EPCOS

SAW Components

Data Sheet G 3355 K

Data Sheet

Standard

- B/G

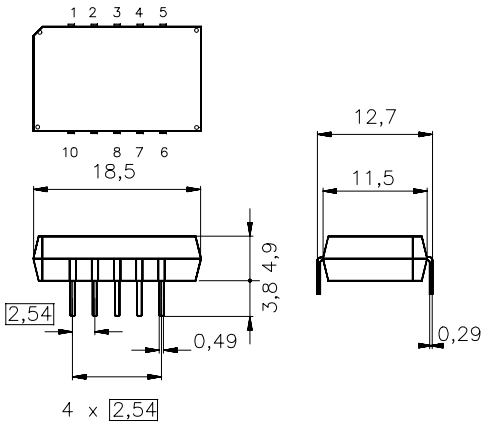
Features

- TV IF filter for quasi/split sound applications (separate picture and sound channel)
- Picture channel with Nyquist slope and sound suppression
- Group delay predistortion
- Sound channel with passband only for sound carriers at 33,40 MHz and 33,05 MHz (NICAM)
- Suitable for CENELEC EN 55020

Terminals

- Tinned CuFe alloy

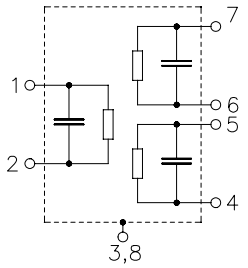
Plastic package **DIP10K**



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
G 3355 K	B39389-G3355-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

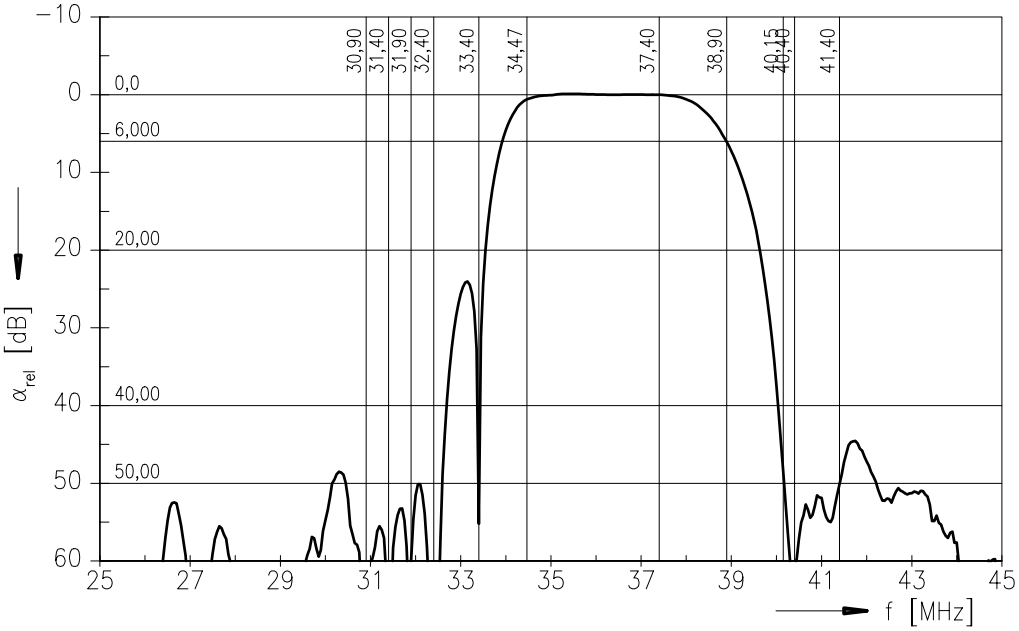
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		37,40 MHz		12,5	14,0	15,5	dB
Relative attenuation			α_{rel}				
Picture carrier		38,90 MHz		5,0	6,0	7,0	dB
Color carrier		34,47 MHz		–0,6	0,4	1,4	dB
Sound carrier		33,40 MHz		30,0	48,0	—	dB
Adjacent picture carrier		30,90 MHz		46,0	60,0	—	dB
		31,90 MHz		48,0	56,0	—	dB
		32,40 MHz		46,0	55,0	—	dB
		40,15 MHz		38,0	48,0	—	dB
Adjacent sound carrier		40,40 MHz		46,0	60,0	—	dB
		41,40 MHz		45,0	59,0	—	dB
Lower sidelobe	25,00 ...	31,90 MHz		40,0	46,0	—	dB
Upper sidelobe	40,40 ...	45,00 MHz		40,0	46,0	—	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)				—	56,0	—	dB
Group delay predistortion (reference frequency 38,90 MHz)			Δτ				
		36,30 MHz		—	–55	—	ns
		34,47 MHz		—	40	—	ns
Impedance at 37,40 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	1,0 ‖ 24,4	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	1,6 ‖ 3,9	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

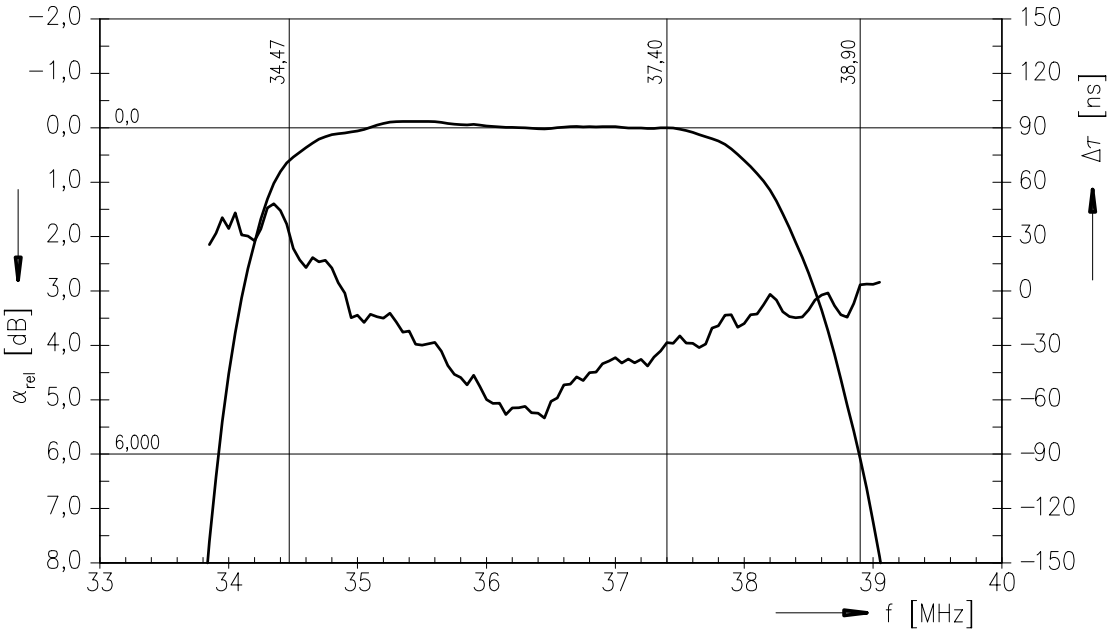
Characteristics of sound channel

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

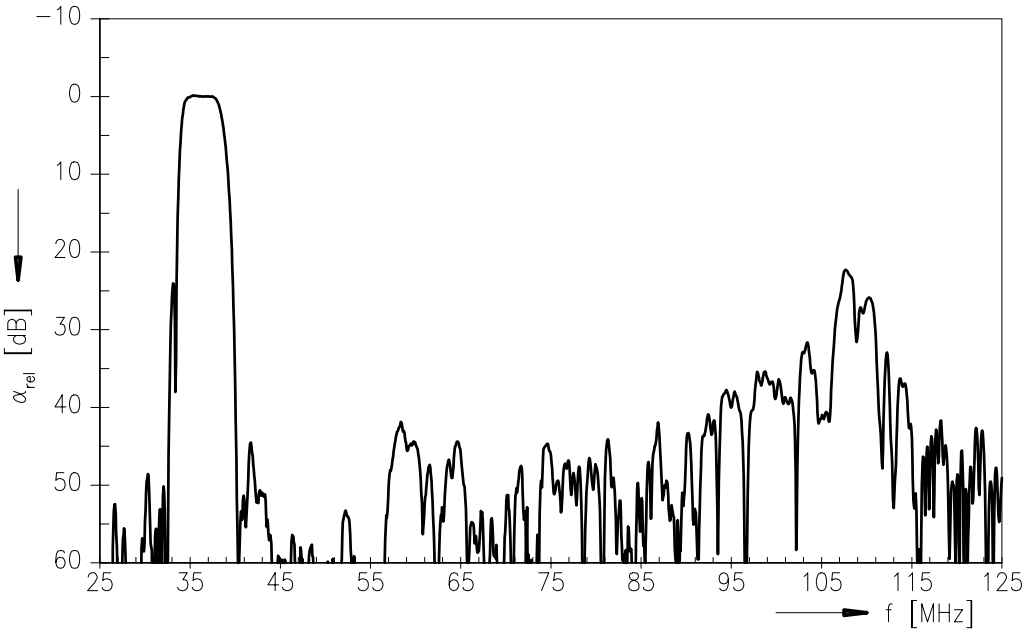
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		33,05 MHz		12,7	14,2	15,7	dB
Relative attenuation			α_{rel}				
Sound carrier		33,40 MHz		1,0	2,0	3,0	dB
Picture carrier		38,90 MHz		42,0	56,0	—	dB
Color carrier		34,47 MHz		28,0	35,0	—	dB
Adjacent picture carrier		30,90 MHz		30,0	37,0	—	dB
		31,90 MHz		32,0	41,0	—	dB
Adjacent sound carrier		40,40 MHz		42,0	53,0	—	dB
		41,40 MHz		42,0	54,0	—	dB
Lower sidelobe	25,00 ...	31,90 MHz		28,0	34,0	—	dB
Upper sidelobe	38,90 ...	45,00 MHz		38,0	46,0	—	dB
Impedance at 33,05 MHz Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	4,1 ‖ 2,6	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

Frequency response of picture channel

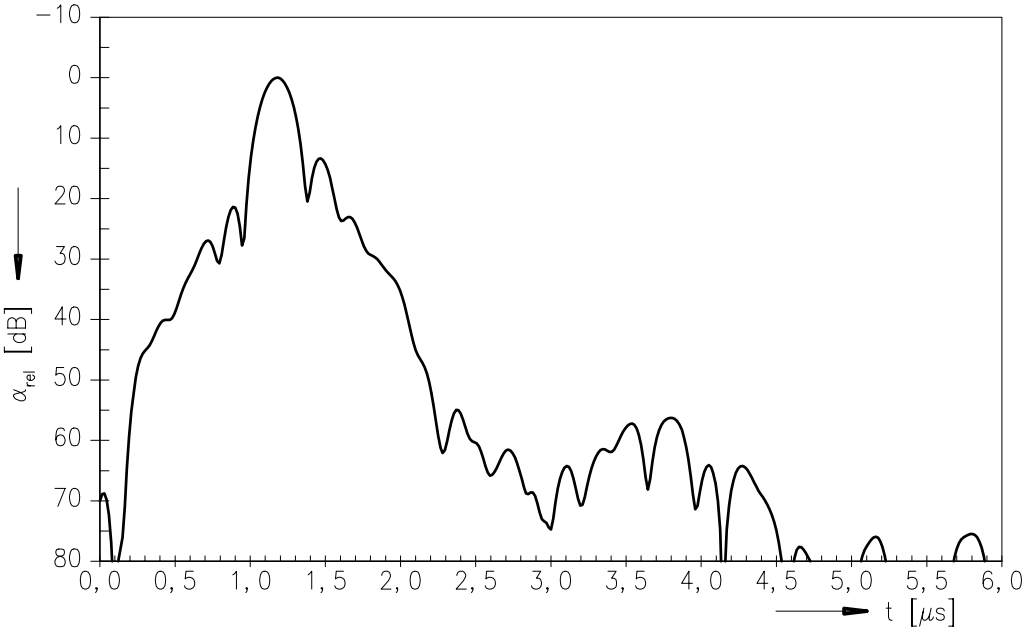




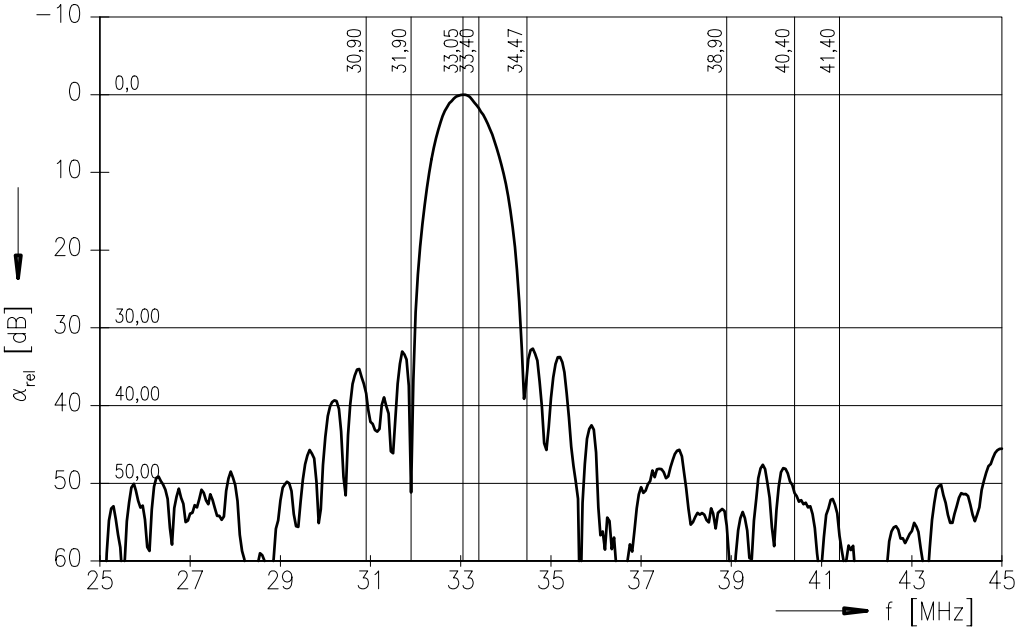
Frequency response of picture channel



Time domain response of picture channel



Frequency response of sound channel



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