EPCOS

SAW Components

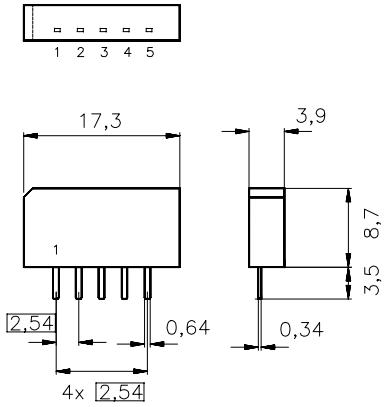
Data Sheet L 9654 M

Data Sheet

Standard

Plastic package **SIP5K**

- L/L'



Features

- TV IF audio filter with two channels
- Channel 1 with pass band for sound carriers at 40,40 MHz (L') and 39,75 MHz (L'-NICAM)
- Channel 2 with pass band for sound carriers at 32,40 MHz (L) and 33,05 MHz (L-NICAM)

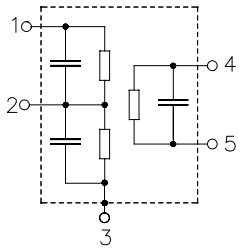
Terminals

- 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 9654 M	B39389-L9654-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	12	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

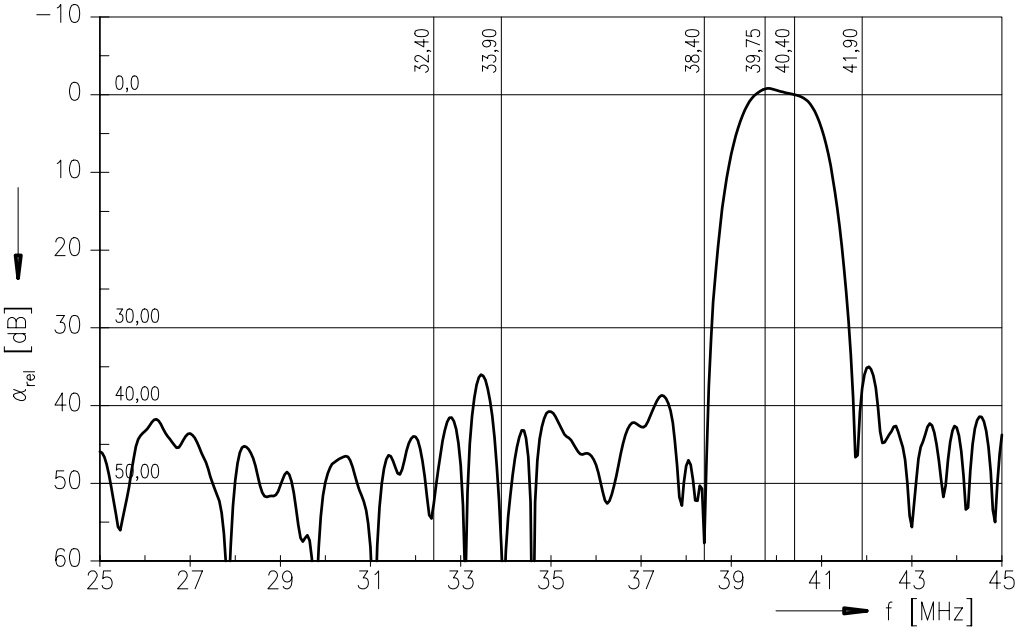
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		40,40 MHz		17,4	18,9	20,4	dB
Relative attenuation			α_{rel}				
		39,75 MHz		–1,7	–0,7	0,3	dB
		38,40 MHz		36,0	56,0	—	dB
Picture carrier		33,90 MHz		38,0	54,0	—	dB
Adjacent picture carrier		41,90 MHz		32,0	37,0	—	dB
Adjacent sound carrier		32,40 MHz		36,0	51,0	—	dB
Lower sidelobe	25,00 ...	32,40 MHz		32,0	38,0	—	dB
Upper sidelobe	41,90 ...	45,00 MHz		30,0	35,0	—	dB
Group delay ripple (p-p)			$\Delta\tau$	—	50	—	ns
Impedance at 40,40 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	1,1 ‖ 10,7	—	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

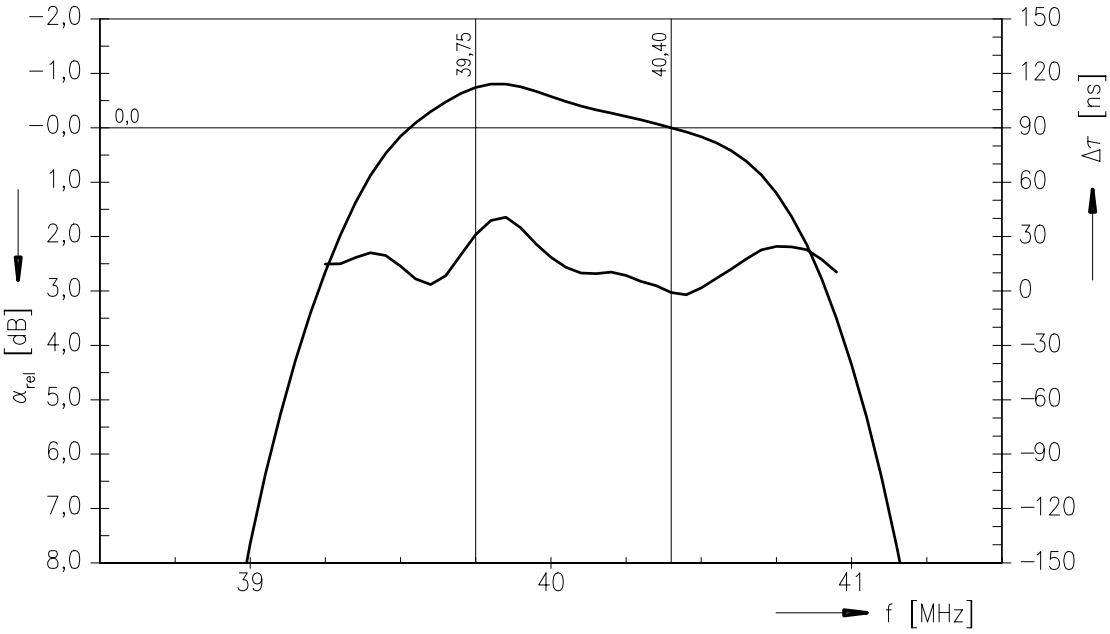
Characteristics of channel 2 (switching pin 2 connected to pin 1)

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

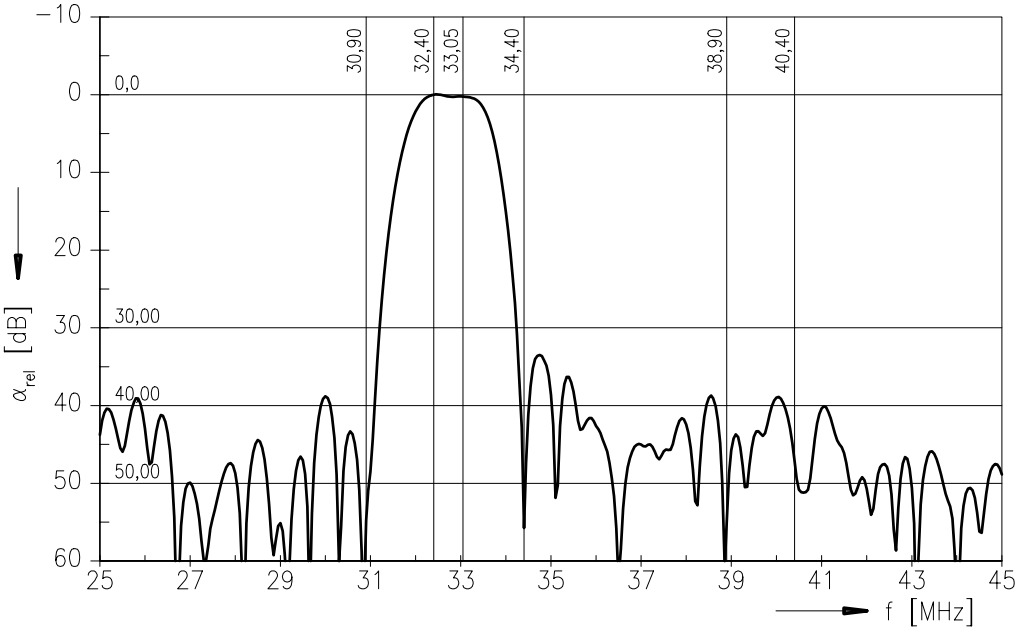
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data	32,40	MHz		16,5	18,0	19,5	dB
Relative attenuation			α_{rel}				
	33,05	MHz		–0,7	0,3	1,3	dB
	34,40	MHz		30,0	50,0	—	dB
Picture carrier	38,90	MHz		40,0	55,0	—	dB
Adjacent picture carrier	30,90	MHz		44,0	54,0	—	dB
Adjacent sound carrier	40,40	MHz		35,0	46,0	—	dB
Lower sidelobe	25,00 ... 30,90	MHz		32,0	38,0	—	dB
Upper sidelobe	38,90 ... 45,00	MHz		32,0	38,0	—	dB
Group delay ripple (p-p)			$\Delta\tau$	—	50	—	ns
Impedance at 32,40 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	1,4 ‖ 15,4	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	0,6 ‖ 14,1	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

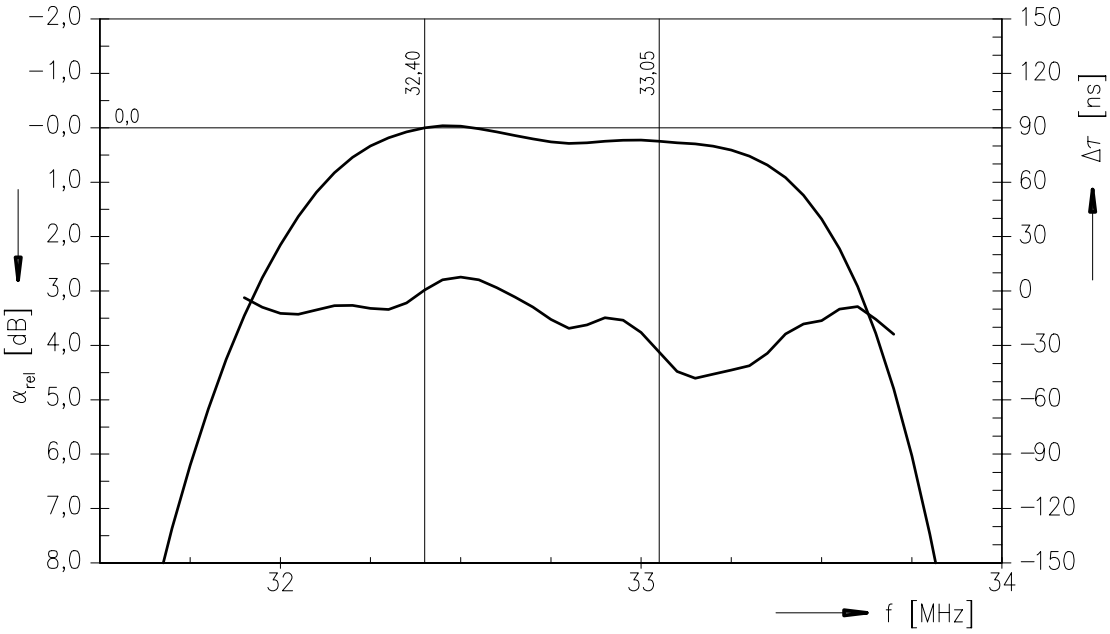
Frequency response of channel 1





Frequency response of channel 2





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