SAW multimedia filters

Series/Type: X6964D

The following products presented in this data sheet are being withdrawn.

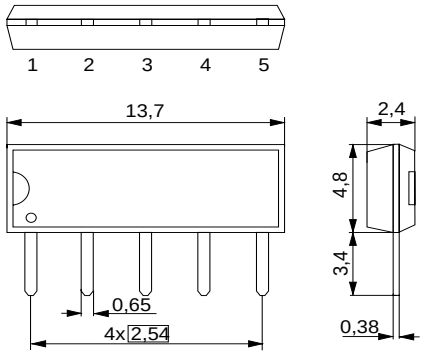
Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39438X6964N201		2011-01-14	2011-09-30	2012-09-30

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.

Duroplast package **SIP5D**

Features

- IF filter for digital cable TV
- Standard IC package



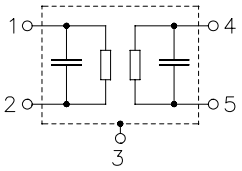
Terminals

- 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

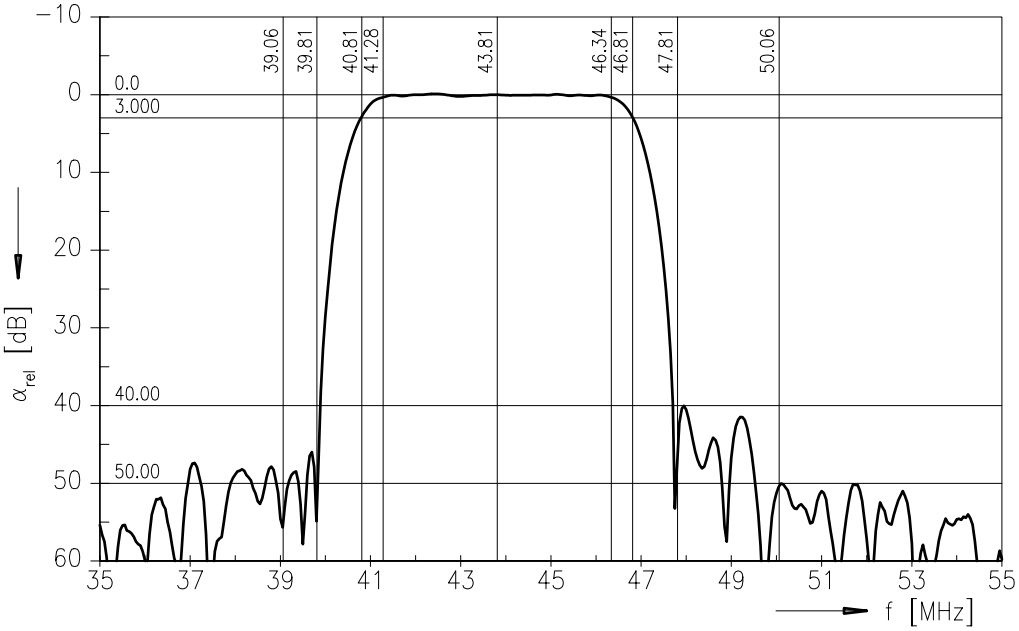
Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

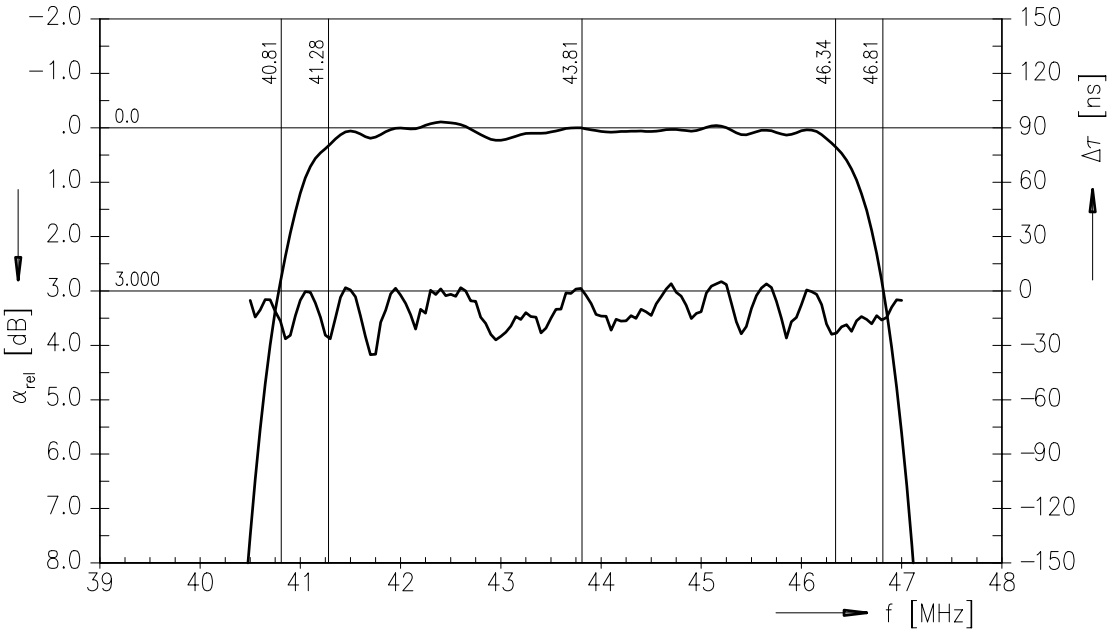
Characteristics

Reference temperature: T_A = 25 (45) ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

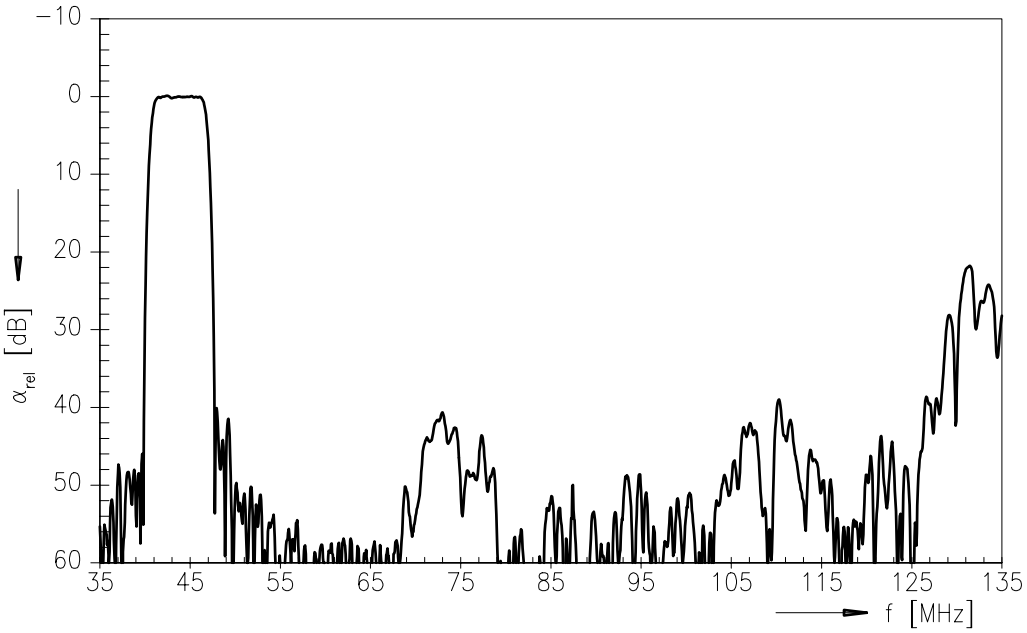
		min.	typ.	max.	
Center frequency (center between 10 dB points)	f_C	(43,68)	(43,75)	(43,82)	MHz
Insertion attenuation	α				
Reference level for the following data 43,81 (43,75) MHz		13,3	14,8	16,3	dB
Pass bandwidth					
$\alpha_{rel} \leq$ 3dB	B_{3dB}	—	6,0	—	MHz
$\alpha_{rel} \leq$ 30dB	B_{30dB}	—	7,6	—	MHz
Relative attenuation	α_{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
Lower sidelobe					
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
Upper sidelobe					
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
Reflected wave signal suppression					
1,3 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 43,81 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,3 µs ... 1,2 µs before main pulse (test pulse 250 ns, carrier frequency 43,81 MHz)		50,0	56,0	—	dB
Group delay ripple (p-p)	Δτ				
40,81 ... 46,81 (40,75 ... 46,75) MHz		—	40	—	ns
Impedance at 43,81 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,1 ‖16,4	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,1 ‖ 5,0	—	kΩ || pF
Temperature coefficient of frequency	TC_f	—	–72	—	ppm/K

Frequency response

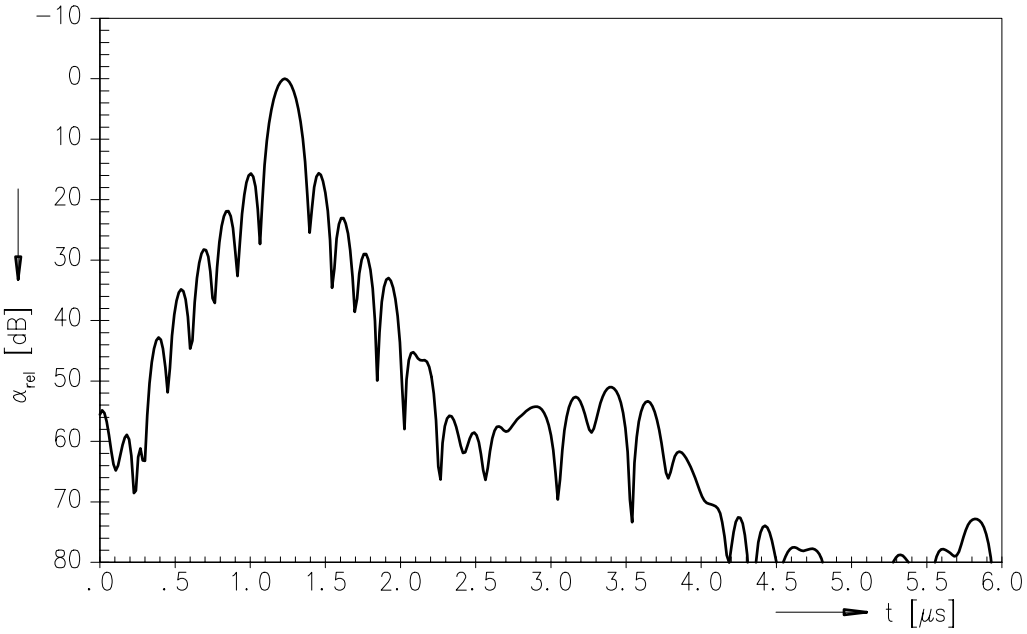




Frequency response



Time domain response



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This brochure replaces the previous edition.

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