EPCOS

SAW Components

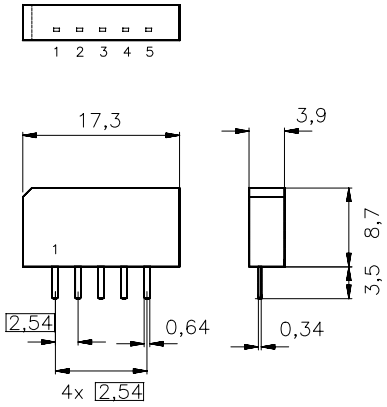
Data Sheet K 7252 M

Data Sheet

Standard

- B/G
- D/K
- M/N

Plastic package **SIP5K**



Dimensions in mm, approx. weight 1,0 g

Features

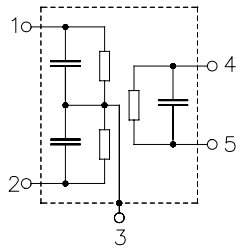
- TV IF filter switchable from B/G, D/K mode to M/N mode
- B/G, D/K mode with Nyquist slope and broad sound shelf for sound carriers at 32,40 MHz and 33,40 MHz
- Reduced group delay predistortion as compared to standard B/G half
- M/N mode with Nyquist slope and sound shelf at 34,40 MHz
- Constant group delay

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
K 7252 M	B39389-K7252-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 in B/G, D/K mode (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

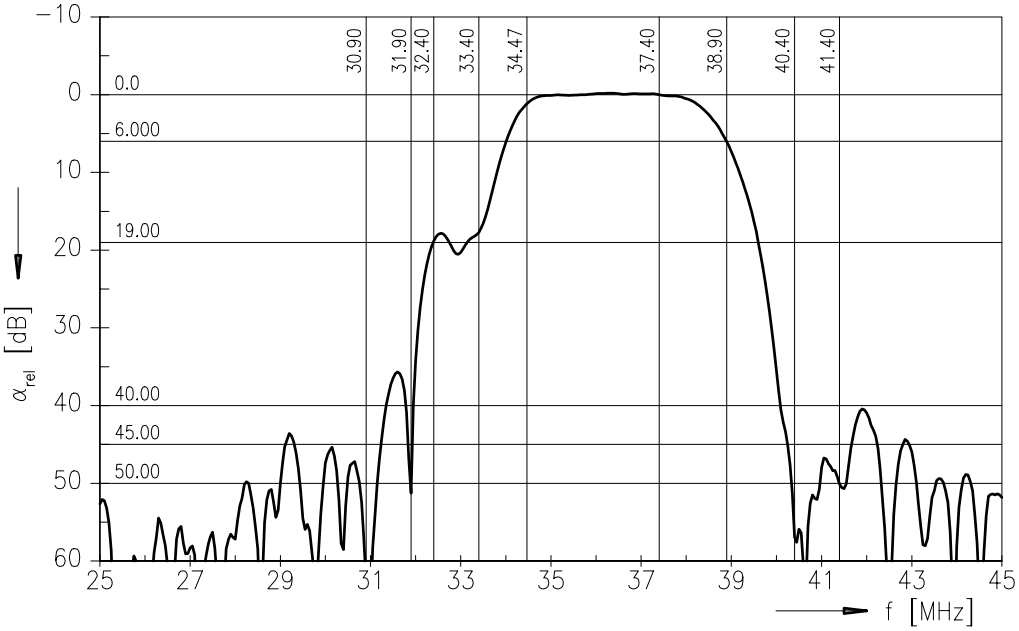
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	37,40 MHz		15,4	16,9	18,4	dB
Relative attenuation		α_{rel}				
Picture carrier	38,90 MHz		4,6	5,6	6,6	dB
Color carrier	34,47 MHz		0,2	1,2	2,2	dB
Sound carrier	32,40 MHz		17,7	19,2	20,7	dB
	33,40 MHz		16,0	17,5	—	dB
Adjacent picture carrier	30,90 MHz		46,0	58,0	—	dB
	31,90 MHz		38,0	50,0	—	dB
Adjacent sound carrier	40,40 MHz		41,0	50,0	—	dB
	41,40 MHz		40,0	46,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz		36,0	42,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz		33,0	39,0	—	dB
Reflected wave signal suppression						
1,3 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)			42,0	50,0	—	dB
Feedthrough signal suppression						
1,2 µs ... 1,1 µs before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)			—	56,0	—	dB
Group delay predistortion (reference frequency 38,90 MHz)		$\Delta\tau$				
	36,80 MHz		—	–40	—	ns
	34,47 MHz		—	50	—	ns
Impedance at 37,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	1,0 ‖ 17,3	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	2,7 ‖ 3,4	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

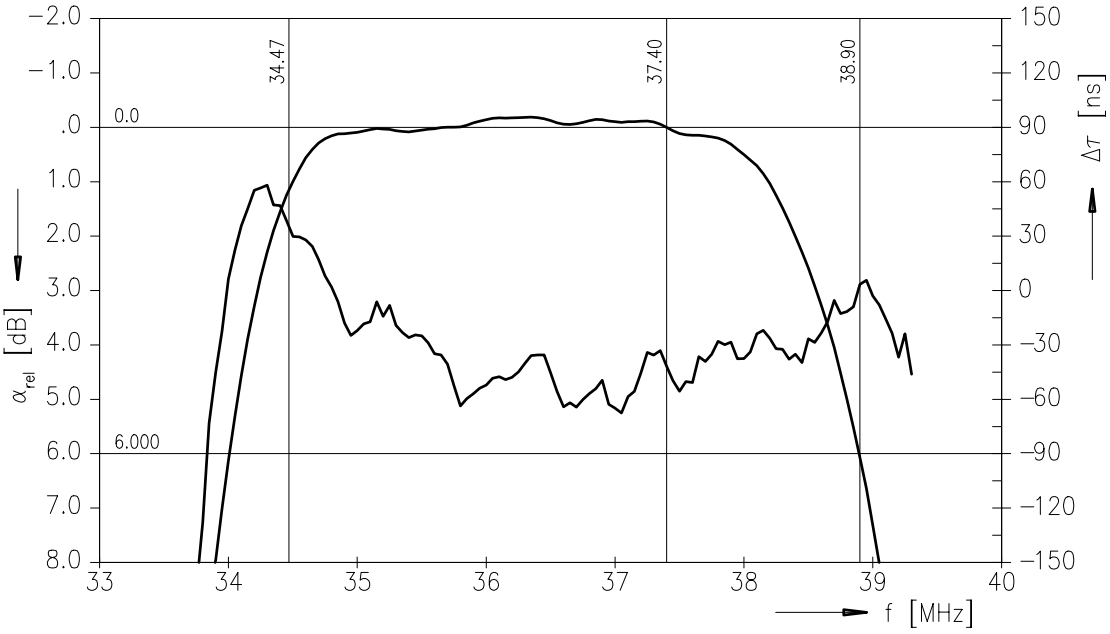
Characteristics in M/N mode (switching pin 2 connected to pin 1)

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

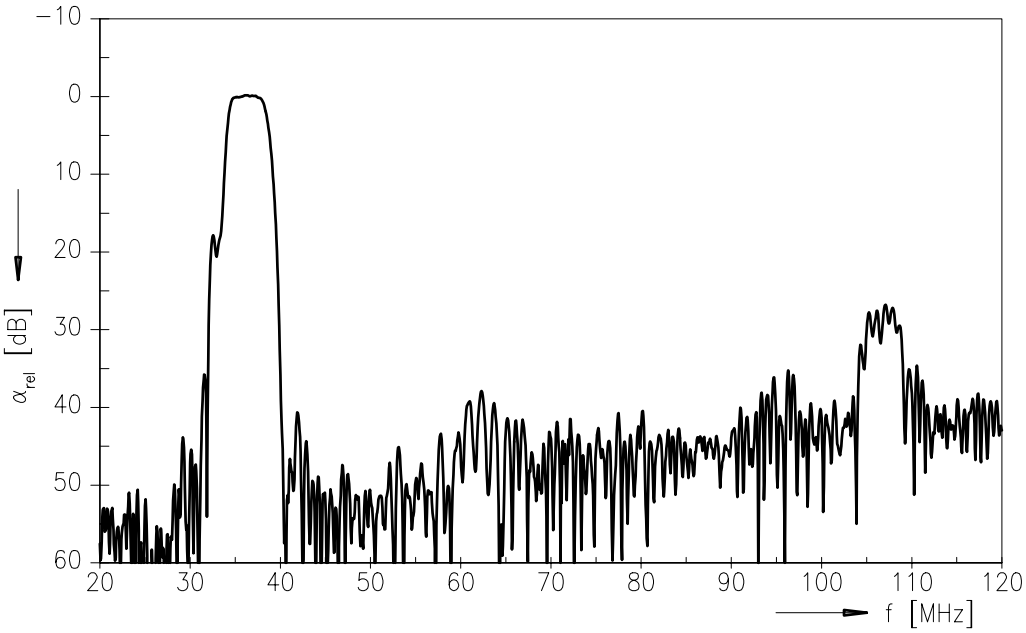
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	37,40 MHz		15,5	17,0	18,5	dB
Relative attenuation		α_{rel}				
Picture carrier	38,90 MHz		4,9	5,9	6,9	dB
Color carrier	35,32 MHz		0,8	1,8	2,8	dB
Sound carrier	34,40 MHz		17,0	18,5	20,0	dB
Adjacent picture carrier	32,90 MHz		40,0	52,0	—	dB
Adjacent sound carrier	40,40 MHz		41,0	49,0	—	dB
Lower sidelobe	25,00 ..... 32,90 MHz		36,0	42,0	—	dB
Upper sidelobe	40,40 ..... 45,00 MHz		31,0	37,0	—	dB
Reflected wave signal suppression						
1,2 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)			42,0	52,0	—	dB
Feedthrough signal suppression						
1,2 µs ... 1,1 µs before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)			—	50,0	—	dB
Group delay ripple (p-p)		$\Delta\tau$	—	50	—	ns
Impedance at 37,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	1,1 ‖ 21,0	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	2,7 ‖ 3,4	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

Frequency response B/G, D/K mode

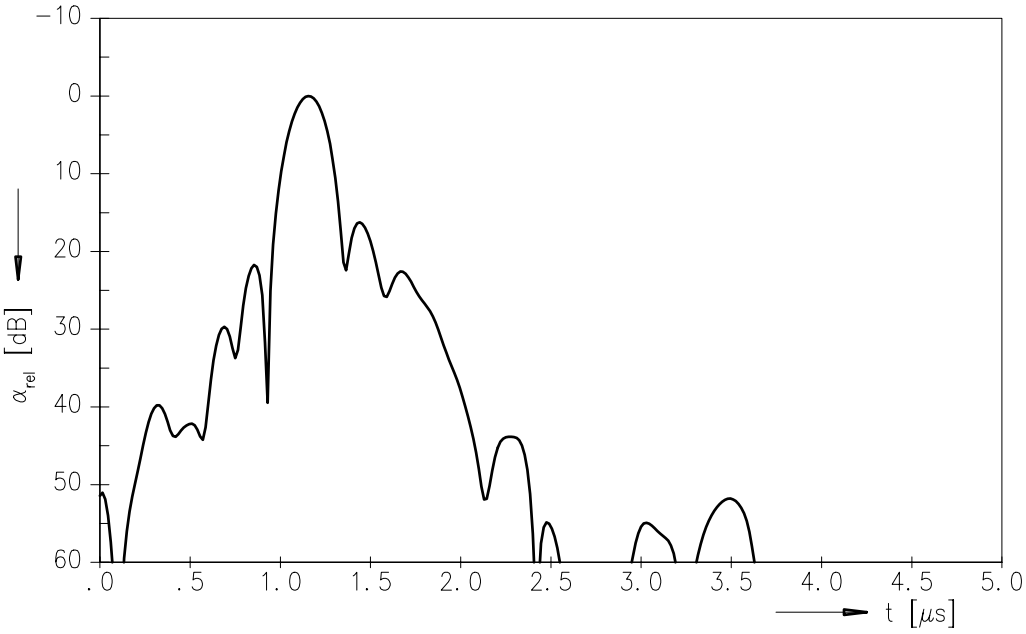




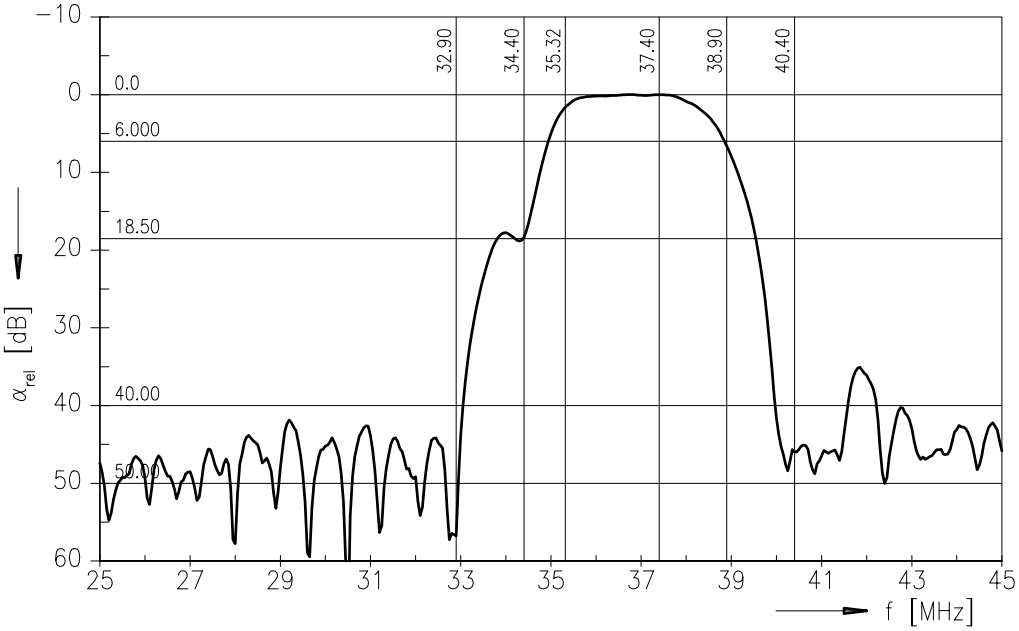
Frequency response B/G, D/K mode

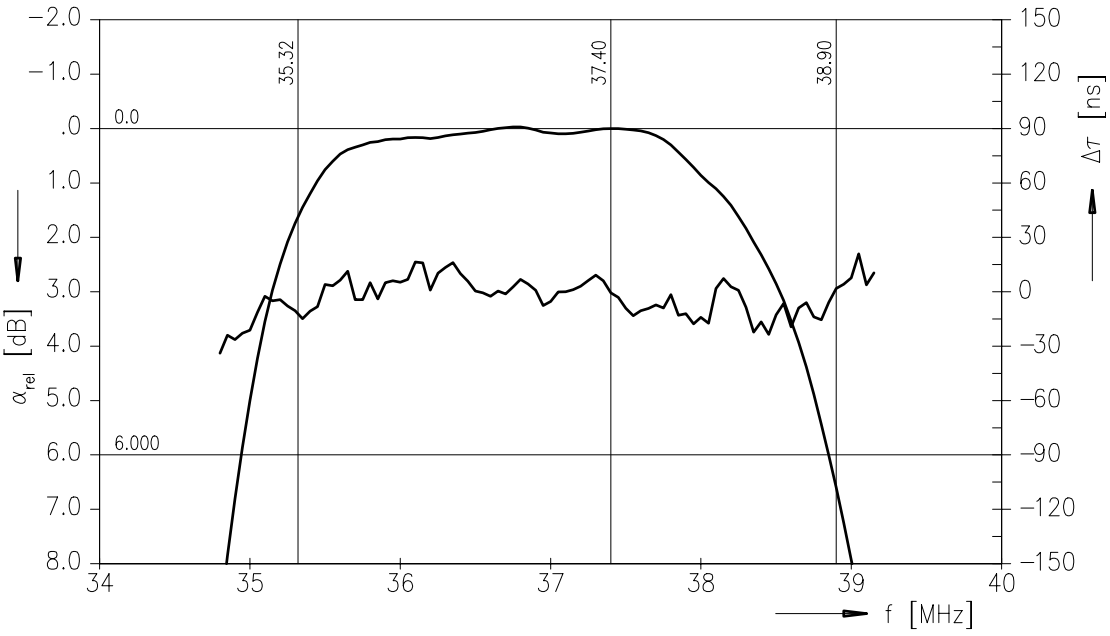


Time domain response B/G, D/K mode

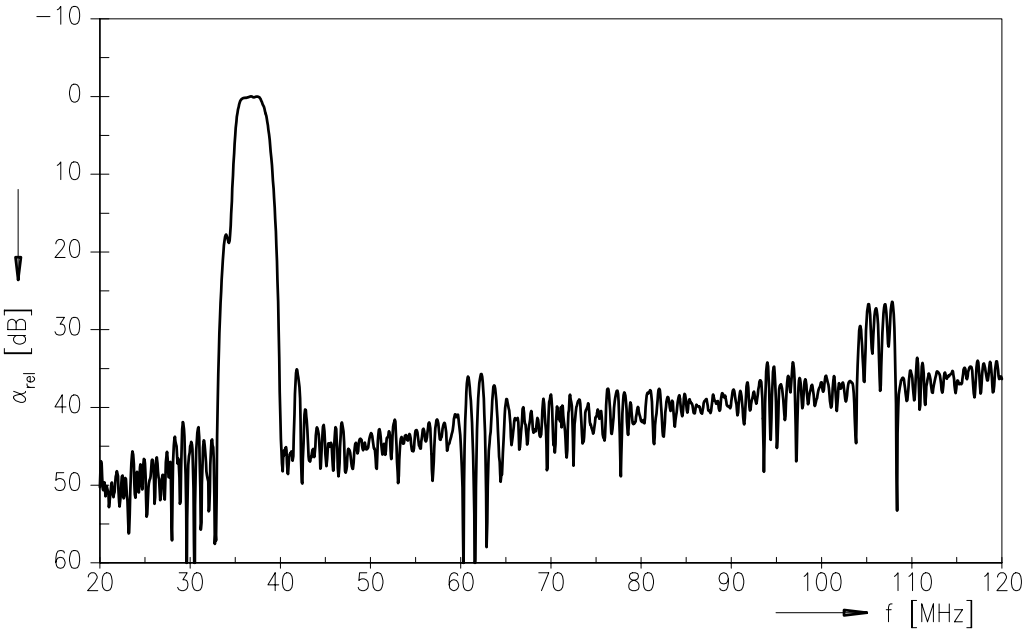


Frequency response M/N mode

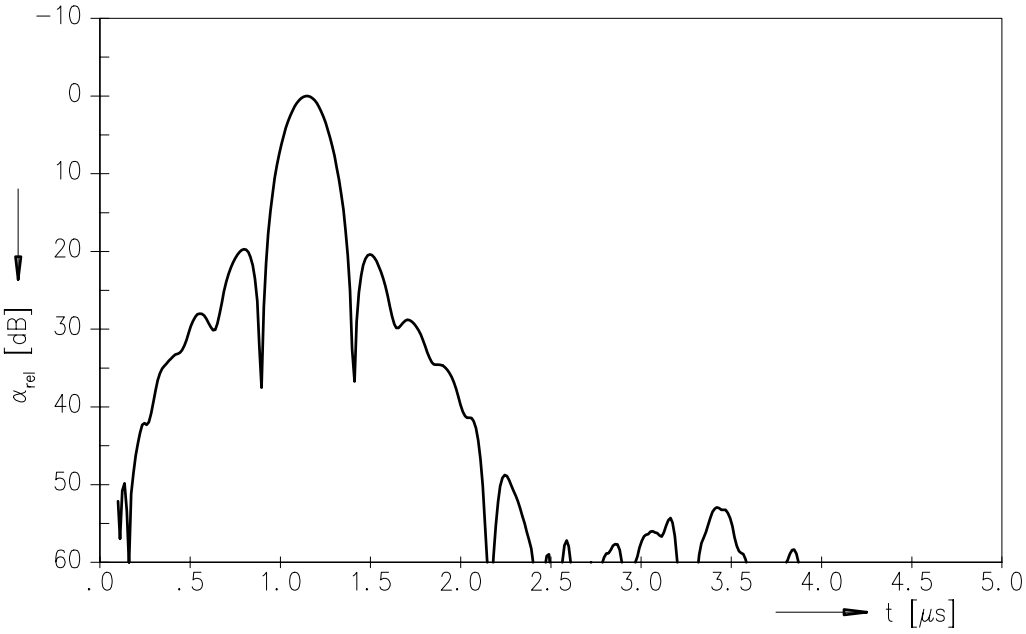




Frequency response M/N mode



Time domain response M/N mode



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