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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 Components*

*Data Sheet X 6964 M*

Data Sheet

A large, stylized, 3D-rendered graphic of the word "EPCOS" in white, set against a dark, textured background. The letters are thick and have a slight shadow, giving them a three-dimensional appearance. The background features a faint, circular pattern that resembles a globe or a complex circuit board layout.

EPCOS



**SAW Components**

**X 6964 M**

**Bandpass Filter**

**43,75 MHz**

Data Sheet

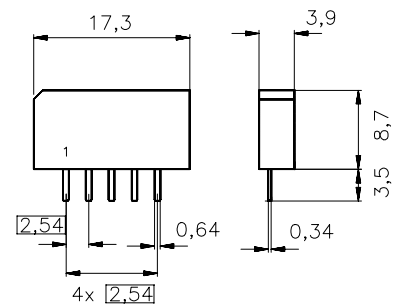
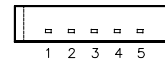
Plastic package **SIP5K**

**Features**

- IF filter for digital cable TV

**Terminals**

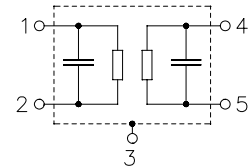
- Tinned CuFe alloy



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


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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:  $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		min.	typ.	max.	
<b>Center frequency</b> (center between 3 dB points)	$f_C$	—	43,75	—	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> 41,28 (41,22) MHz	$\alpha_{\text{rel}}$	-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
<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> Aperture 50 kHz	$\Delta\tau$	—	40	—	ns
<b>Impedance at 43,81 MHz</b> Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$ Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	1,1 $\parallel$ 16,4 1,1 $\parallel$ 5,0	—	k $\Omega$ $\parallel$ pF k $\Omega$ $\parallel$ pF
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-72	—	ppm/K



SAW Components

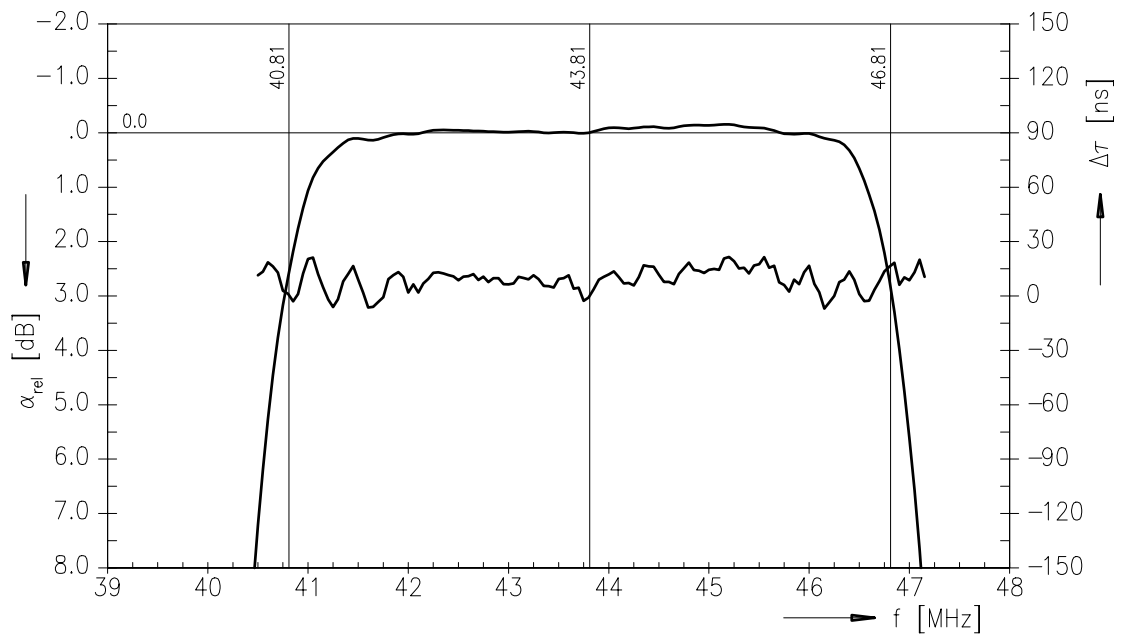
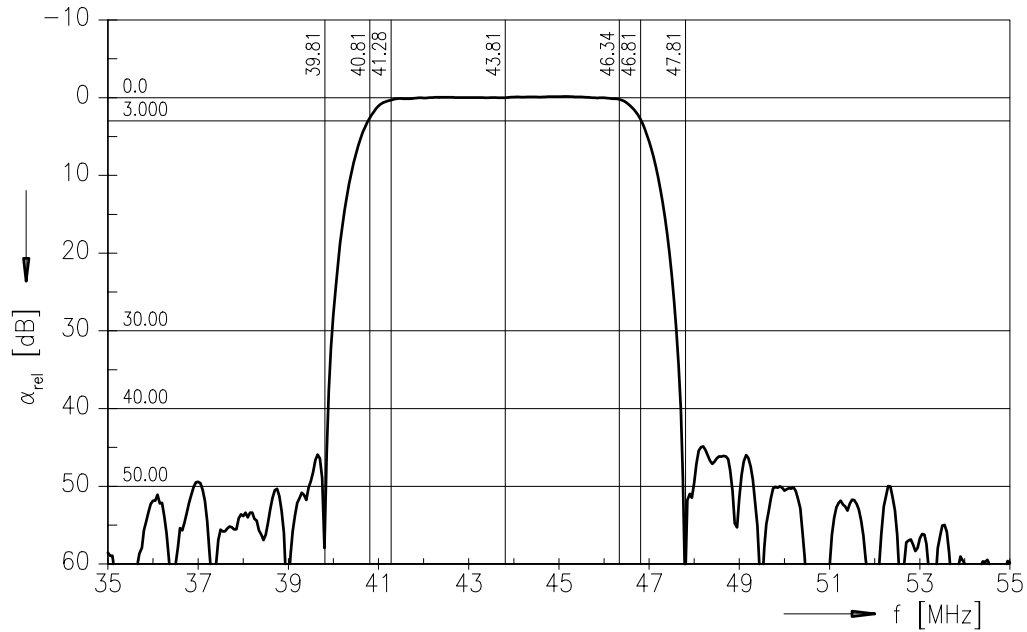
X 6964 M

Bandpass Filter

43,75 MHz

Data Sheet

Frequency response





SAW Components

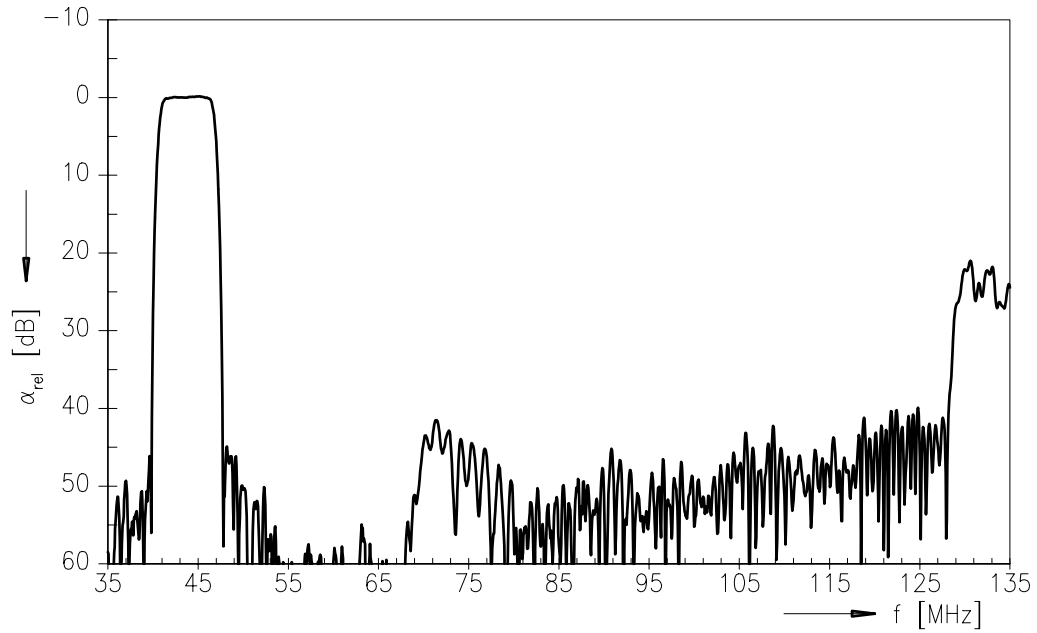
X 6964 M

Bandpass Filter

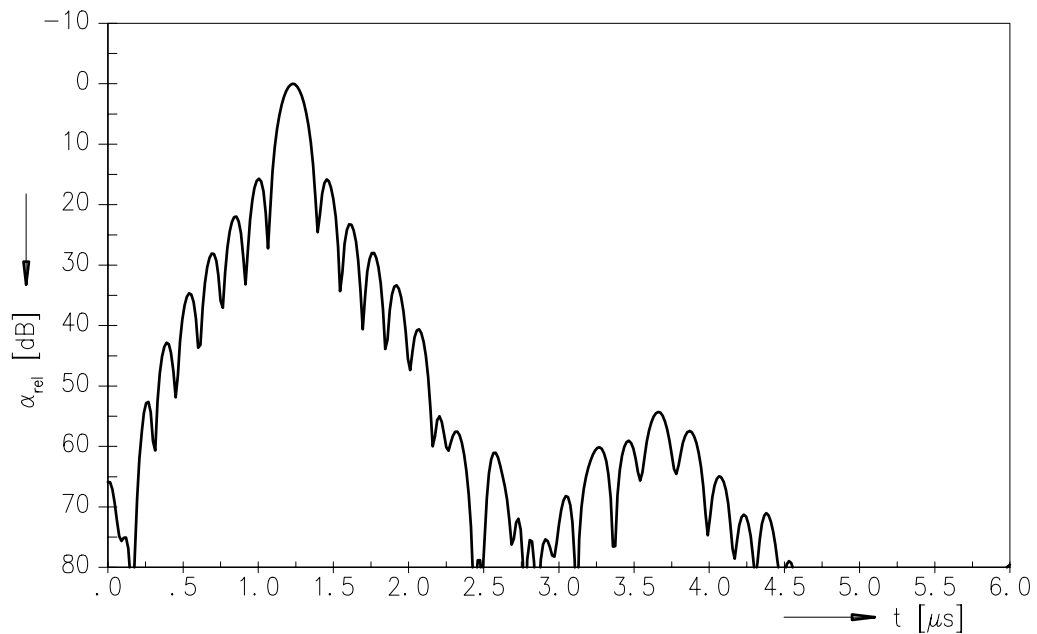
43,75 MHz

Data Sheet

Frequency response



Time domain response





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