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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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# SAW multimedia filters

## Series/Type: X6964D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39438X6964N201		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](http://www.epcos.com/sales).

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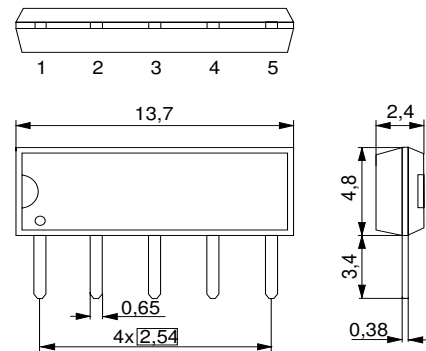
**SAW Components**
**X 6964 D**
**Bandpass Filter**
**43,75 MHz**
**Data Sheet**

 Duroplast package **SIP5D**
**Features**

- IF filter for digital cable TV
- Standard IC package

**Terminals**

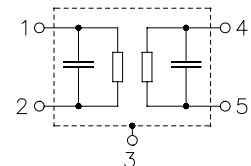
- Tinned CuFe alloy



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 6964 D	B39438-X6964-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

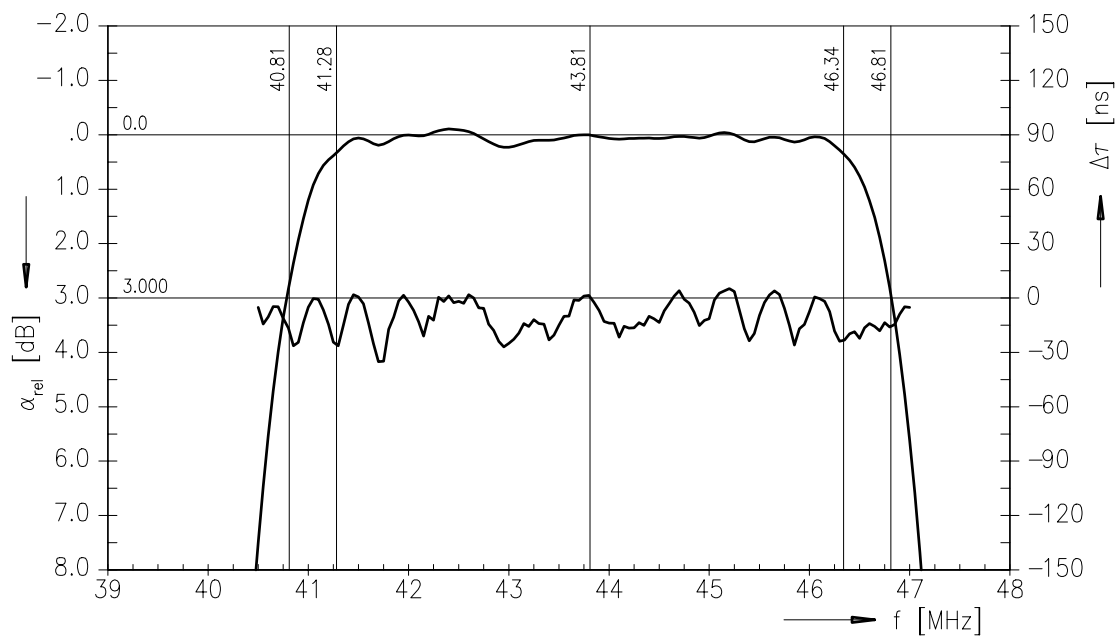
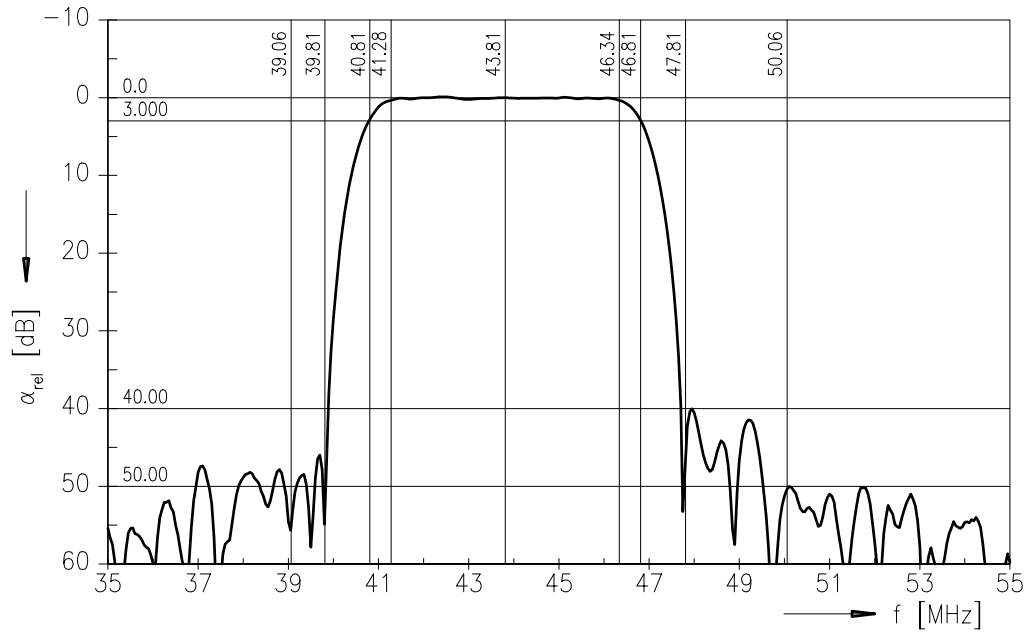
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**Characteristics**

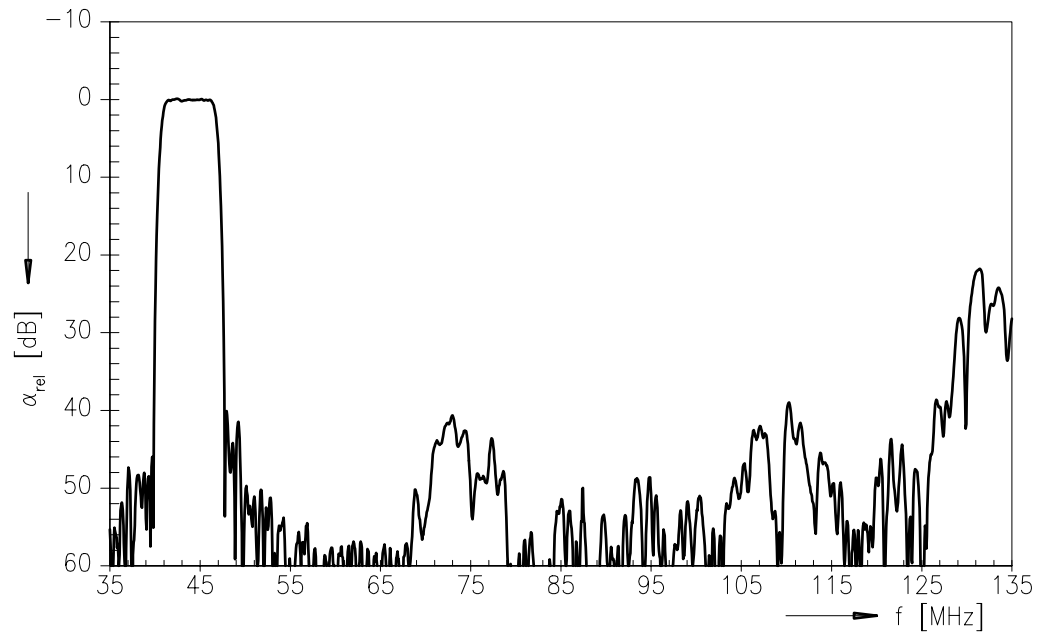
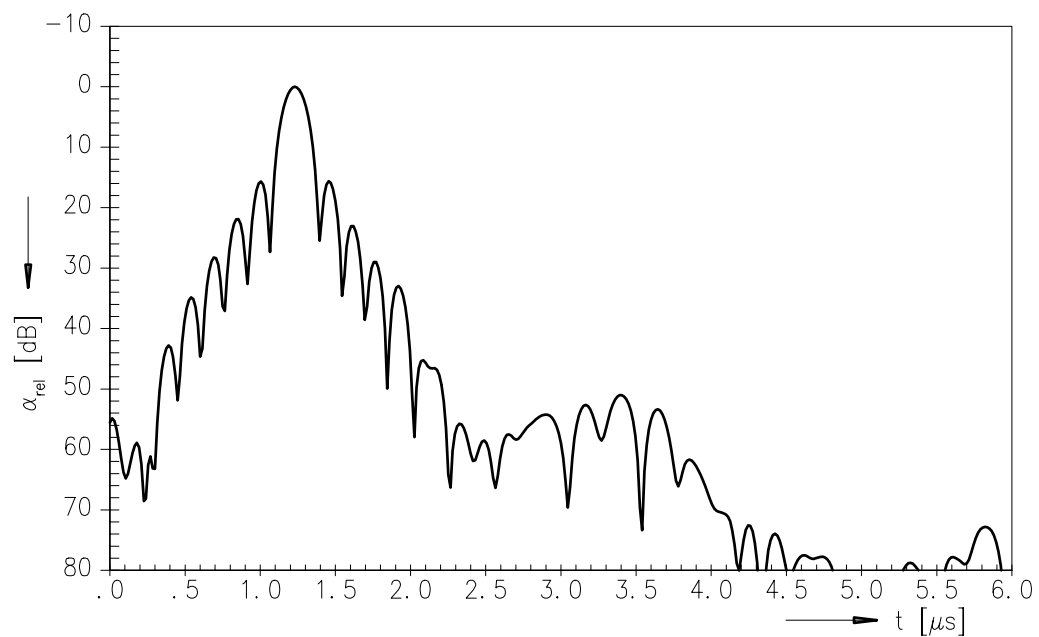
Reference temperature:  $T_A = 25 (45) \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b> (center between 10 dB points)	$f_C$	(43,68)	(43,75)	(43,82)	MHz
<b>Insertion attenuation</b> Reference level for the following data	$\alpha$ 43,81 (43,75) MHz	13,3	14,8	16,3	dB
<b>Pass bandwidth</b> $\alpha_{\text{rel}} \leq 3\text{dB}$	$B_{3\text{dB}}$	—	6,0	—	MHz
$\alpha_{\text{rel}} \leq 30\text{dB}$	$B_{30\text{dB}}$	—	7,6	—	MHz
<b>Relative attenuation</b>	$\alpha_{\text{rel}}$				
	41,28 (41,22) MHz	—	0,3	—	dB
	46,34 (46,28) MHz	-0,8	0,2	1,2	dB
	40,81 (40,75) MHz	1,5	2,7	3,9	dB
	46,81 (46,75) MHz	1,5	2,7	3,9	dB
	39,81 (39,75) MHz	38,0	53,0	—	dB
	47,81 (47,75) MHz	37,0	48,0	—	dB
<b>Lower sidelobe</b>					
	35,06 ... 39,06 (35,00 ... 39,00) MHz	42,0	48,0	—	dB
	39,06 ... 39,81 (39,00 ... 39,75) MHz	37,0	46,0	—	dB
<b>Upper sidelobe</b>					
	47,81 ... 50,06 (47,75 ... 50,00) MHz	36,0	41,0	—	dB
	50,06 ... 55,06 (50,00 ... 55,00) MHz	42,0	48,0	—	dB
<b>Reflected wave signal suppression</b> 1,3 $\mu\text{s}$ ... 6,0 $\mu\text{s}$ after main pulse (test pulse 250 ns, carrier frequency 43,81 MHz)		42,0	52,0	—	dB
<b>Feedthrough signal suppression</b> 1,3 $\mu\text{s}$ ... 1,2 $\mu\text{s}$ before main pulse (test pulse 250 ns, carrier frequency 43,81 MHz)		50,0	56,0	—	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	40	—	ns
<b>Impedance at 43,81 MHz</b>					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,1 $\parallel$ 16,4	—	$\text{k}\Omega \parallel \text{pF}$
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	1,1 $\parallel$ 5,0	—	$\text{k}\Omega \parallel \text{pF}$
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K

Data Sheet

Frequency response



**Data Sheet**
**Frequency response**

**Time domain response**


**SAW Components**

**X 6964 D**

**Bandpass Filter**

**43,75 MHz**

**Data Sheet**

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This brochure replaces the previous edition.

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