



SAW COMPONENTS

Series/Type: **K3352K**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39380K3352K100	K3964M + K9358M	2008-01-18	2008-06-30	2008-09-30

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

K 3352 K

IF Filter for Quasi/Split Sound Applications

38,00 MHz

Data Sheet

Standard

- B/G
- D/K
- I

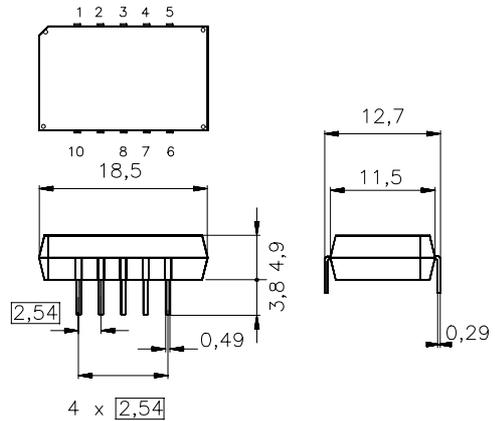
Features

- TV IF filter for quasi/split sound applications (separate picture and sound channel)
- Picture channel with Nyquist slope and sound suppression
- Customized group delay predistortion
- Sound channel with one passband for sound carriers between 31,50 MHz and 32,50 MHz
- Suitable for CENELEC EN 55020

Terminals

- Tinned CuFe alloy

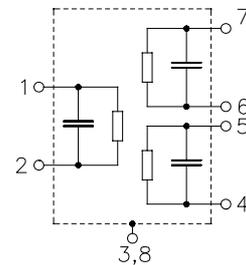
Plastic package **DIP10K**



Dimensions in mm, approx. weight 1,8 g

Pin configuration

- 1 Input
- 2 Input - ground
- 3; 8 Chip carrier - ground
- 4; 5 Output - sound
- 6; 7 Output - picture
- 9 Free
- 10 Not connected



Type	Ordering code	Marking and package according to	Packing according to
K 3352 K	B39380-K3352-K100	C61157-A2-A3	F61074-V8068-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 of picture channel

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

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	36,50 MHz	12,1	13,6	15,1	dB
Relative attenuation					
	α_{rel}				
Picture carrier	38,00 MHz	5,4	6,4	7,4	dB
Color carrier	33,57 MHz	1,8	2,8	3,8	dB
Sound carrier	31,50 MHz	44,0	52,0	—	dB
	32,50 MHz	39,0	54,0	—	dB
Adjacent picture carrier	30,00 MHz	43,0	52,0	—	dB
	31,00 MHz	48,0	56,0	—	dB
Adjacent sound carrier	39,50 MHz	43,0	53,0	—	dB
	40,00 MHz	44,0	52,0	—	dB
	39,26 MHz	39,0	46,0	—	dB
Lower sidelobe	25,00 ... 30,00 MHz	40,0	50,0	—	dB
Upper sidelobe	40,00 ... 45,00 MHz	38,0	45,0	—	dB
Reflected wave signal suppression					
1,2 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 36,50 MHz)		—	56,0	—	dB
Group delay predistortion					
(reference frequency 38,00 MHz)					
	$\Delta\tau$				
	37,00 MHz	—	30	—	ns
	33,57 MHz	—	-22	—	ns
Impedance at 36,50 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,0 \parallel 22,0	—	k Ω \parallel pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,7 \parallel 4,3	—	k Ω \parallel pF
Temperature coefficient of frequency					
	TC_f	—	-72	—	ppm/K



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Characteristics of sound channel

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

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	31,50 MHz	12,3	13,8	15,3	dB
Relative attenuation					
	α_{rel}				
Sound carrier	32,50 MHz	0,7	1,7	2,7	dB
Picture carrier	38,00 MHz	37,0	42,0	—	dB
Color carrier	33,57 MHz	27,0	34,0	—	dB
Adjacent picture carrier	30,00 MHz	36,0	44,0	—	dB
	31,00 MHz	—	6,9	—	dB
Adjacent sound carrier	39,50 MHz	42,0	49,0	—	dB
	40,00 MHz	41,0	47,0	—	dB
Lower sidelobe	25,00 ... 30,00 MHz	32,0	37,0	—	dB
Upper sidelobe	38,00 ... 45,00 MHz	35,0	41,0	—	dB
Impedance at 31,50 MHz					
	Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$	—	2,1 3,9	—	k Ω pF
Temperature coefficient of frequency					
	TC_f	—	-72	—	ppm/K



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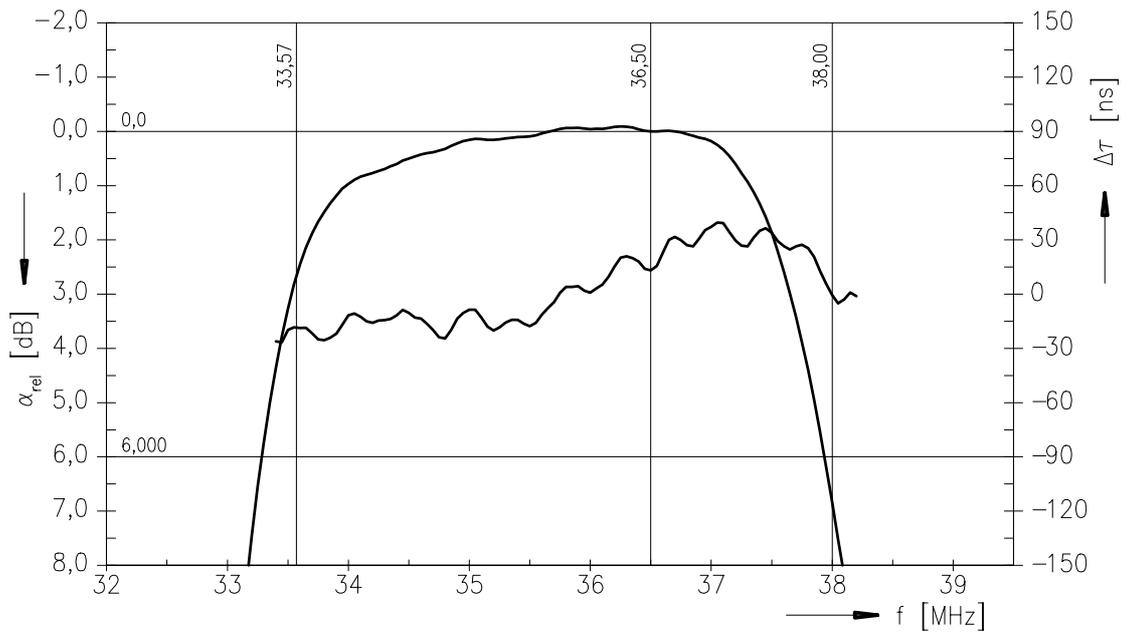
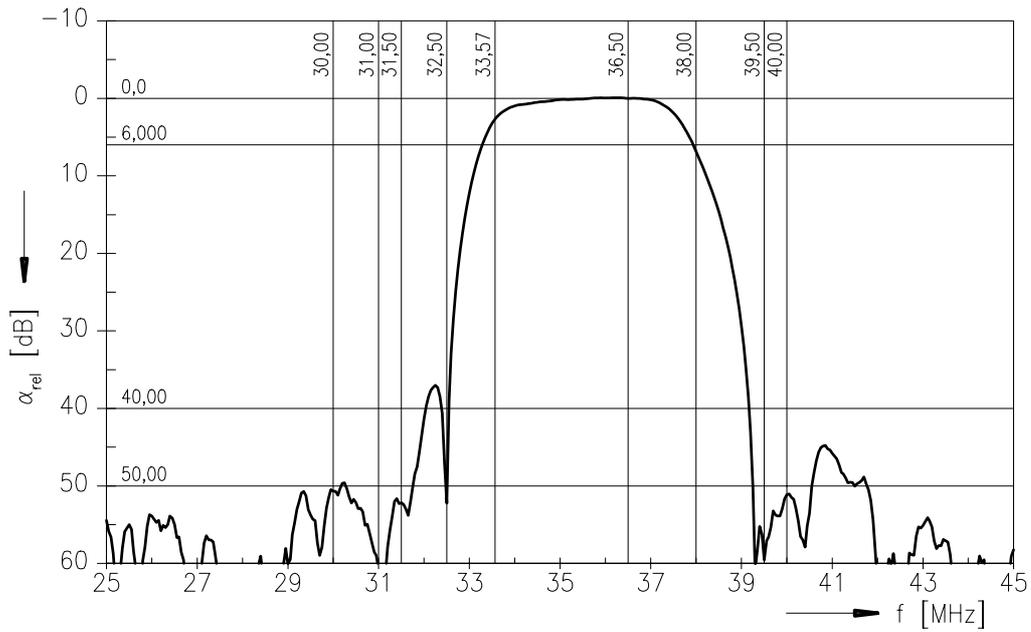
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Data Sheet

Frequency response of picture channel





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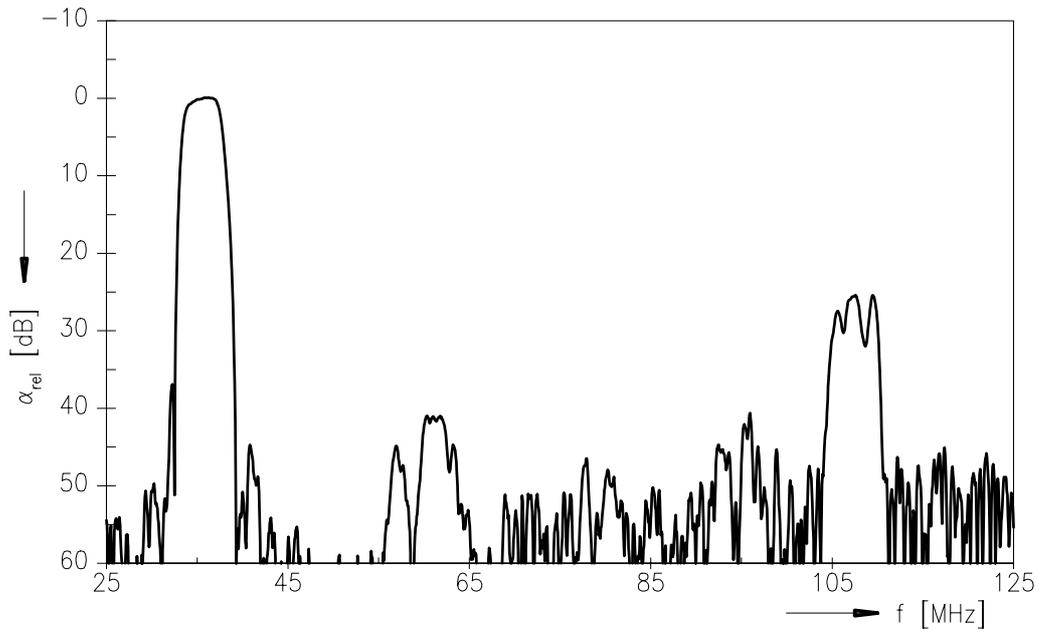
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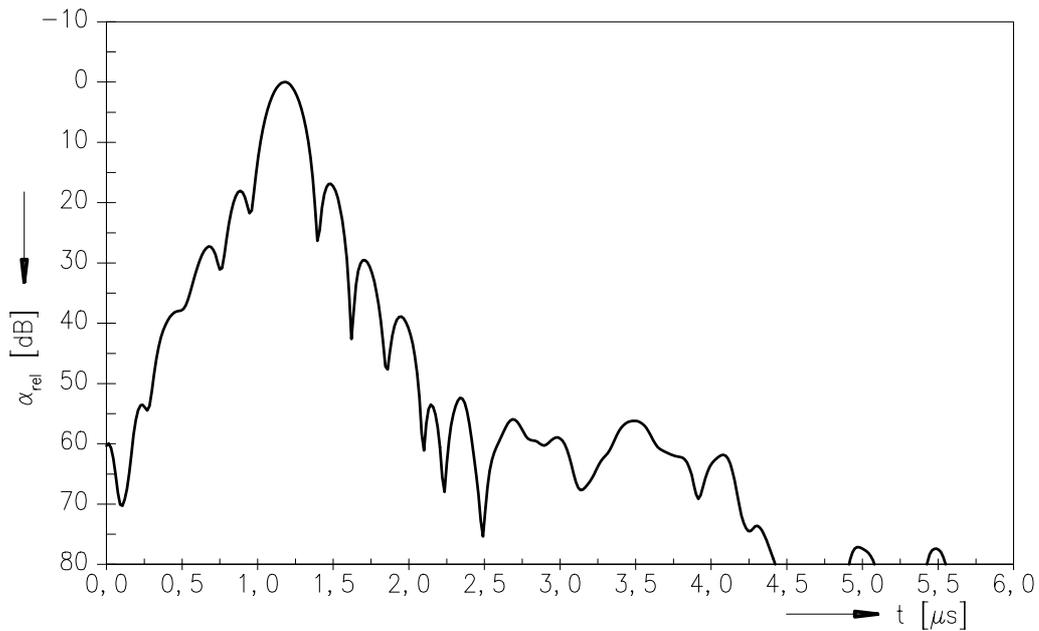
38,00 MHz

Data Sheet

Frequency response of picture channel



Time domain response of picture channel





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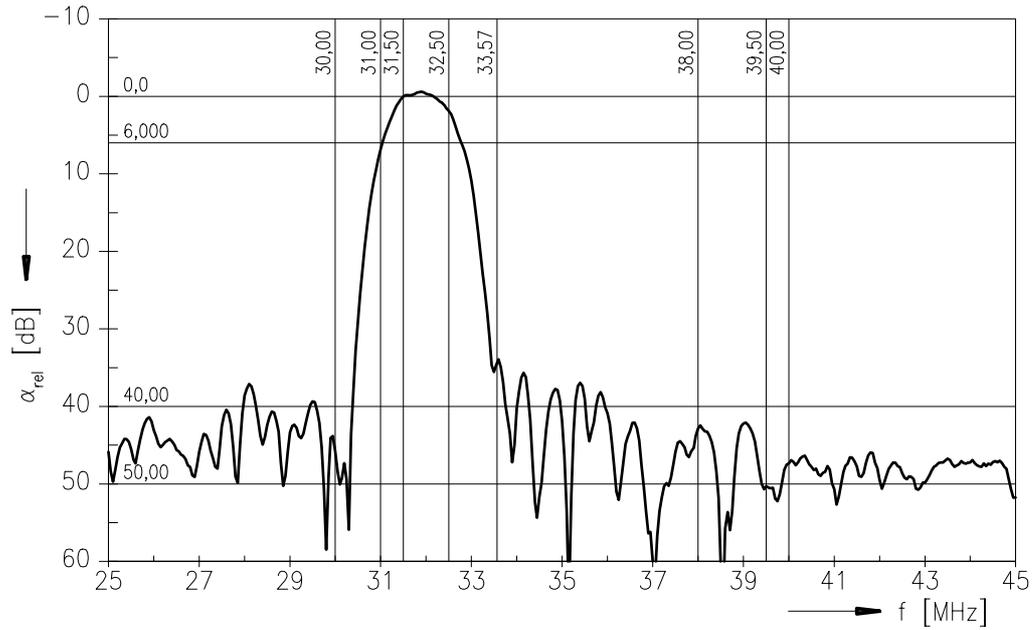
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