



SAW Components

Data Sheet K 9653 D





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K 9653 D

IF Filter for Audio Applications

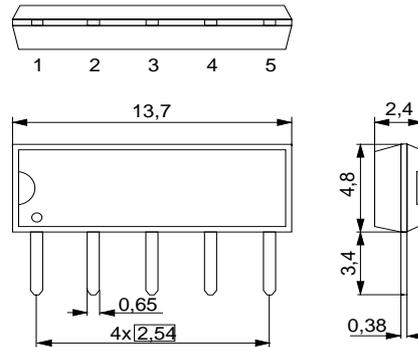
38,90 MHz

Data Sheet

Standard

Duroplast package **SIP5D**

- B/G
- D/K
- I
- M/N



Features

- TV IF audio filter with two channels
- Channel 1 (B/G, I, D/K) with one pass band for sound carriers between 32,35 MHz and 33,40 MHz
- Channel 2 (M/N) with one pass band for sound carrier at 34,40 MHz
- Standard IC package

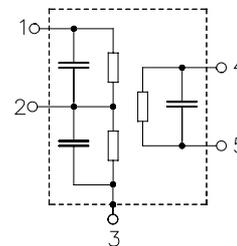
Terminals

typ. Dimensions in mm, approx. weight 0,5 g

- Tinned CuFe alloy

Pin configuration

- 1 Input
- 2 Switching Input
- 3 Input - ground / Chip carrier - ground
- 4 Output
- 5 Output



Type	Ordering code	Marking and package according to	Packing according to
K 9653 D	B39389-K9653-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 of channel 1 (switching pin 2 connected to ground)

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	33,40 MHz	14,7	16,2	17,7	dB
Relative attenuation					
	α_{rel}				
Sound carrier	32,35 MHz	-0,8	0,2	1,2	dB
	32,40 MHz	-0,9	0,1	1,1	dB
	32,90 MHz	-1,3	-0,3	0,7	dB
Picture carrier	38,90 MHz	41,0	50,0	—	dB
Color carrier	34,47 MHz	28,0	40,0	—	dB
Adjacent picture carrier	30,90 MHz	46,0	59,0	—	dB
Adjacent sound carrier	40,40 MHz	40,0	46,0	—	dB
	40,90 MHz	41,0	48,0	—	dB
	41,40 MHz	44,0	53,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz	40,0	45,0	—	dB
Upper sidelobe	38,90 ... 45,00 MHz	38,0	44,0	—	dB
Impedance at 33,40 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	1,2 \parallel 8,8	—	k Ω \parallel pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,0 \parallel 7,1	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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Characteristics of channel 2 (switching pin 2 connected to pin 1)

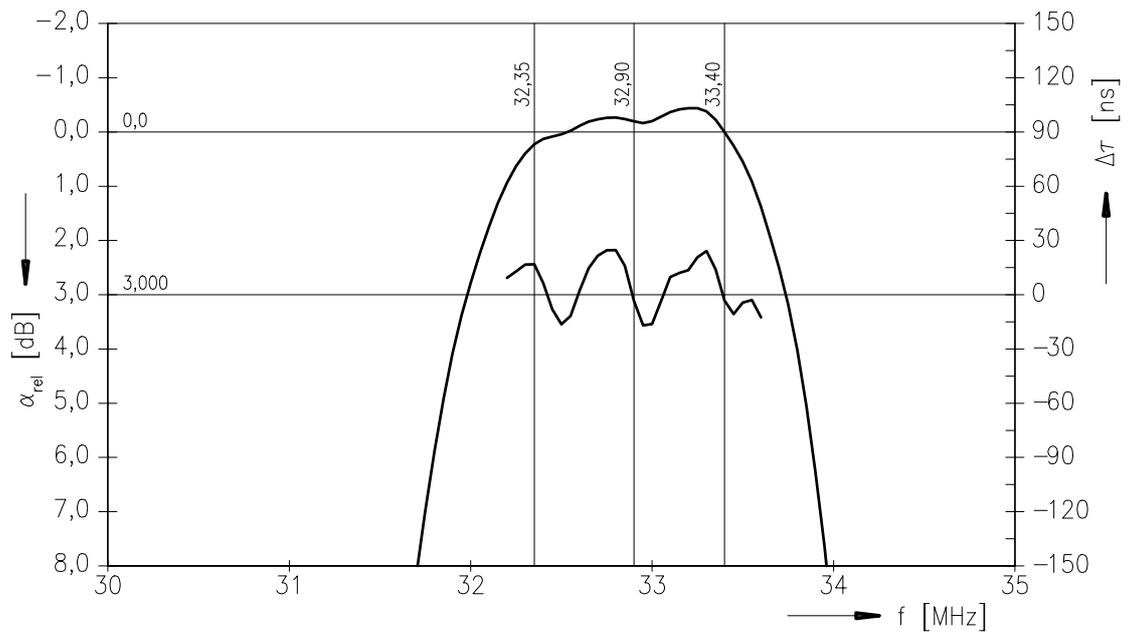
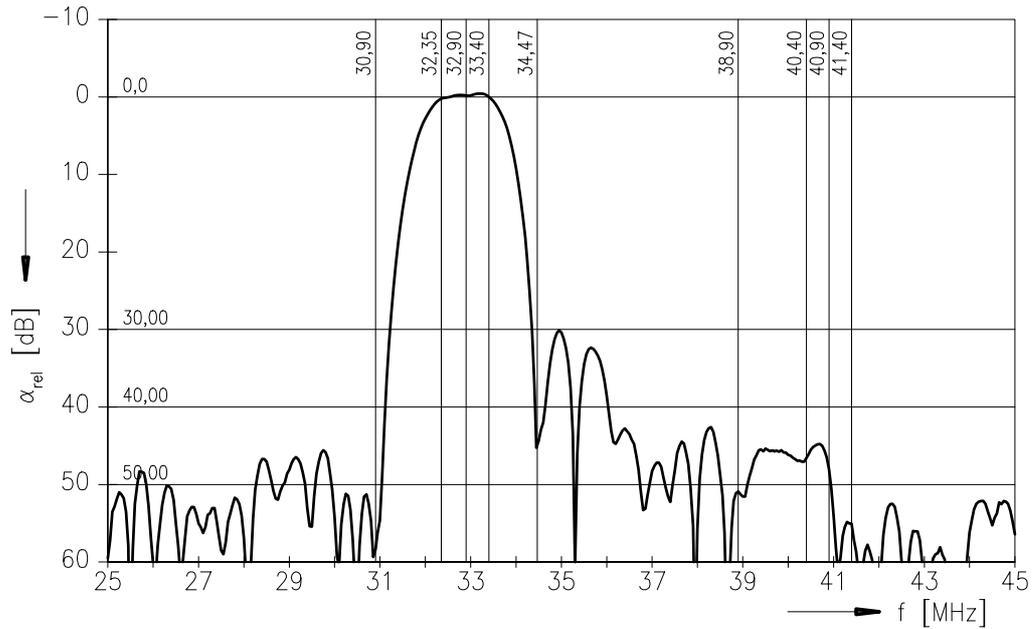
Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	34,40 MHz	12,5	14,0	15,5	dB
Relative attenuation					
	α_{rel}				
Picture carrier	38,90 MHz	41,0	54,0	—	dB
Color carrier	35,32 MHz	25,0	34,0	—	dB
Adjacent picture carrier	32,90 MHz	33,0	48,0	—	dB
Adjacent sound carrier	40,40 MHz	41,0	50,0	—	dB
Lower sidelobe	25,00 ... 30,30 MHz	33,0	39,0	—	dB
	30,30 ... 32,90 MHz	28,0	34,0	—	dB
Upper sidelobe	38,90 ... 45,00 MHz	38,0	45,0	—	dB
Impedance at 34,40 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	0,6 14,9	—	k Ω pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	1,3 4,9	—	k Ω pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



Data Sheet

Frequency response of channel 1





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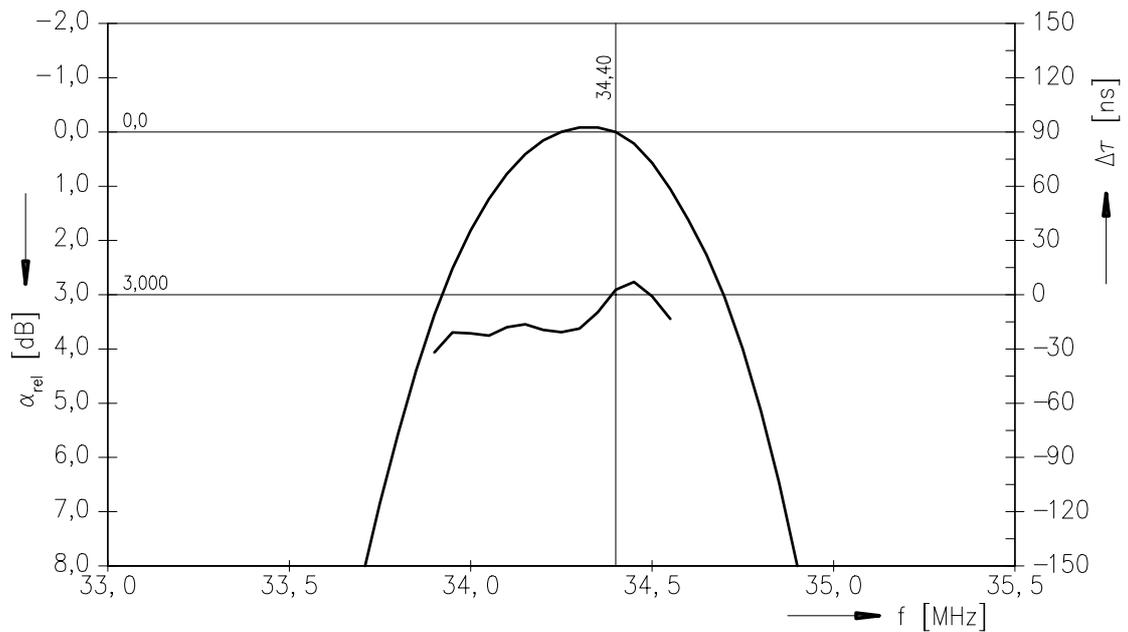
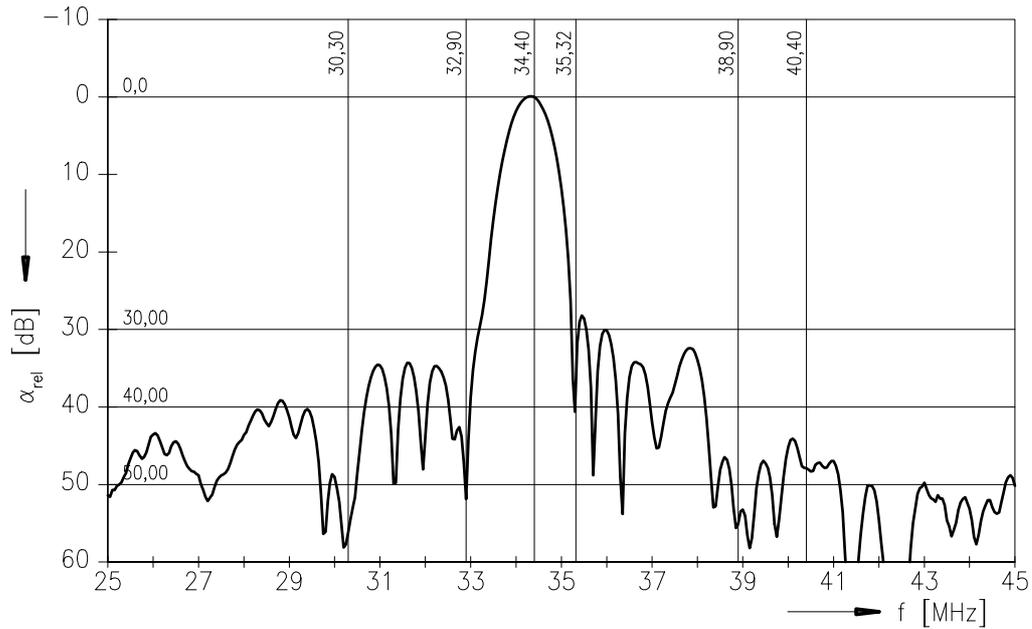
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Frequency response of channel 2





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