EPCOS

SAW Components

Data Sheet K 3350 K

Data Sheet

Standard

- B/G
- D/K

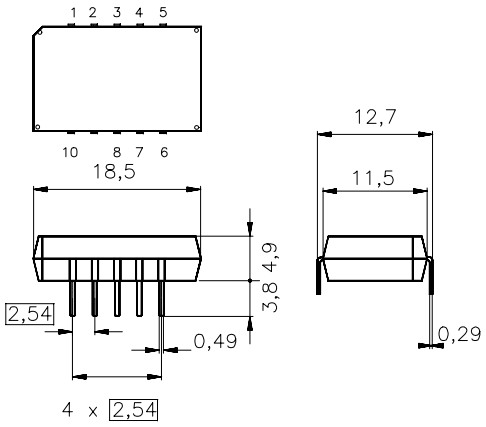
Features

- TV IF filter for quasi/split sound applications (separate picture and sound channel)
- Picture channel with Nyquist slope and sound suppression
- Reduced group delay predistortion as compared with standard B/G half
- Sound channel with one passband for sound carriers at 32,40 MHz (D/K) and 33,40 MHz (B/G)
- Suitable for CENELEC EN 55020

Terminals

- Tinned CuFe alloy

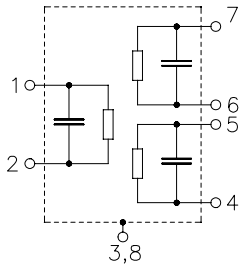
Plastic package **DIP10K**



Dimensions in mm, approx. weight 1,8 g

Pin configuration

1	Input
2	Input - ground
3; 8	Chip carrier - ground
4; 5	Output - sound
6; 7	Output - picture
9	Free
10	Not connected



Type	Ordering code	Marking and package according to	Packing according to
K 3350 K	B39389-K3350-K100	C61157-A2-A3	F61074-V8068-Z000

Maximum ratings

Operable 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 picture channel

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

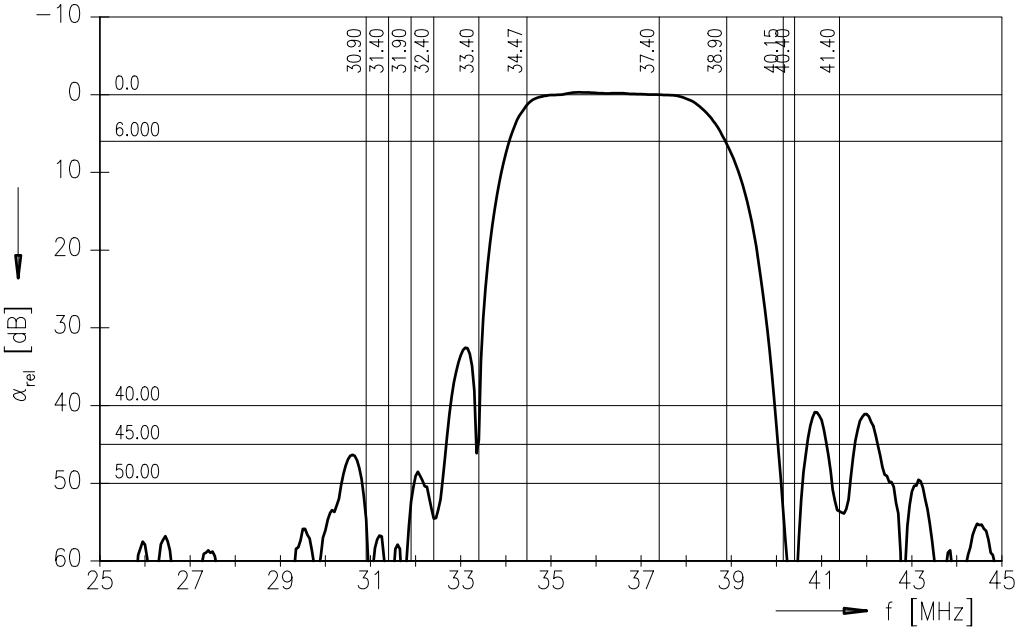
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	37,40 MHz		13,0	14,5	16,0	dB
Relative attenuation		α_{rel}				
Picture carrier	38,90 MHz		5,2	6,2	7,2	dB
Color carrier	34,47 MHz		0,4	1,4	2,4	dB
Sound carrier	33,40 MHz		34,0	43,0	—	dB
Adjacent picture carrier	30,90 MHz		45,0	53,0	—	dB
	31,90 MHz		47,0	57,0	—	dB
	31,40 MHz		—	60,0		
	32,40 MHz		47,0	55,0		
	40,15 MHz		43,0	59,0		
Adjacent sound carrier	40,40 MHz		45,0	56,0	—	dB
	41,40 MHz		43,0	55,0	—	dB
Lower sidelobe	25,00 ... 31,90 MHz		39,0	44,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz		34,0	40,0	—	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	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	56,0	—	dB
Group delay predistortion (reference frequency 38,90 MHz)		$\Delta\tau$				
	36,90 MHz		—	–90	—	ns
	34,47 MHz		—	30	—	ns
Impedance at 37,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	1,1‖24,8	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	1,6 ‖ 4,1	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

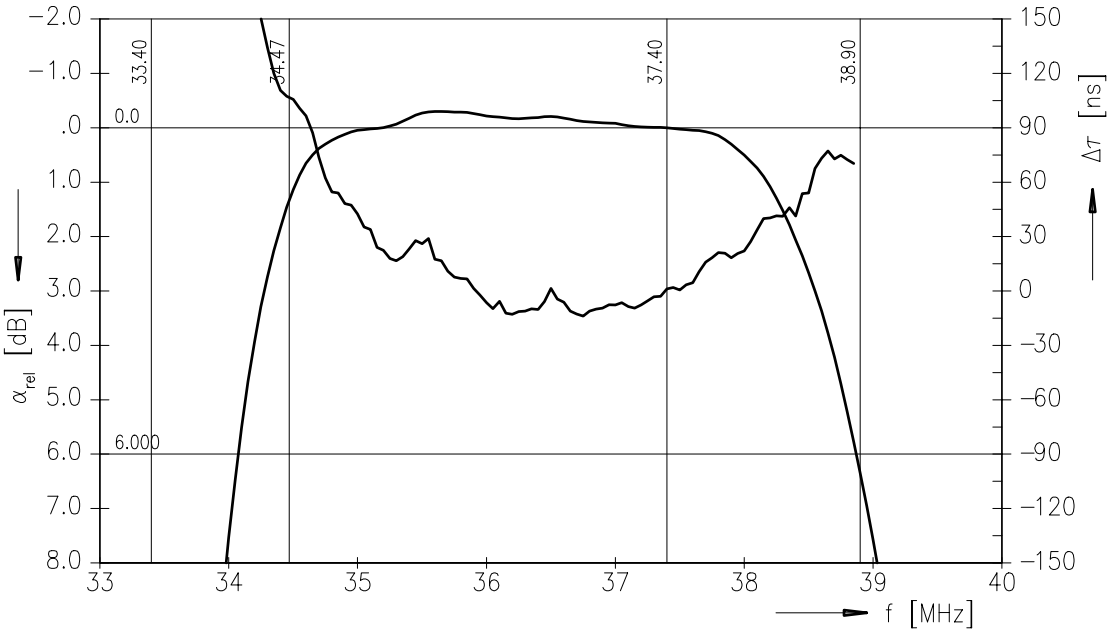
Characteristics of sound channel

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

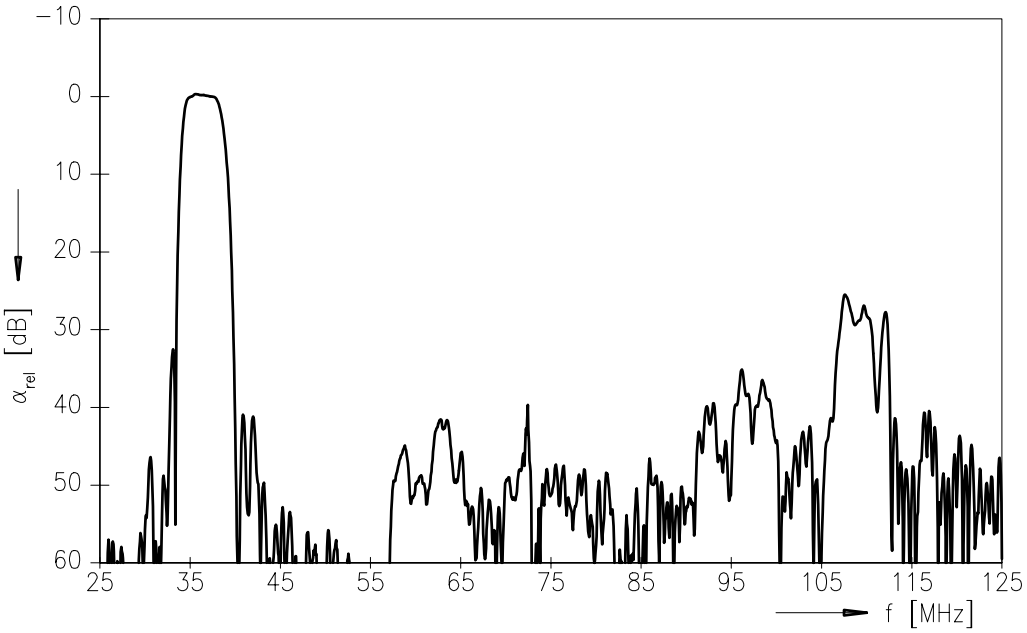
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		33,40 MHz		12,5	14,0	15,5	dB
Relative attenuation			α_{rel}				
Sound carrier		33,05 MHz		–1,5	–0,5	0,5	dB
		32,40 MHz		–1,4	–0,4	0,6	dB
Picture carrier		38,90 MHz		41,0	49,0	—	dB
Color carrier		34,47 MHz		28,0	34,0	—	dB
Adjacent picture carrier		30,90 MHz		36,0	43,0	—	dB
Adjacent sound carrier		40,40 MHz		44,0	52,0	—	dB
		41,40 MHz		46,0	56,0	—	dB
Lower sidelobe	25,00 ...	30,90 MHz		36,0	41,0	—	dB
Upper sidelobe	38,90 ...	45,00 MHz		41,0	48,0	—	dB
Impedance at 33,40 MHz Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	3,6 || 2,3	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

Frequency response of picture channel

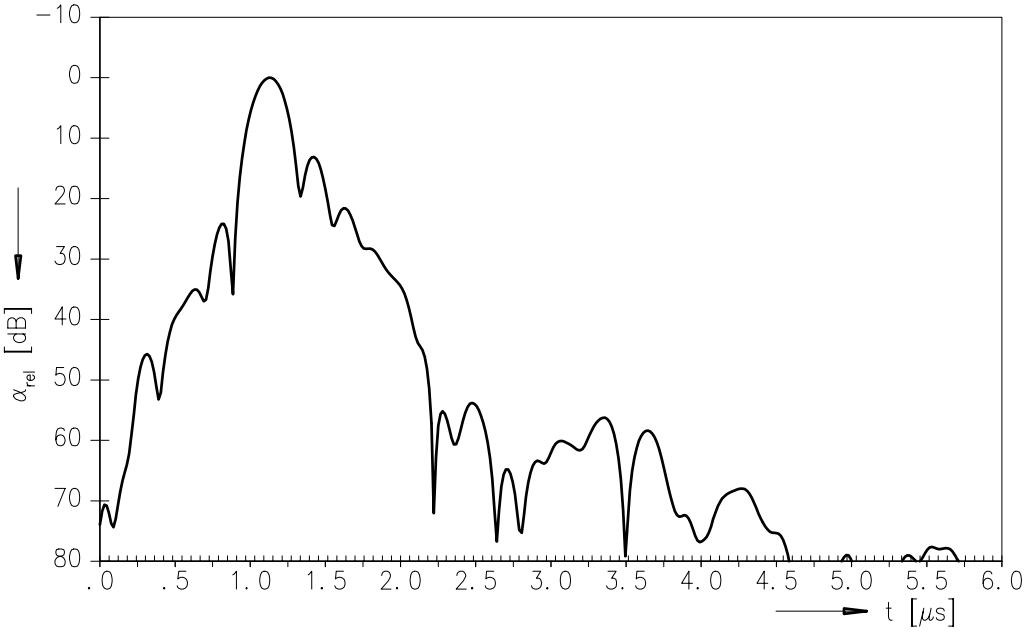




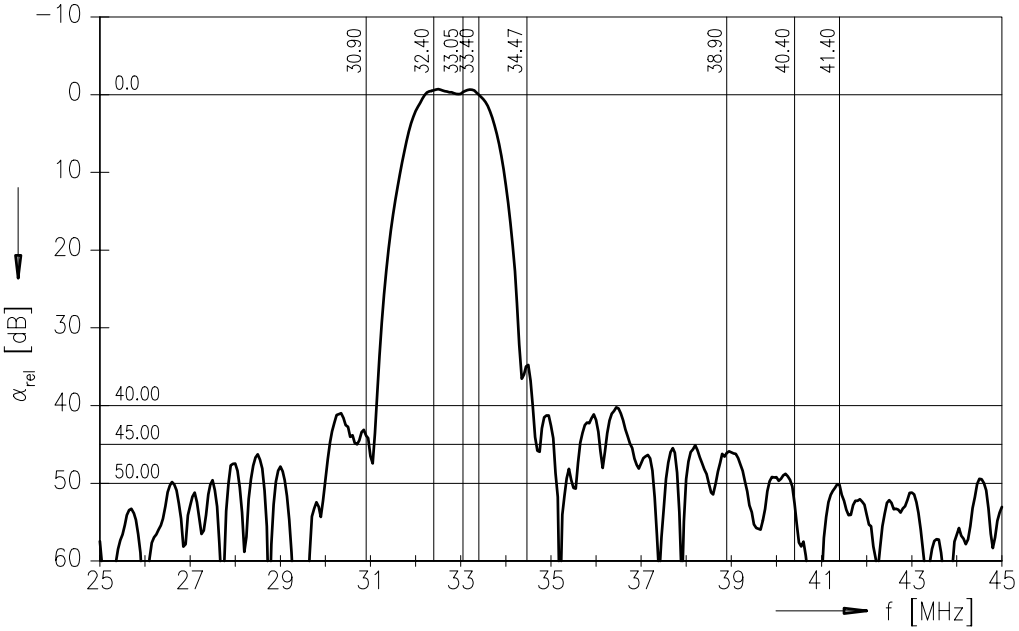
Frequency response of picture channel



Time domain response of picture channel



Frequency response of sound channel



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