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SAW Components

Data Sheet L 9653 M

Data Sheet

A large, stylized, 3D-rendered version of the EPCOS logo, featuring the word "EPCOS" in a bold, sans-serif font, set against a dark, textured background with a glowing effect.



SAW Components

L 9653 M

IF Filter for Audio Applications

33,90 MHz and 38,90 MHz

Data Sheet

Standard

Plastic package **SIP5K**

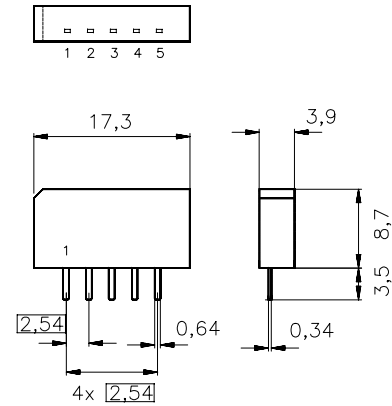
- L/L'

Features

- TV IF audio filter with two channels
- Channel 1 (L') with pass band for sound carrier at 40,40 MHz
- Channel 2 (L) with pass band for sound carrier at 32,40 MHz

Terminals

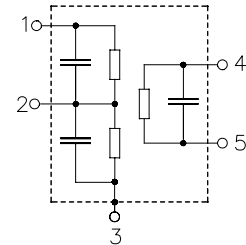
- Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 g

Pin configuration

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



Type	Ordering code	Marking and package according to	Packing according to
L 9653 M	B39389-L9653-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operating 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	40,40 MHz	12,5	14,0	15,5	dB
Relative attenuation					
	α_{rel}				
Picture carrier	33,90 MHz	42,0	52,0	—	dB
	38,40 MHz	40,0	45,0	—	dB
Adjacent picture carrier	41,90 MHz	34,0	38,0	—	dB
Adjacent sound carrier	32,40 MHz	39,0	55,0	—	dB
Lower sidelobe	25,00 ... 33,90 MHz	35,0	41,0	—	dB
Upper sidelobe	41,90 ... 45,00 MHz	32,0	37,0	—	dB
Impedance at 40,40 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	0,4 12,2	—	k Ω pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	0,5 10,3	—	k Ω 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)

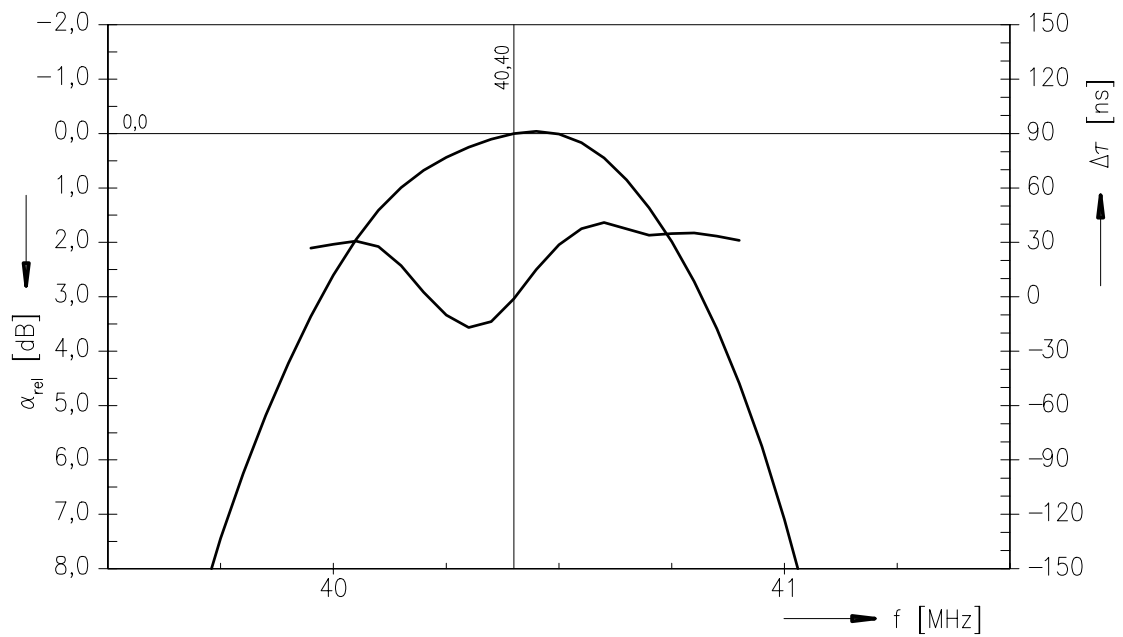
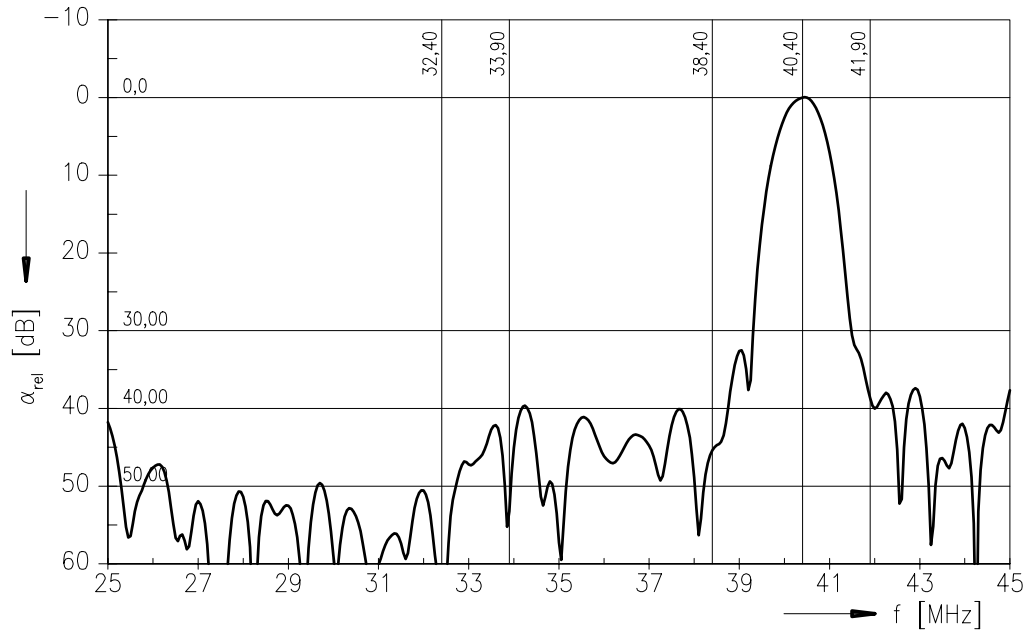
Reference temperature: $T_A = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation					
	α				
Reference level for the following data	32,40 MHz	12,2	13,7	15,2	dB
Relative attenuation					
	α_{rel}				
Picture carrier	38,90 MHz	45,0	61,0	—	dB
	34,40 MHz	33,0	37,0	—	dB
Adjacent picture carrier	30,90 MHz	46,0	58,0	—	dB
Adjacent sound carrier	40,40 MHz	37,0	47,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz	36,0	42,0	—	dB
Upper sidelobe	38,90 ... 45,00 MHz	35,0	41,0	—	dB
Impedance at 32,40 MHz					
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$	—	0,7 \parallel 16,0	—	k Ω \parallel pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$	—	0,7 \parallel 13,9	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



Data Sheet

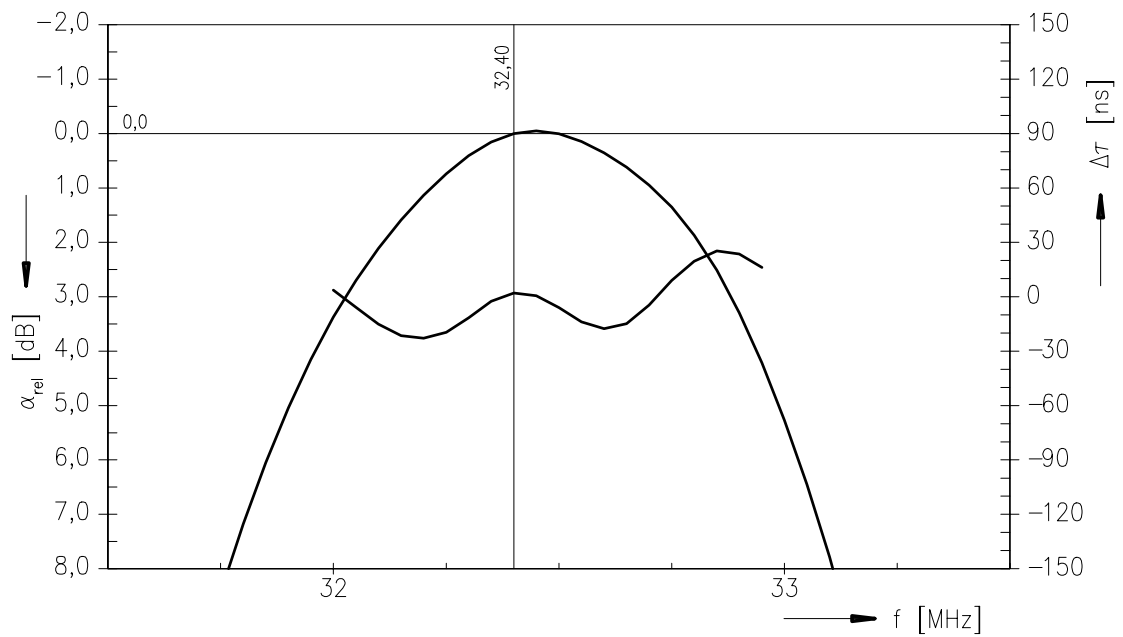
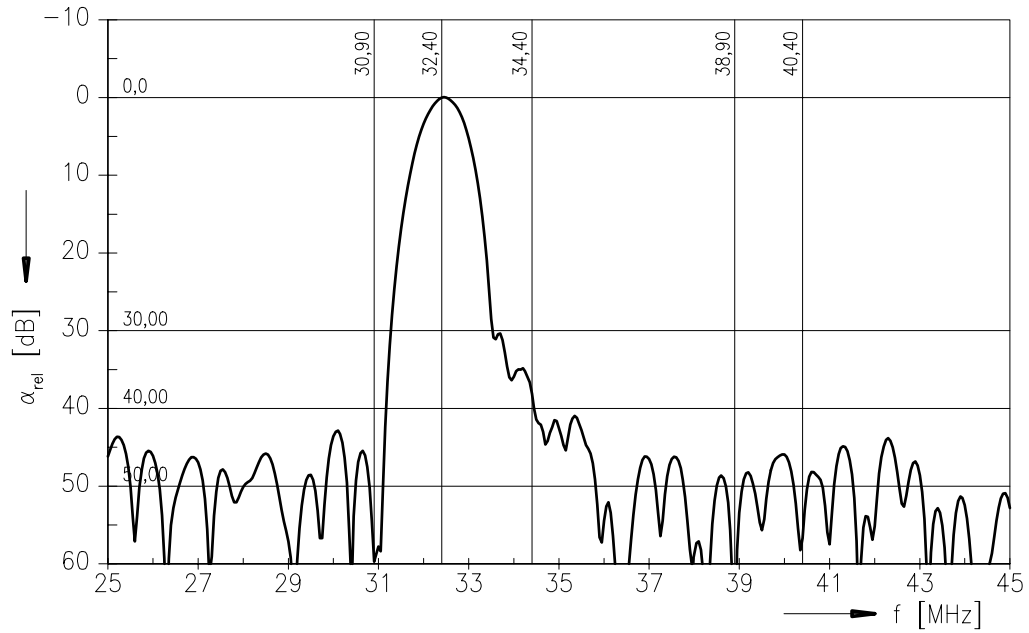
Frequency response of channel 1





Data Sheet

Frequency response of channel 2





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