



SAW Components

Data Sheet X 6959 D

Data Sheet

A large, stylized EPCOS logo is superimposed over a grayscale image of a globe. The logo is rendered in a light, glowing white color, making it stand out against the darker background of the globe.



SAW Components	X 6959 D
Bandpass Filter	44,00 MHz

Data Sheet

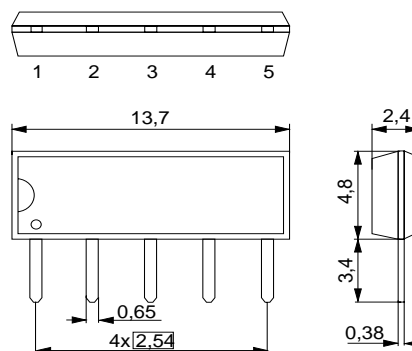
Duroplast package **SIP5D**

Features

- Low group delay ripple
- Standard IC package

Terminals

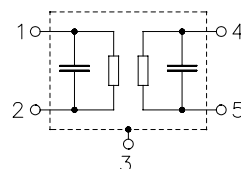
- Tinned CuFe alloy



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 6959 D	B39440-X6959-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: $T_A = 25\text{ °C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Center frequency (center between 10 dB points)	f_C	—	44,00	—	MHz
Insertion attenuation Reference level for the following data	α 44,00 MHz	13,3	14,8	16,3	dB
Pass bandwidth $\alpha_{\text{rel}} \leq 3\text{ dB}$	$B_{3\text{dB}}$	—	1,7	—	MHz
$\alpha_{\text{rel}} \leq 6\text{ dB}$	$B_{6\text{dB}}$	—	2,0	—	MHz
$\alpha_{\text{rel}} \leq 30\text{ dB}$	$B_{30\text{dB}}$	—	2,9	—	MHz
Relative attenuation Lower sidelobe	α_{rel}				
	35,00 ... 41,30 MHz	38,0	43,0	—	dB
	41,30 ... 42,30 MHz	36,0	43,0	—	dB
Upper sidelobe					
	45,80 ... 47,20 MHz	33,0	39,0	—	dB
	47,20 ... 55,00 MHz	39,0	45,0	—	dB
Group delay ripple (p-p) Aperture 50 kHz	$\Delta\tau$ 43,00 ... 45,00 MHz	—	40	—	ns
Impedance at 44,00 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,8 \parallel 12,8	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	0,9 \parallel 3,8	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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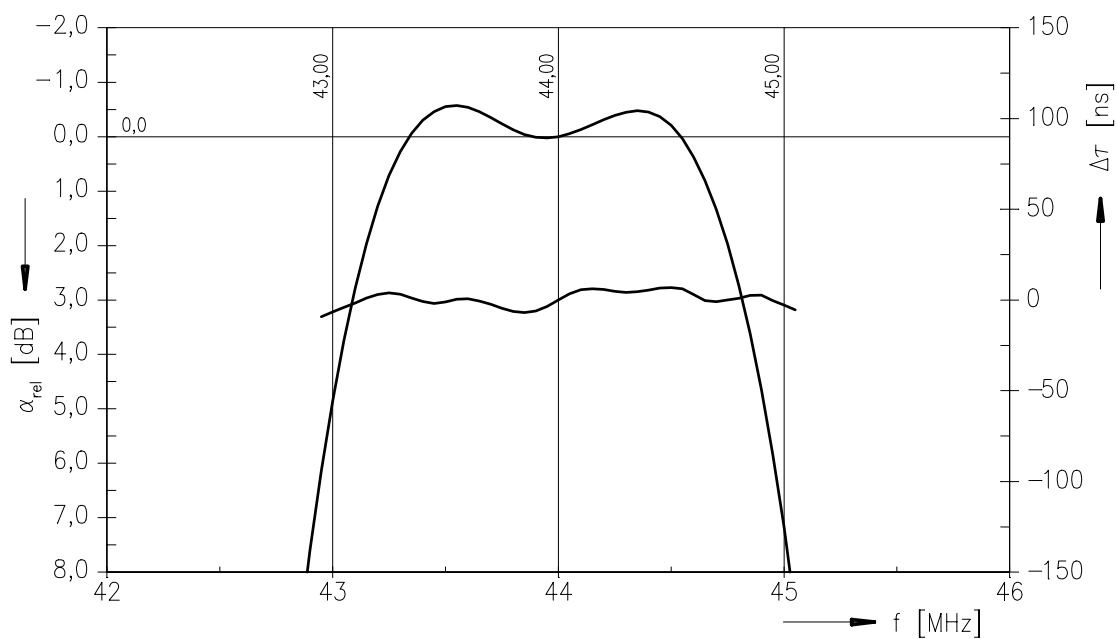
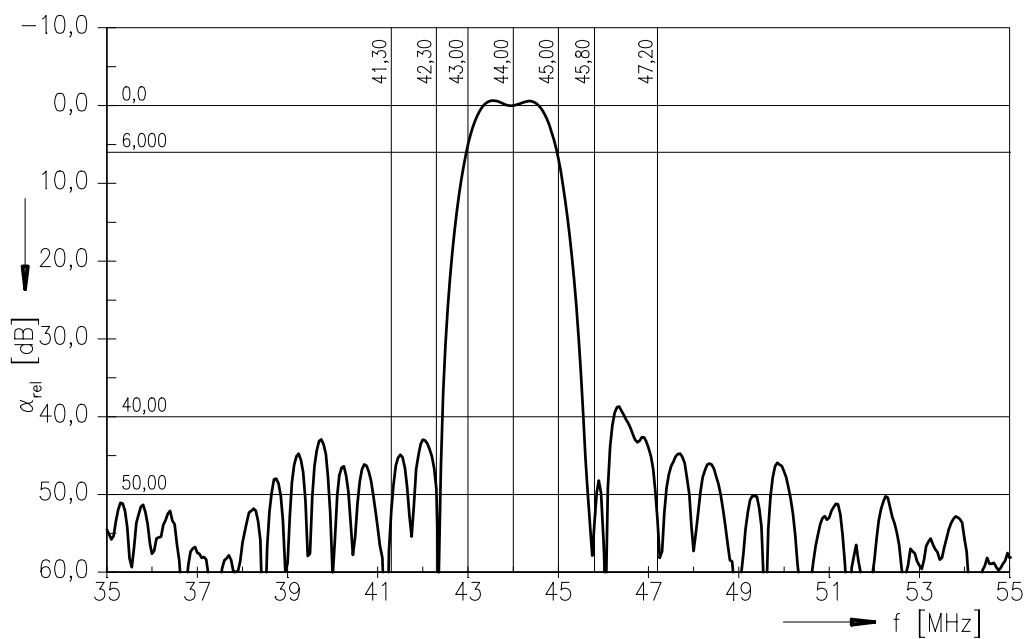
X 6959 D

Bandpass Filter

44,00 MHz

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Frequency response





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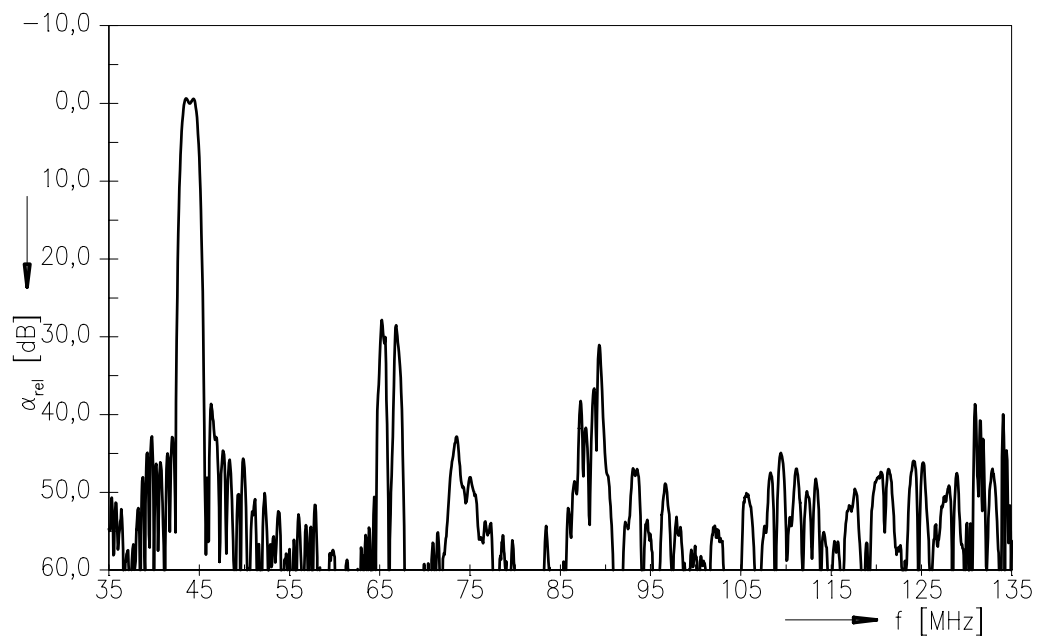
X 6959 D

Bandpass Filter

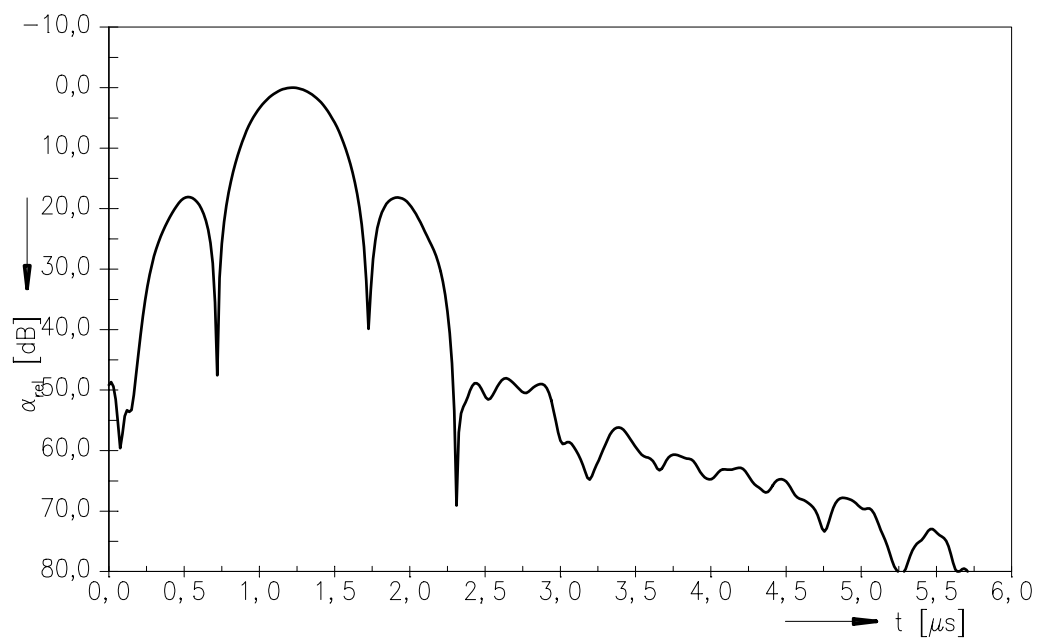
44,00 MHz

Data Sheet

Frequency response



Time domain response





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ished by EPCOS AG
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This brochure replaces the previous edition.

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