



# SAW Components

Data Sheet X 6922 D

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The graphic is rendered in shades of gray and white, giving it a metallic or high-tech appearance.



## SAW Components

X 6922 D

## Bandpass Filter

38,912 MHz

### Data Sheet

Duroplast package **SIP5D**

#### Standard

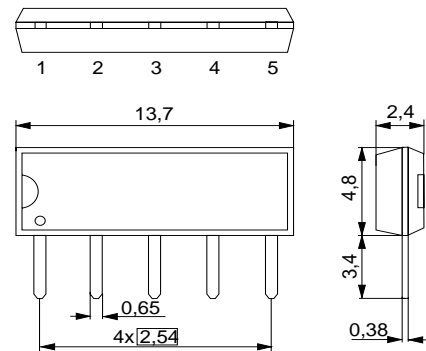
- DAB

#### Features

- IF filter for Digital Audio Broadcasting
- Constant group delay
- Standard IC package

#### Terminals

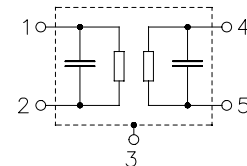
- Tinned CuFe alloy



Dimensions in mm, approx. weight 0,5 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
X 6922 D	B39389-X6922-N201	C61157-A1-A21	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

Reference temperature:  $T_A = 25 (45) ^\circ \text{C}$   
Terminating source impedance:  $Z_S = 50 \Omega$   
Terminating load impedance:  $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		min.	typ.	max.	
<b>Center frequency</b> (center between 10 dB points)	$f_c$	(38,874)	(38,912)	(38,950)	MHz
<b>Insertion attenuation</b> Reference level for the following data	$\alpha$				
38,922 (38,912) MHz		17,2	18,7	20,2	dB
<b>Pass bandwidth</b> $\alpha_{\text{rel}} \leq 3 \text{ dB}$ $\alpha_{\text{rel}} \leq 30 \text{ dB}$	$B_{3\text{dB}}$ $B_{30\text{dB}}$	—	1,5 2,7	—	MHz MHz
<b>Relative attenuation</b> 36,27 ... 37,31 (36,26 ... 37,30) MHz 40,61 ... 41,41 (40,60 ... 41,40) MHz Lower sidelobe (incl. second adjacent channel) 30,01 ... 36,27 (30,00 ... 36,26) MHz Upper sidelobe (incl. second adjacent channel) 41,41 ... 50,01 (41,40 ... 50,00) MHz	$\alpha_{\text{rel}}$	38,0 38,0 43,0 42,0	41,0 44,0 50,0 47,0	— — — —	dB dB dB dB
<b>Reflected wave signal suppression</b> 1,6 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 38,922 MHz)		42,0	52,0	—	dB
<b>Group delay ripple (p-p)</b> 38,12 ... 39,72 (38,11 ... 39,71) MHz	$\Delta\tau$	—	35	—	ns
<b>Impedance</b> at 38,922 MHz Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$ Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		— —	1,0 $\parallel$ 25,3 0,9 $\parallel$ 15,0	— —	k $\Omega$ $\parallel$ pF k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-18	—	ppm/K



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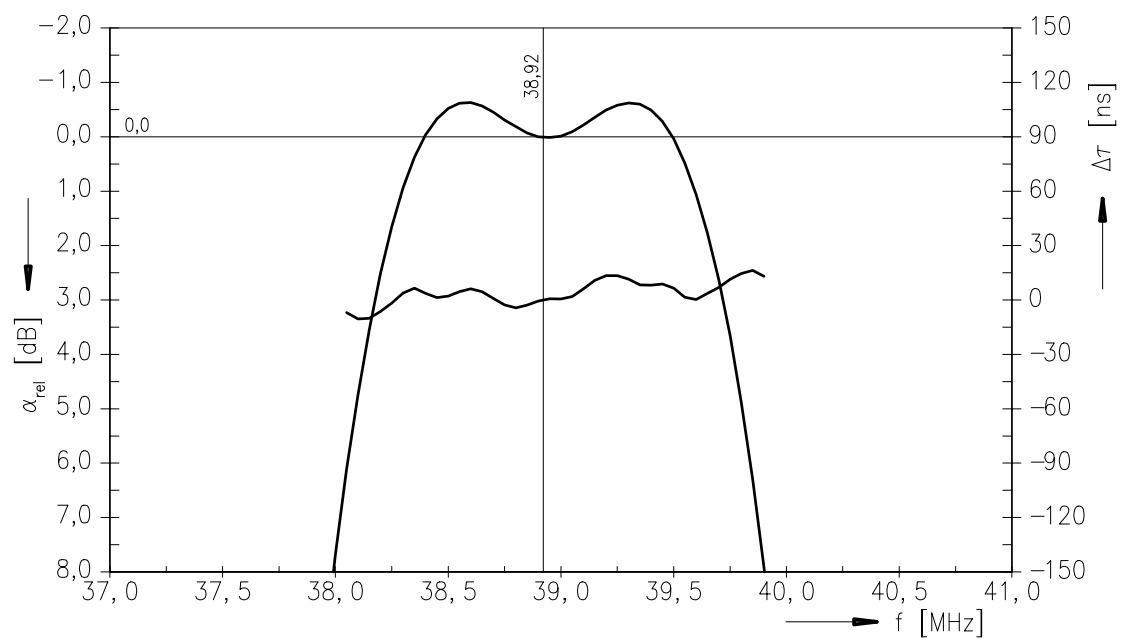
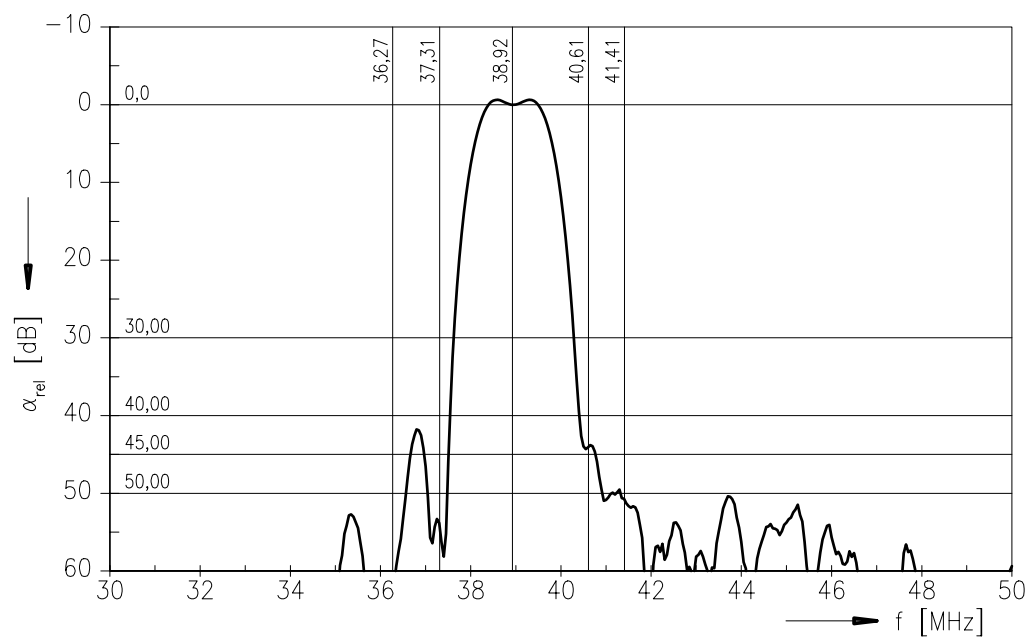
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Frequency response





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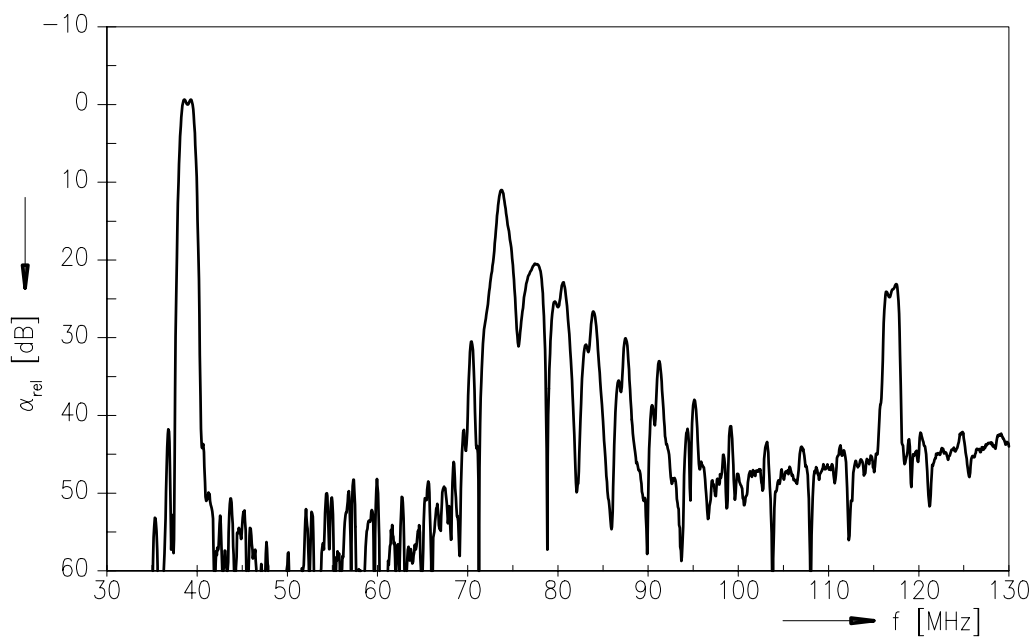
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Bandpass Filter

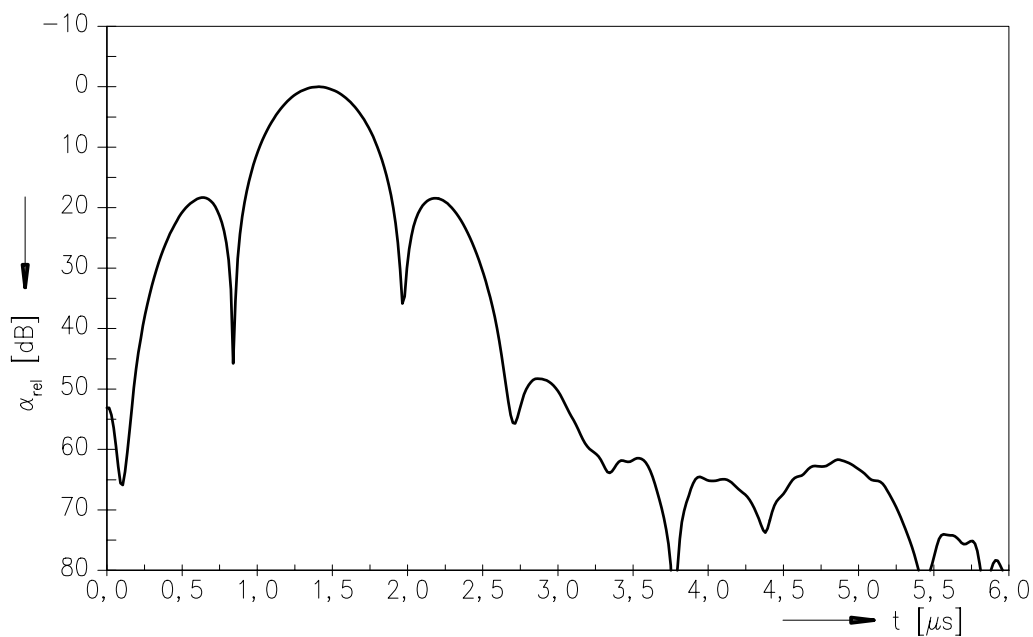
38,912 MHz

## Data Sheet

### Frequency response



### Time domain response





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