EPCOS

SAW Components

Data Sheet X 6964 M

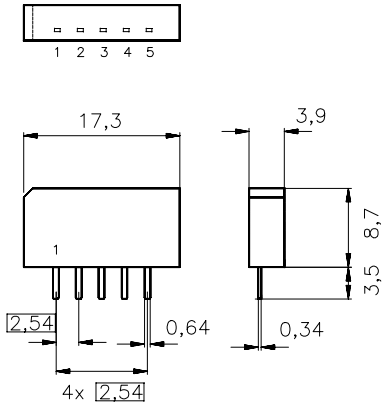
Plastic package **SIP5K**

Features

- IF filter for digital cable TV

Terminals

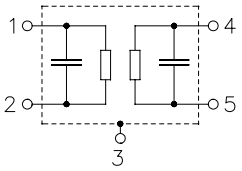
- Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 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 M	B39438-X6964-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

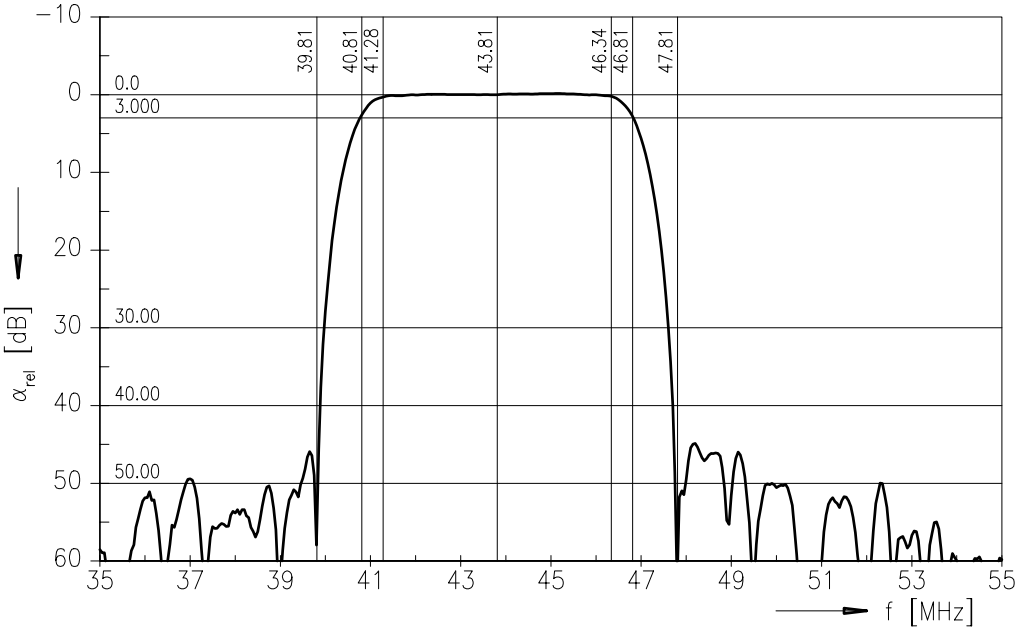
Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

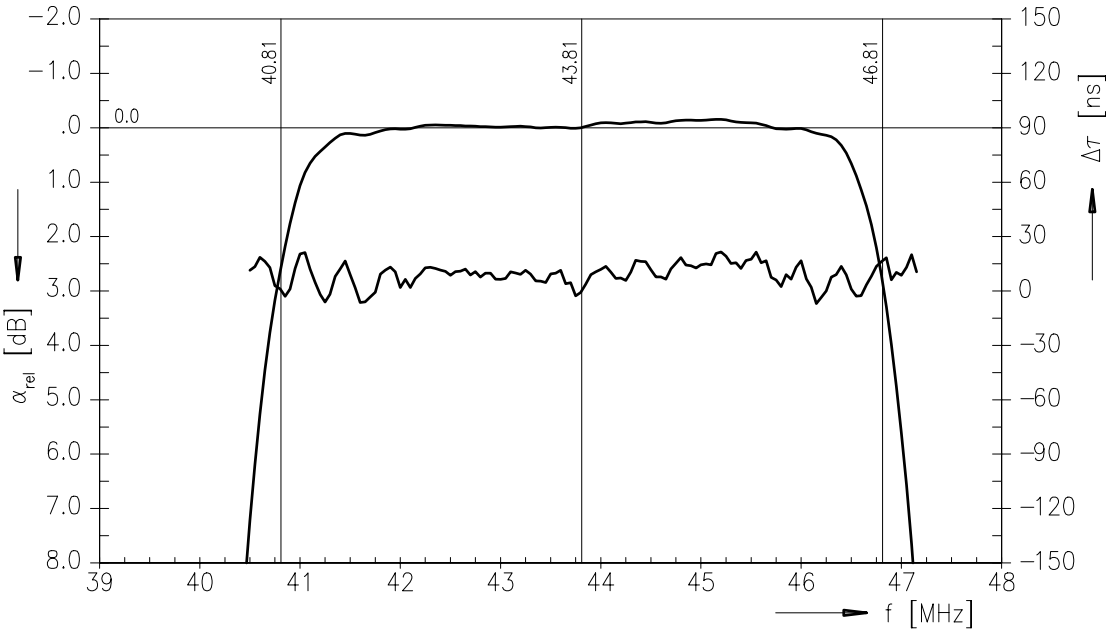
Characteristics

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

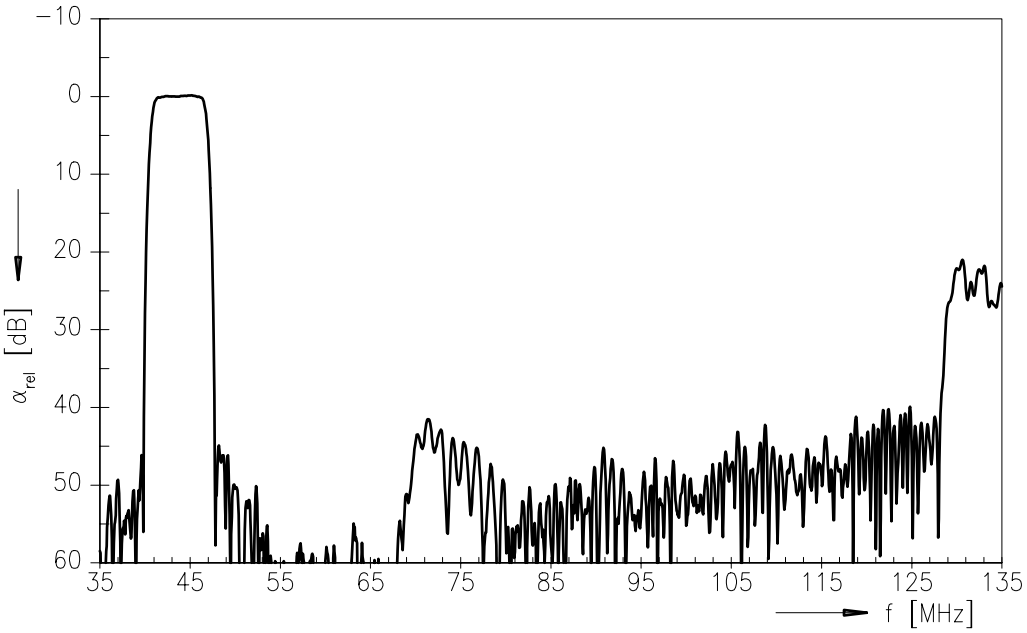
		min.	typ.	max.	
Center frequency (center between 3 dB points)	f_C	—	43,75	—	MHz
Insertion attenuation	α				
Reference level for the following data 43,81 (43,75) MHz		13,3	14,8	16,3	dB
Pass bandwith					
α_{rel} ≤3 dB	B_{3dB}	—	6,0	—	MHz
α_{rel} ≤30 dB	B_{30dB}	—	7,6	—	MHz
Relative attenuation	α_{rel}				
41,28 (41,22) MHz		–0,8	0,2	1,2	dB
46,34 (46,28) MHz		–0,7	0,3	1,3	dB
40,81 (40,75) MHz		1,3	2,5	3,7	dB
46,81 (46,75) MHz		1,6	2,8	4,0	dB
40,31 (40,25) MHz		9,0	12,0	—	dB
47,31 (47,25) MHz		9,0	13,0	—	dB
39,81 (39,75) MHz		38,0	50,0	—	dB
47,81 (47,75) MHz		38,0	52,0	—	dB
Lower sidelobe					
35,06 ... 39,81 (35,00 ... 39,75) MHz		38,0	46,0	—	dB
Upper sidelobe					
47,81 ... 55,06 (47,75 ... 55,00) MHz		38,0	44,0	—	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				
Aperture 50 kHz					
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

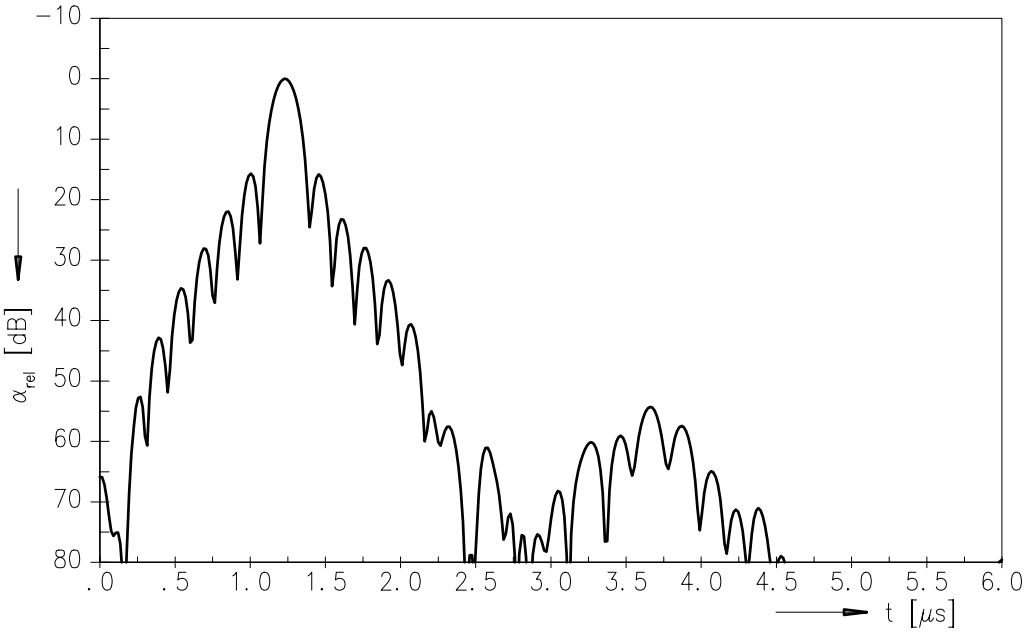




Frequency response



Time domain response



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