



SAW multimedia filters

Series/Type: X6941D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39440X6941N201		2011-01-14	2011-09-30	2012-09-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



SAW Components

X 6941 D

Bandpass Filter

44,00 MHz

Data Sheet

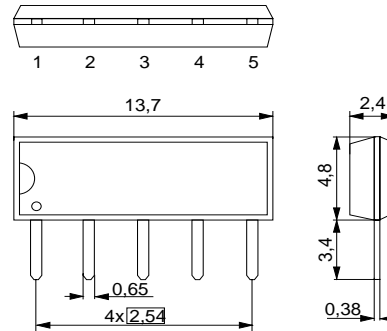
Standard

Duroplast package **SIP5D**

- HDTV

Features

- Constant group delay
- Optimized for cascade of two devices
- Optimized for balanced to balanced operation
- Standard IC package



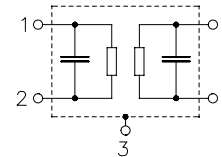
Terminals

- Tinned CuFe alloy

Dimensions in mm, approx. weight 0,5 g

Pin configuration

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



Type	Ordering code	Marking and package according to	Packing according to
X 6941 D	B39440-X6941-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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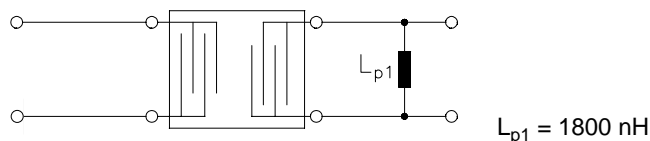
Data Sheet

Characteristics

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

		min.	typ.	max.	
Insertion attenuation	α				
Reference level for the following data	44,00 MHz	18,5	20,0	21,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
41,60 ... 46,40 MHz		—	0,4	—	dB
Relative attenuation	α_{rel}				
40,75 MHz		25,0	32,0	—	dB
41,31 MHz		1,1	1,6	2,1	dB
41,43 MHz		-0,4	0,3	1,0	dB
41,60 MHz		-0,4	0,1	0,6	dB
46,40 MHz		-0,4	0,1	0,6	dB
46,57 MHz		0,1	0,6	1,1	dB
46,69 MHz		1,5	2,0	2,5	dB
47,25 MHz		25,0	36,0	—	dB
Lower sidelobe 35,00 ... 39,10 MHz		34,0	42,0	—	dB
39,10 ... 40,35 MHz		27,0	32,0	—	dB
Upper sidelobe 47,65 ... 48,65 MHz		25,0	30,0	—	dB
48,65 ... 55,00 MHz		32,0	37,0	—	dB
Reflected wave signal suppression					
1,5 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 44,00 MHz)		42,0	56,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
41,31 ... 46,69 MHz		—	30	80	ns
Impedance at 44,00 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,9 \parallel 22,2	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	6,1 \parallel 5,7	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-18	—	ppm/K

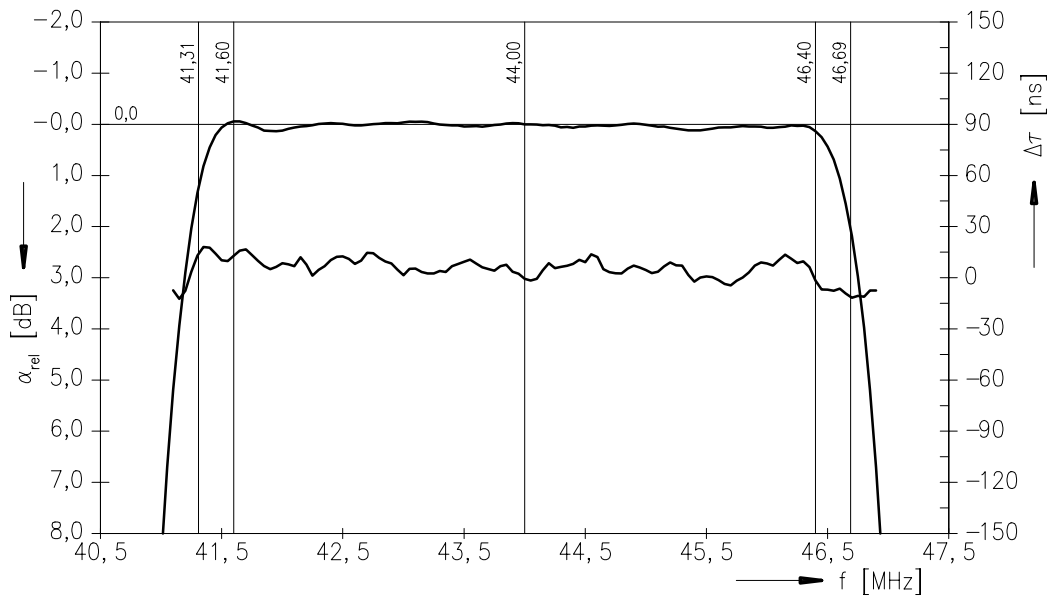
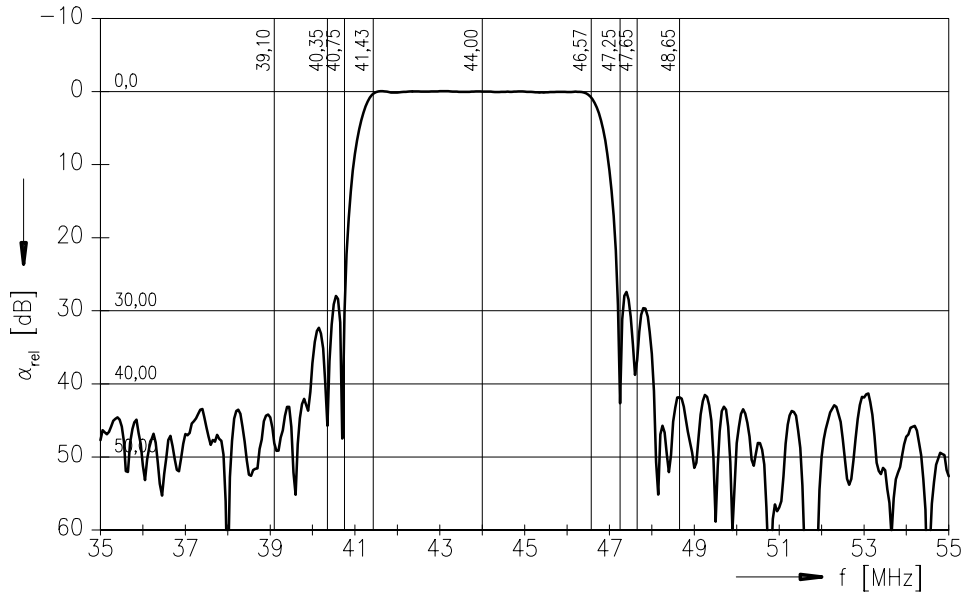
Matching network:





Data Sheet

Frequency response





SAW Components

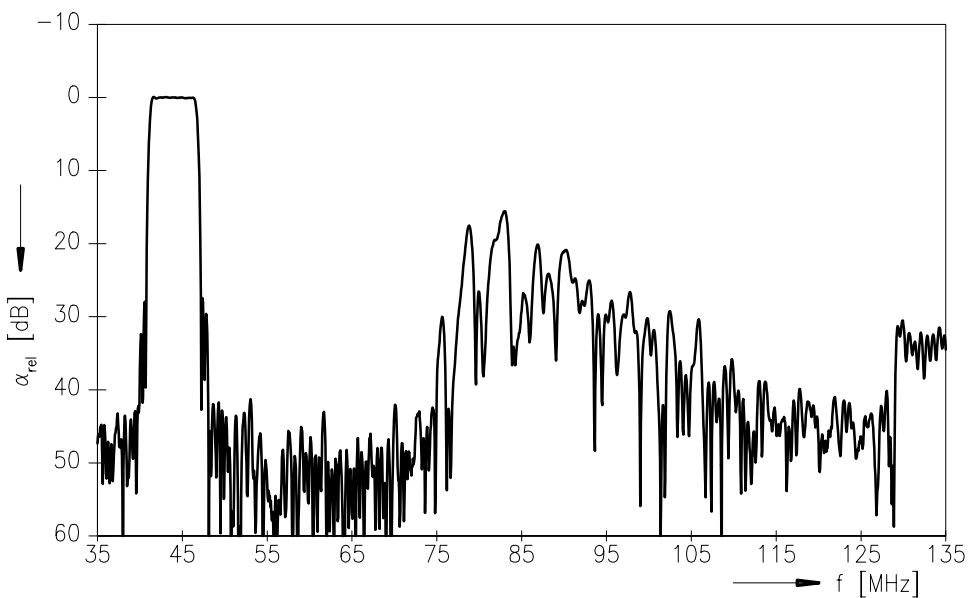
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Bandpass Filter

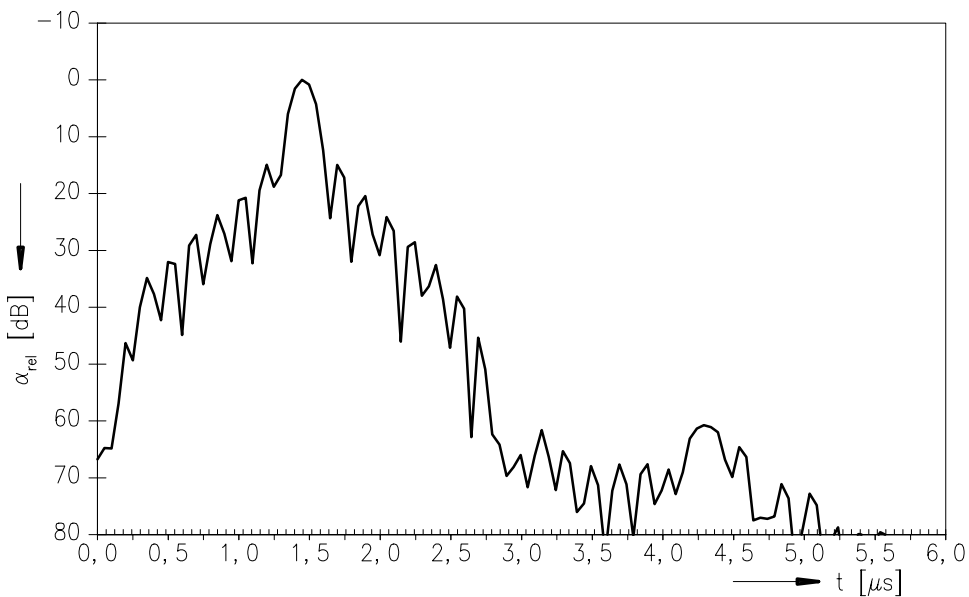
44,00 MHz

Data Sheet

Frequency response



Time domain response





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P.O. Box 80 17 09, D-81617 München

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This brochure replaces the previous edition.

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