EPCOS

SAW Components

Data Sheet K 9456 M

Data Sheet

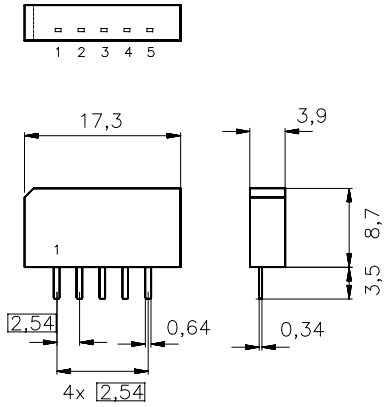
Standard

- B/G
- D/K
- I
- L/L'

Features

- TV IF audio filter with two channels
- Channel 1 (L') with one pass band for sound carriers at 40,40 MHz (L') and 39,75 MHz (L'- NICAM)
- Channel 2 (B/G,D/K,L,I) with one pass band for sound carriers between 32,35 MHz and 33,40 MHz

Plastic package **SIP5K**



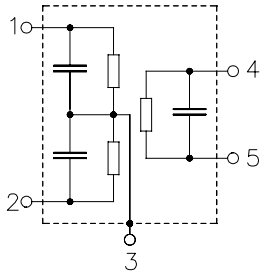
Dimensions in mm, approx. weight 1,0 g

Terminals

- Tinned CuFe alloy

Pin configuration

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



Type	Ordering code	Marking and package according to	Packing according to
K 9456 M	B39389-K9456-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

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

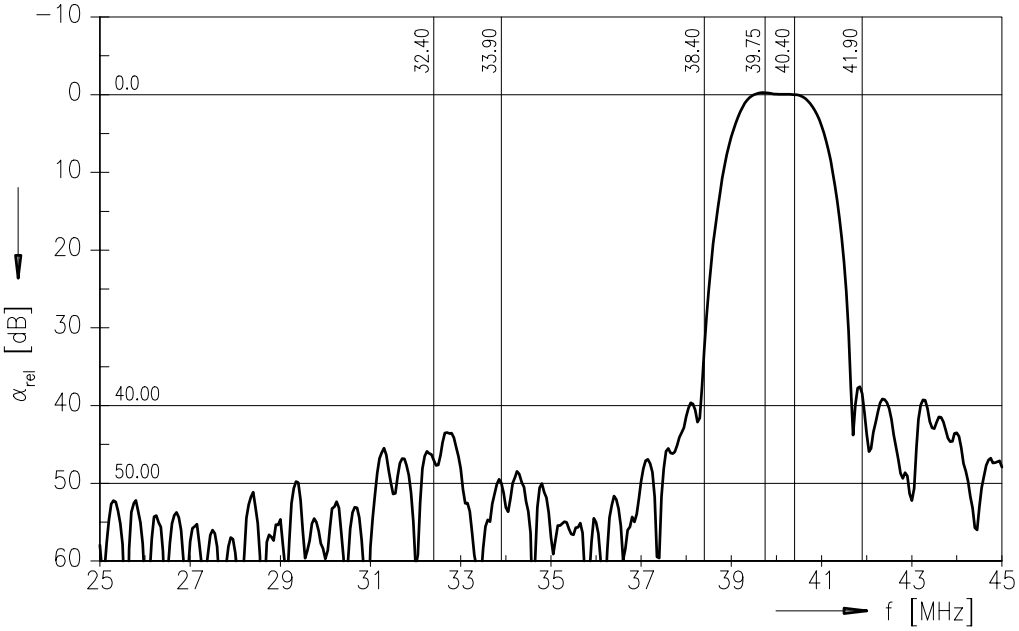
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		40,40 MHz		15,1	16,6	18,1	dB
Relative attenuation			α_{rel}				
		39,75 MHz		–1,3	–0,3	0,7	dB
		38,40 MHz		27,0	35,0	—	dB
Picture carrier		33,90 MHz		38,0	45,0	—	dB
Adjacent picture carrier		41,90 MHz		31,0	38,0	—	dB
Adjacent sound carrier		32,40 MHz		40,0	46,0	—	dB
Lower sidelobe	25,00 ...	33,90 MHz		34,0	40,0	—	dB
Upper sidelobe	41,90 ...	45,00 MHz		28,0	35,0	—	dB
Group delay ripple (p-p)			Δτ				
	39,40 ...	40,50 MHz		—	40	—	ns
Impedance at 40,40 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	0,9 || 9,5	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	2,9 || 4,5	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

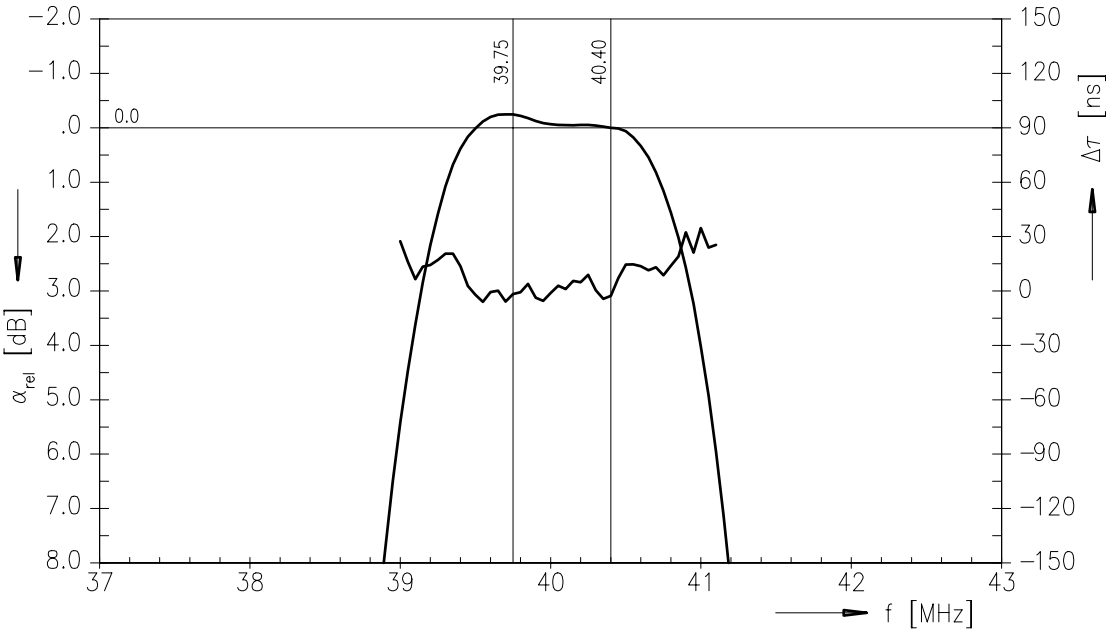
Characteristics of channel 2

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

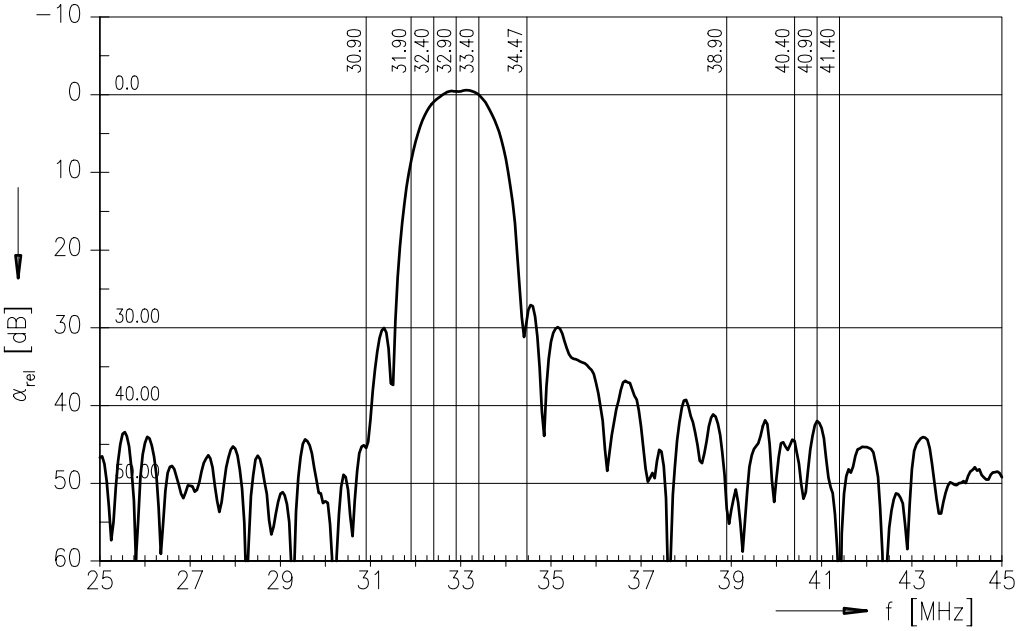
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		33,40 MHz		14,5	16,0	17,5	dB
Relative attenuation			α_{rel}				
Sound carrier B/G-NICAM		33,05 MHz		–1,4	–0,4	0,6	dB
Sound carrier I		32,90 MHz		–1,4	–0,4	0,6	dB
Sound carrier D/K, L		32,40 MHz		0,2	1,2	2,2	dB
Picture carrier		38,90 MHz		37,0	48,0	—	dB
Color carrier		34,47 MHz		23,0	30,0	—	dB
Adjacent picture carrier		30,90 MHz		39,0	45,0	—	dB
		31,90 MHz		—	9,4	—	dB
Adjacent sound carrier		40,40 MHz		35,0	40,0	—	dB
		40,90 MHz		35,0	40,0	—	dB
		41,40 MHz		40,0	54,0	—	dB
Lower sidelobe	25,00 ...	30,90 MHz		38,0	44,0	—	dB
Upper sidelobe	38,90 ...	45,00 MHz		34,0	39,0	—	dB
Group delay ripple (p-p)			Δτ				
	32,00 ...	33,50 MHz		—	40	—	ns
Impedance at 33,40 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	1,0 || 9,1	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	2,8 || 4,7	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

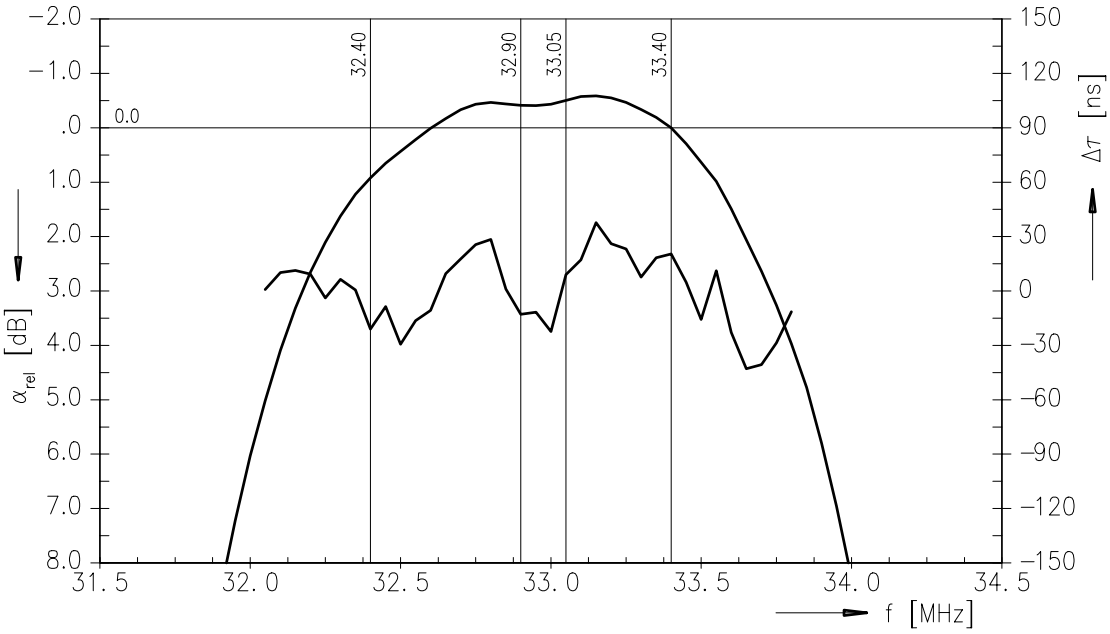
Frequency response of channel 1





Frequency response of channel 2





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