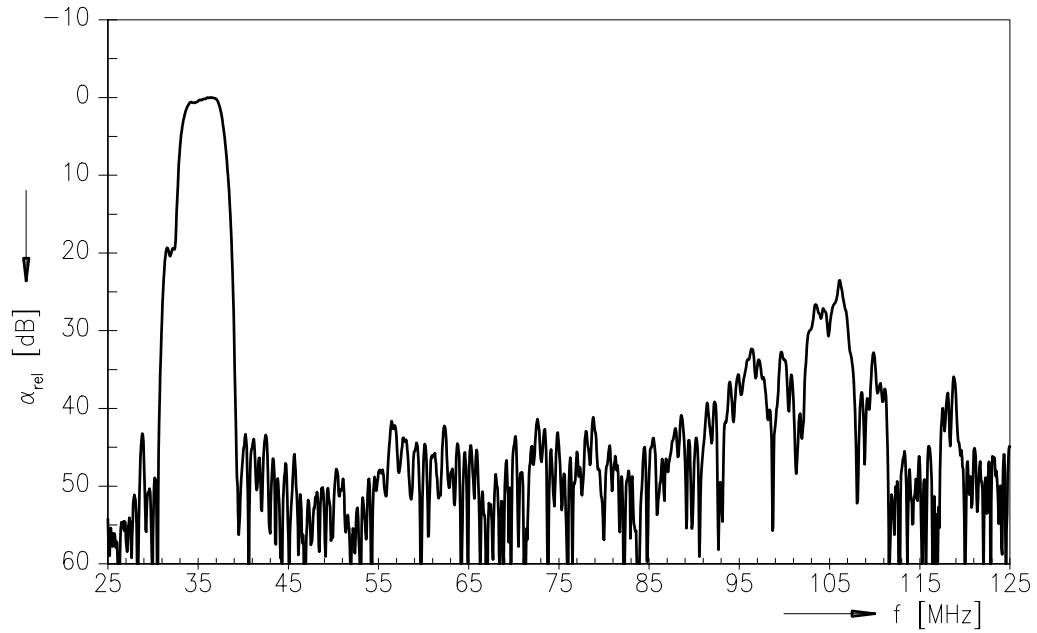
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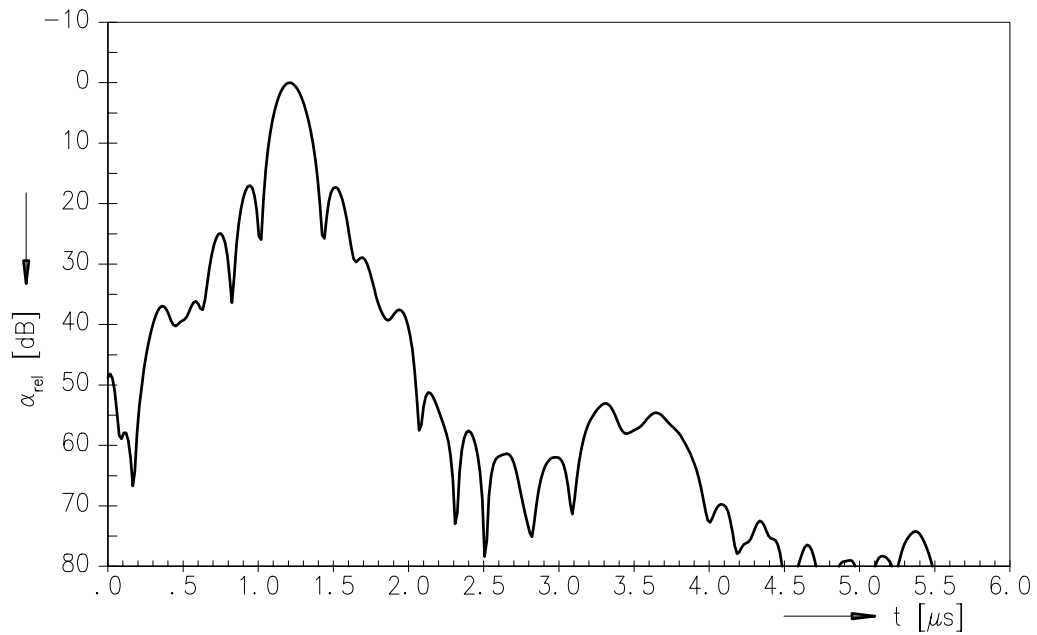
38,00 MHz

Data Sheet

Frequency response D/K mode (switching input pin 10 connected to ground input pin 2)



Time domain response D/K mode







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