EPCOS

SAW Components

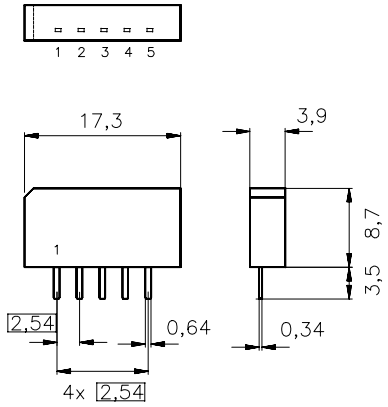
Data Sheet K 9453 M

Data Sheet

Standard

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

Plastic package **SIP5K**



Dimensions in mm, approx. weight 1,0 g

Features

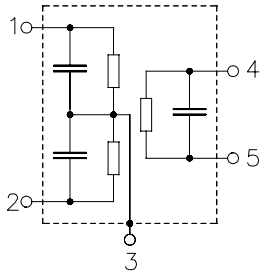
- TV IF audio filter with two channels
- Channel 1 (L') with one pass band for sound carrier at 40,40 MHz
- Channel 2 (L, D/K, I, B/G) with one pass band for sound carriers between 32,40 MHz and 33,40 MHz

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 9453 M	B39389-K9453-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

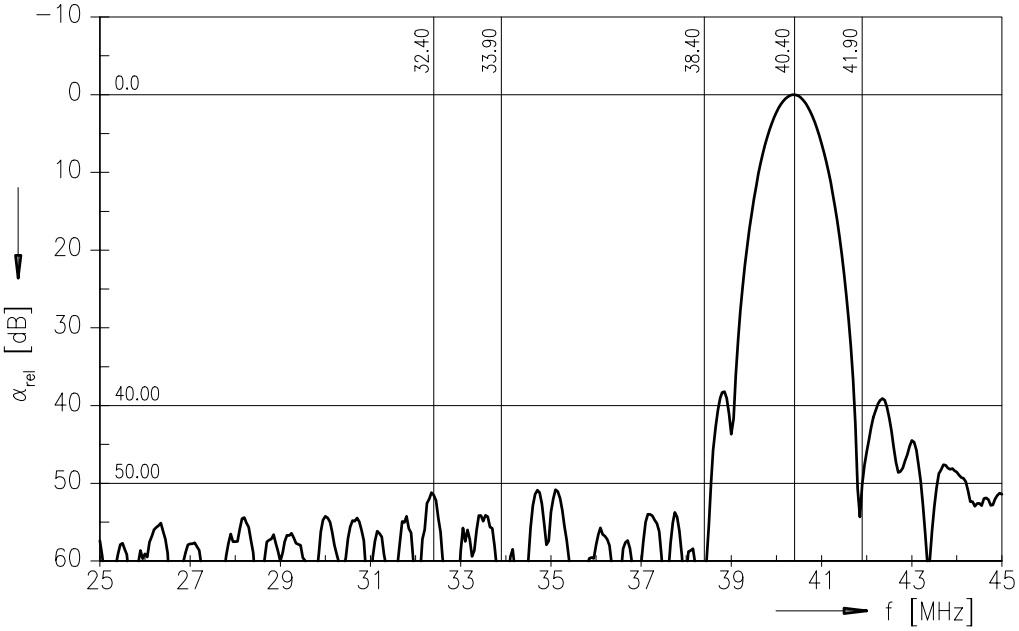
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	40,40 MHz		12,7	14,2	15,7	dB
Relative attenuation		α_{rel}				
Picture carrier	33,90 MHz		42,0	52,0	—	dB
	38,40 MHz		40,0	56,0	—	dB
Adjacent picture carrier	41,90 MHz		36,0	44,0	—	dB
Adjacent sound carrier	32,40 MHz		42,0	50,0	—	dB
Lower sidelobe	25,00 ... 38,40 MHz		38,0	46,0	—	dB
Upper sidelobe	41,90 ... 45,00 MHz		32,0	38,0	—	dB
Impedance at 40,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	0,8 || 8,5	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	2,1 || 5,3	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

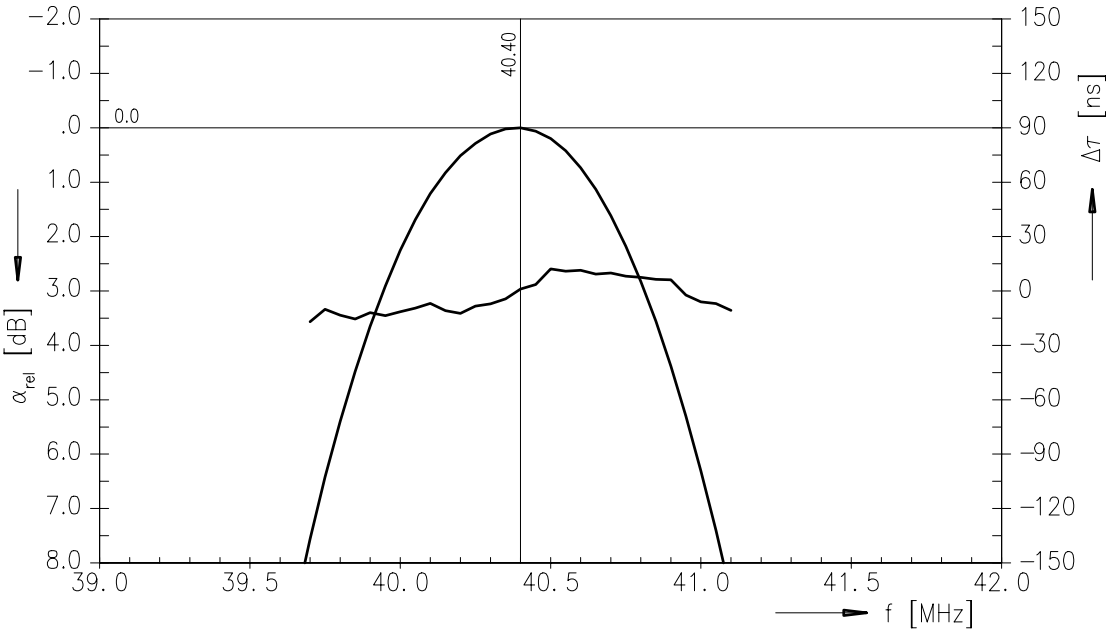
Characteristics of channel 2

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

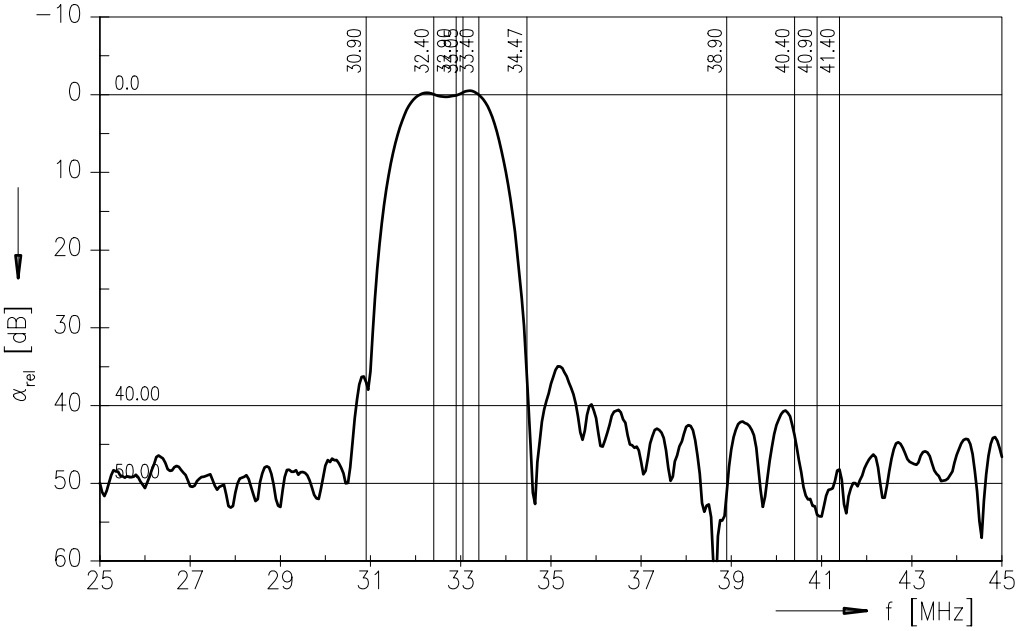
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	33,40 MHz		13,5	15,0	16,5	dB
Relative attenuation		α_{rel}				
Sound carrier	33,05 MHz		–1,3	–0,3	0,7	dB
	32,90 MHz		–0,9	0,1	1,1	dB
	32,40 MHz		–1,2	–0,2	0,8	dB
Picture carrier	38,90 MHz		39,0	49,0	—	dB
Color carrier	34,47 MHz		25,0	32,0	—	dB
Adjacent picture carrier	30,90 MHz		31,0	37,0	—	dB
Adjacent sound carrier	40,40 MHz		34,0	40,0	—	dB
	40,90 MHz		36,0	43,0	—	dB
	41,40 MHz		38,0	48,0	—	dB
Lower sidelobe	25,00 ... 30,50 MHz		38,0	44,0	—	dB
Upper sidelobe	38,90 ... 45,00 MHz		32,0	37,0	—	dB
Impedance at 33,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	1,0 || 10,1	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	2,7 || 6,8	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

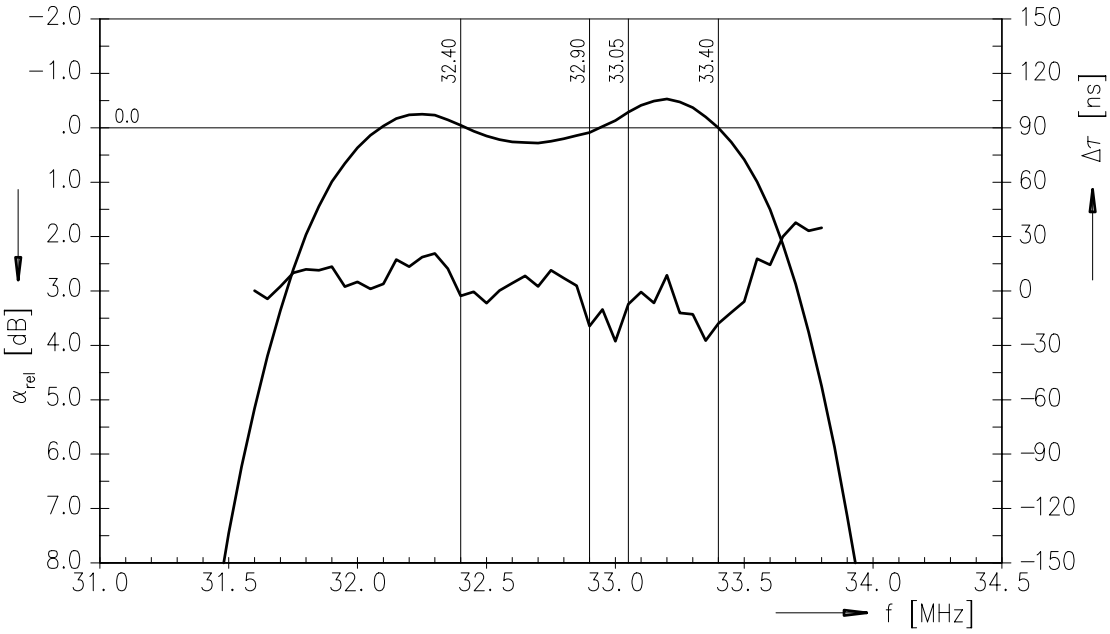
Frequency response of channel 1





Frequency response of channel 2





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