



SAW Components

Data Sheet L 9653 M

Data Sheet



EP

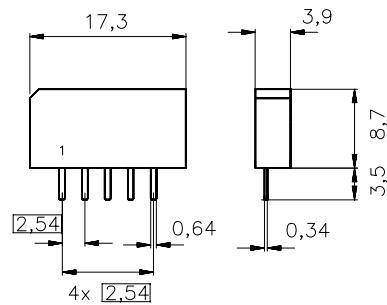
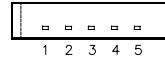
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SAW Components
L 9653 M
IF Filter for Audio Applications
33,90 MHz and 38,90 MHz
Data Sheet
Standard
Plastic package SIP5K

- 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

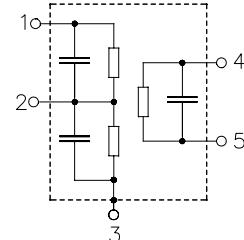

Terminals

- 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

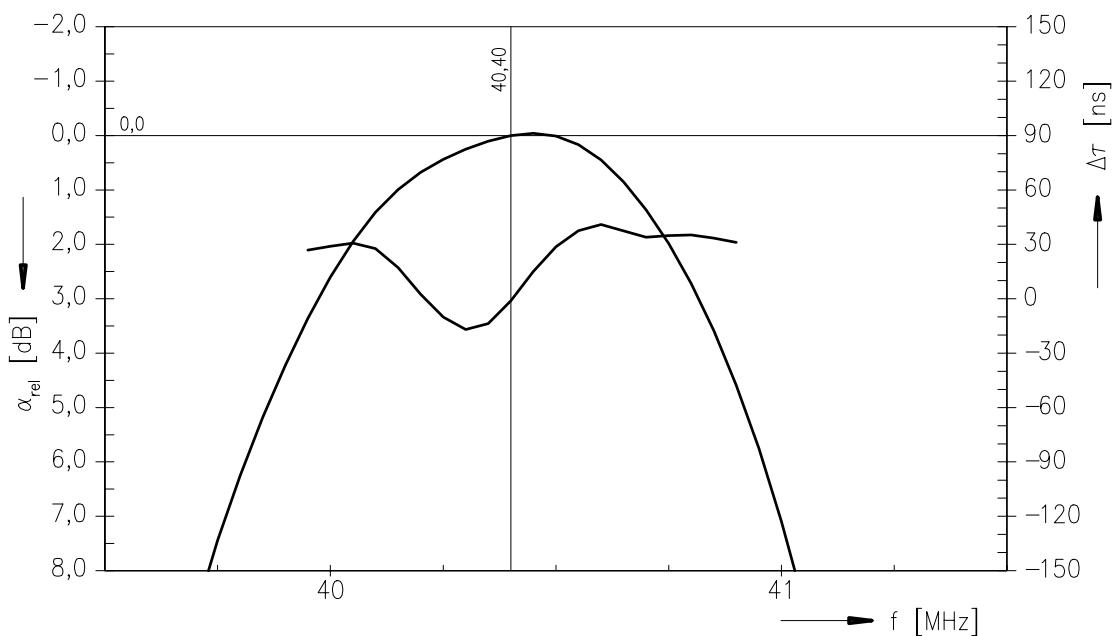
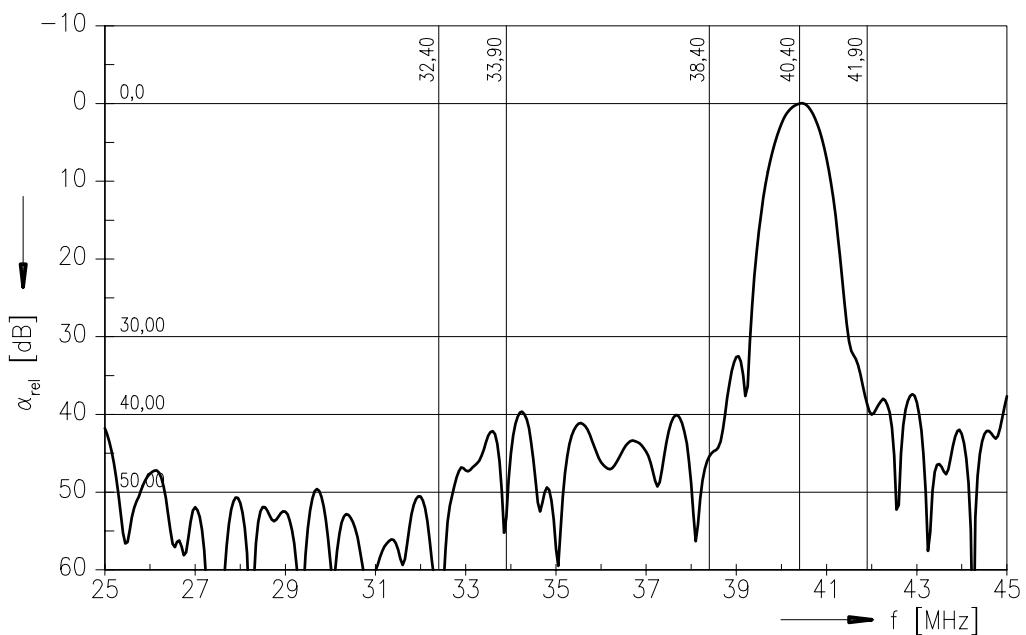
Operating temperature range	T_A	- 25/+ 65	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

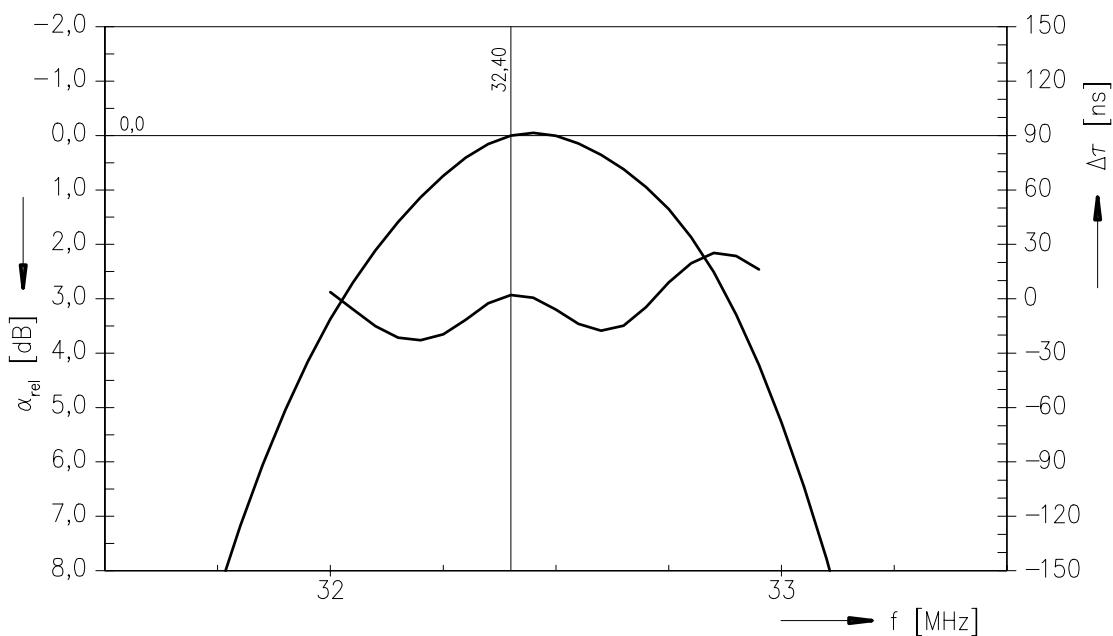
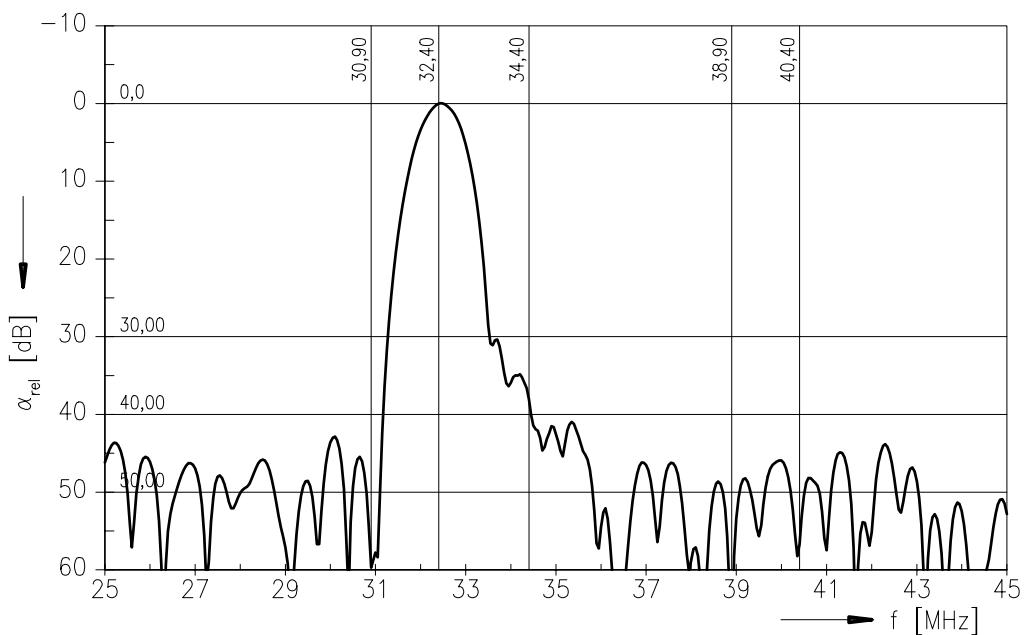
**SAW Components****L 9653 M****IF Filter for Audio Applications****33,90 MHz and 38,90 MHz****Data Sheet****Characteristics of channel 1 (switching pin 2 connected to ground)**Reference temperature: $T_A = 25^\circ\text{C}$ Terminating source impedance: $Z_S = 50 \Omega$ Terminating load impedance: $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		min.	typ.	max.	
Insertion attenuation	α				
Reference level for the following data	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: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	0,4 12,2	—	$\text{k}\Omega \parallel \text{pF}$
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	0,5 10,3	—	$\text{k}\Omega \parallel \text{pF}$
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K

**SAW Components****L 9653 M****IF Filter for Audio Applications****33,90 MHz and 38,90 MHz****Data Sheet****Characteristics of channel 2 (switching pin 2 connected to pin 1)**Reference temperature: $T_A = 25^\circ\text{C}$ 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	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: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	0,7 16,0	—	$\text{k}\Omega \parallel \text{pF}$
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	0,7 13,9	—	$\text{k}\Omega \parallel \text{pF}$
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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L 9653 M

IF Filter for Audio Applications

33,90 MHz and 38,90 MHz

Data Sheet

Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW CE MM PD

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