EPCOS

SAW Components

Data Sheet L 9653 M

Data Sheet

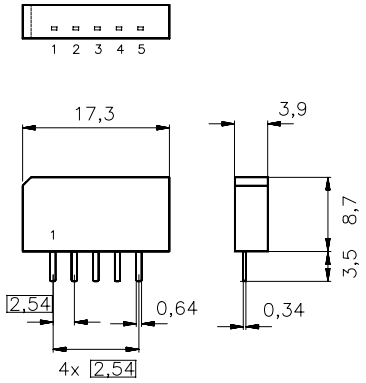
Standard

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



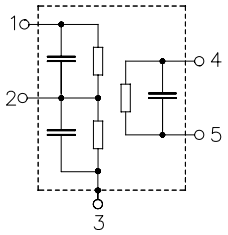
Dimensions in mm, approx. weight 1,0 g

Terminals

- Tinned CuFe alloy

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

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

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

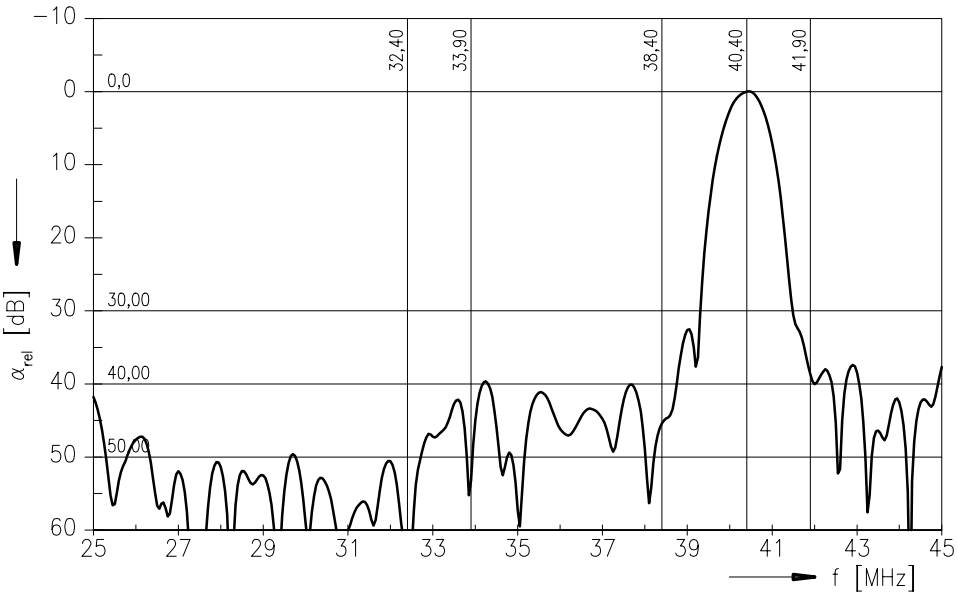
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data	40,40	MHz		12,5	14,0	15,5	dB
Relative attenuation			α_{rel}				
Picture carrier	33,90	MHz		42,0	52,0	—	dB
	38,40	MHz		40,0	45,0	—	dB
Adjacent picture carrier	41,90	MHz		34,0	38,0	—	dB
Adjacent sound carrier	32,40	MHz		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	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	0,5 ‖ 10,3	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

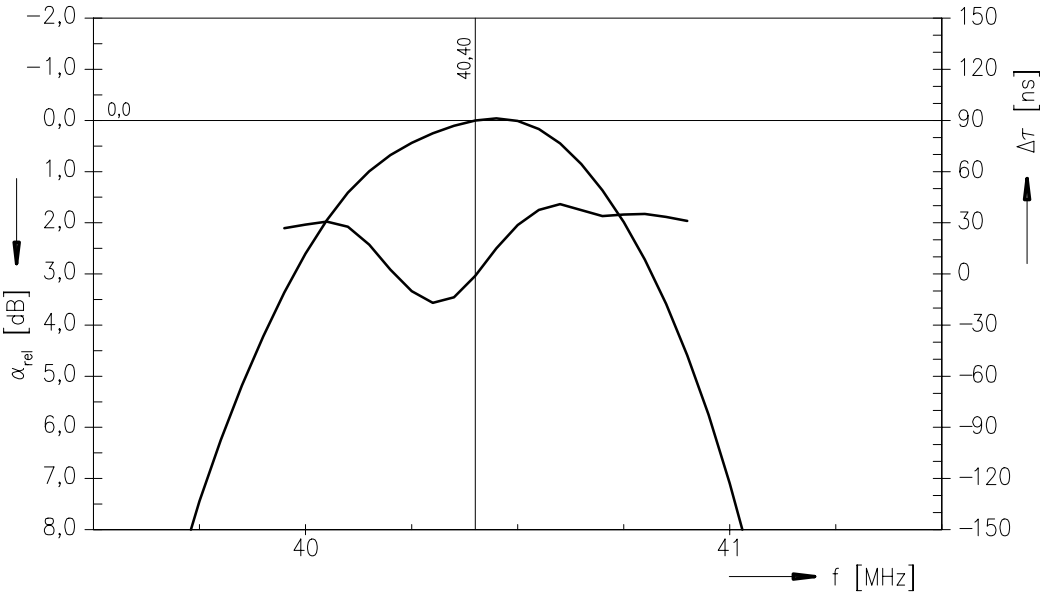
Characteristics of channel 2 (switching pin 2 connected to pin 1)

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF

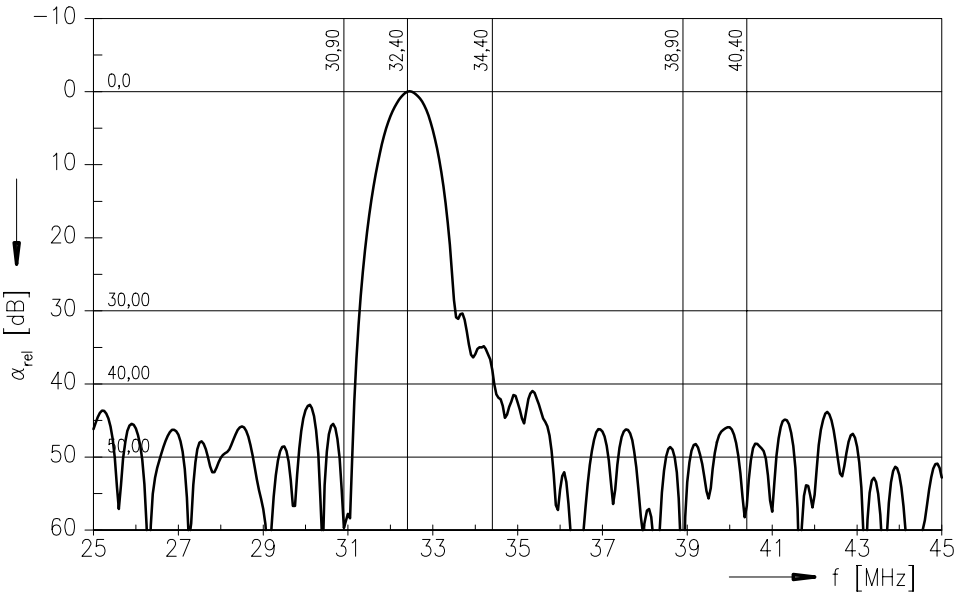
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		32,40 MHz		12,2	13,7	15,2	dB
Relative attenuation			α_{rel}				
Picture carrier		38,90 MHz		45,0	61,0	—	dB
		34,40 MHz		33,0	37,0	—	dB
Adjacent picture carrier		30,90 MHz		46,0	58,0	—	dB
Adjacent sound carrier		40,40 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 ‖ 16,0	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	0,7 ‖ 13,9	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

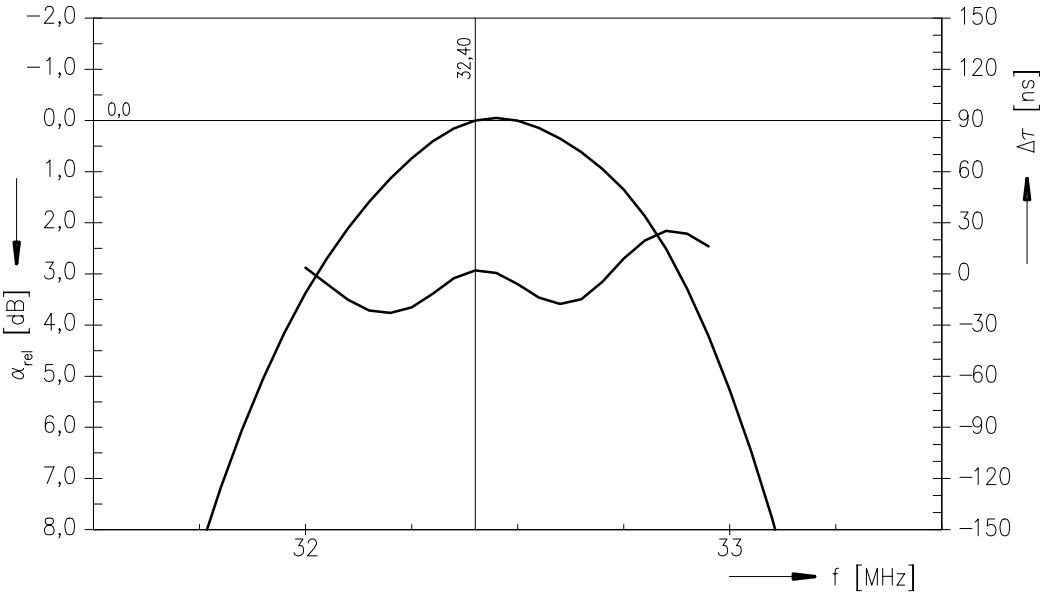
Frequency response of channel 1





Frequency response of channel 2





Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW CE MM PD
P.O. Box 80 17 09, D-81617 München

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