SAW COMPONENTS

Series/Type: J3353K

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39389J3353K100	K3953M + K9353M	2008-01-18	2008-06-30	2008-09-30

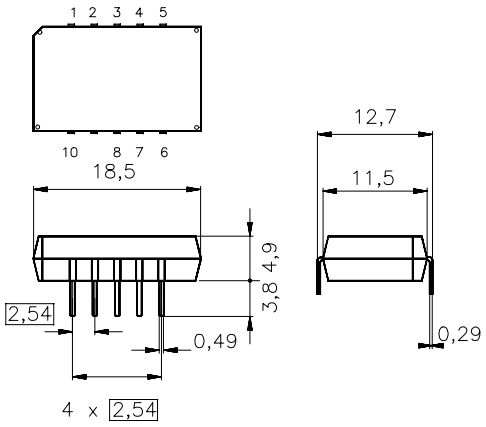
For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

Data Sheet

Standard

- I
- D/K

Plastic package **DIP10K**



Dimensions in mm, approx. weight 1,8 g

Features

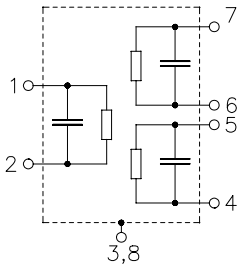
- TV IF filter for quasi/split sound applications (separate picture and sound channel)
- Picture channel with Nyquist slope and sound suppression
- Customized group delay predistortion
- Sound channel with passband for sound carriers at 32,90 MHz and 32,35 MHz (NICAM)
- Suitable for CENELEC EN 55020

Terminals

- Tinned CuFe alloy

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
J 3353 K	B39389-J3353-K100	C61157-A2-A3	F61074-V8068-Z000

Maximum ratings

Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–25/+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

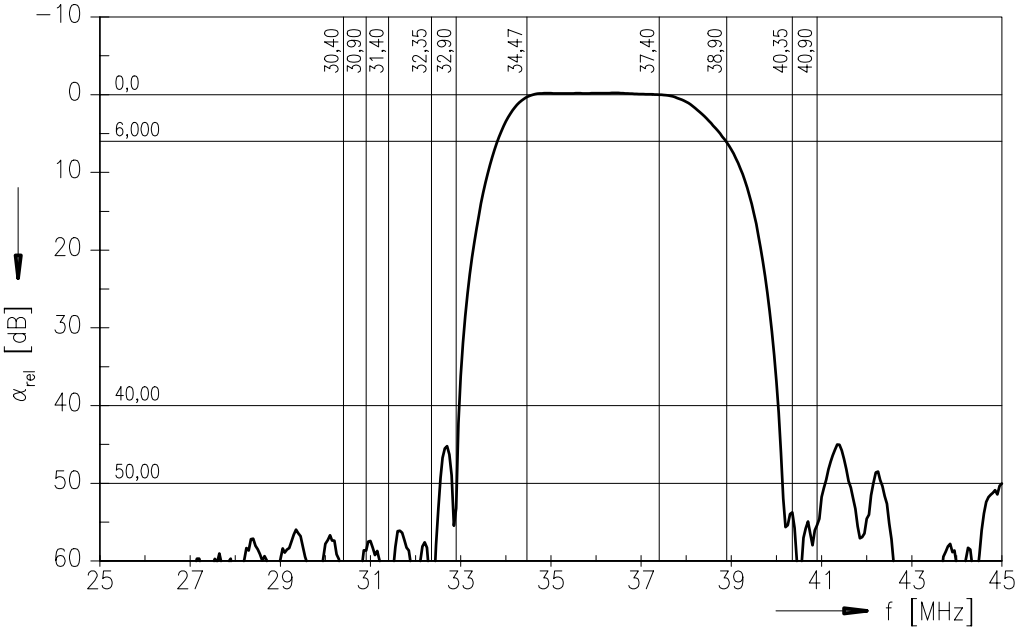
			min.	typ.	max.	
Insertion attenuation		α				
Reference level for the following data	37,40 MHz		12,9	14,4	15,9	dB
Relative attenuation		α_{rel}				
Picture carrier	38,90 MHz		5,0	6,0	7,0	dB
Color carrier	34,47 MHz		–0,6	0,4	1,4	dB
Sound carrier	32,90 MHz		40,0	52,0	—	dB
	32,35 MHz		44,0	56,0	—	dB
Adjacent picture carrier	30,90 MHz		50,0	62,0	—	dB
	30,40 MHz		48,0	60,0	—	dB
	31,40 MHz		48,0	60,0	—	dB
Adjacent sound carrier	40,90 MHz		45,0	55,0	—	dB
	40,35 MHz		43,0	53,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz		46,0	54,0	—	dB
Upper sidelobe	40,90 ... 45,00 MHz		39,0	45,0	—	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	55,0	—	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)		$\Delta\tau$				
	38,90 MHz		—	0	—	ns
	34,47 MHz		—	–50	—	ns
Impedance at 37,40 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	1,2 ‖ 24,0	—	kΩ || pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	2,5 ‖ 3,6	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	–72	—	ppm/K

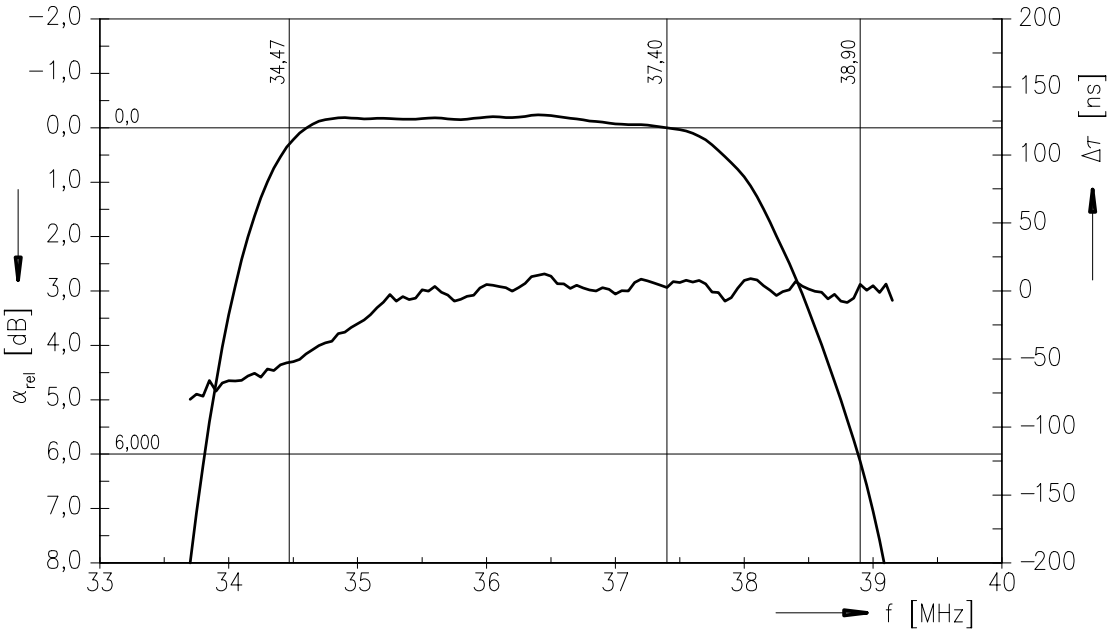
Characteristics of sound channel

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

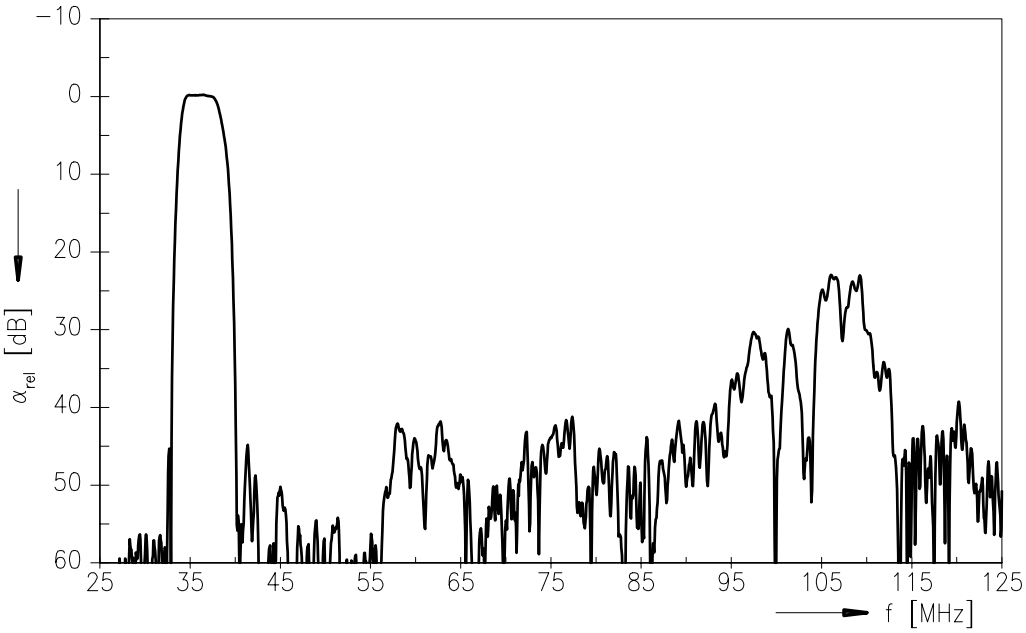
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data		32,35 MHz		10,4	11,9	13,4	dB
Relative attenuation			α_{rel}				
Sound carrier		32,90 MHz		–0,5	0,5	1,5	dB
		31,95 MHz		—	2,5	—	dB
Picture carrier		38,90 MHz		46,0	58,0	—	dB
Color carrier		34,47 MHz		33,0	47,0	—	dB
Adjacent picture carrier		30,90 MHz		40,0	51,0	—	dB
Adjacent sound carrier		40,90 MHz		48,0	59,0	—	dB
		40,35 MHz		46,0	55,0	—	dB
Lower sidelobe	25,00 ...	30,90 MHz		39,0	45,0	—	dB
Upper sidelobe	38,90 ...	45,00 MHz		44,0	50,0	—	dB
Impedance at 32,35 MHz Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	2,5 || 3,6	—	kΩ || pF
Temperature coefficient of frequency			TC_f	—	–72	—	ppm/K

Frequency response of picture channel

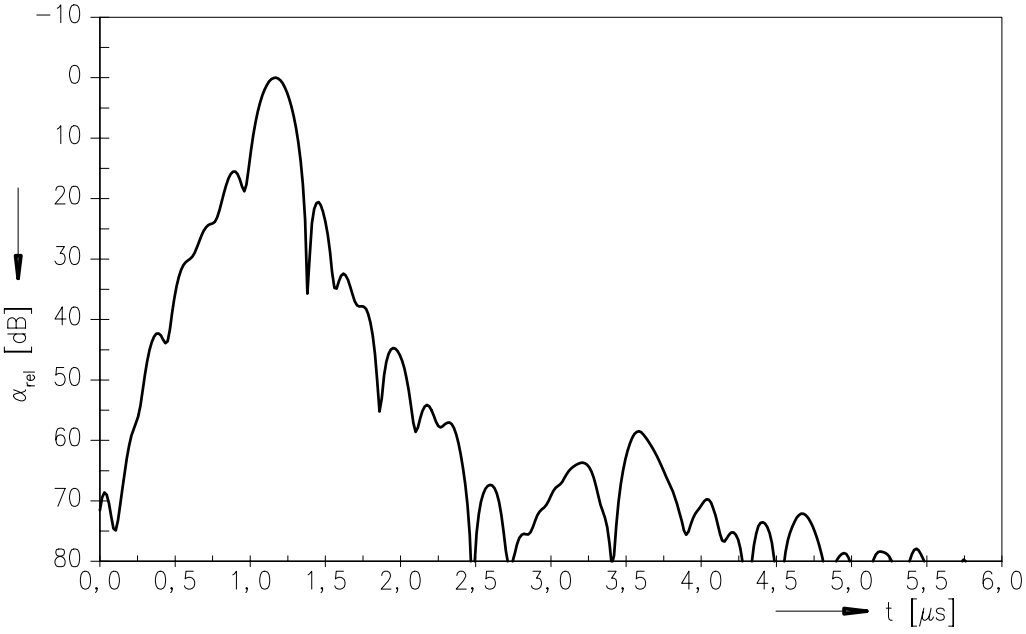




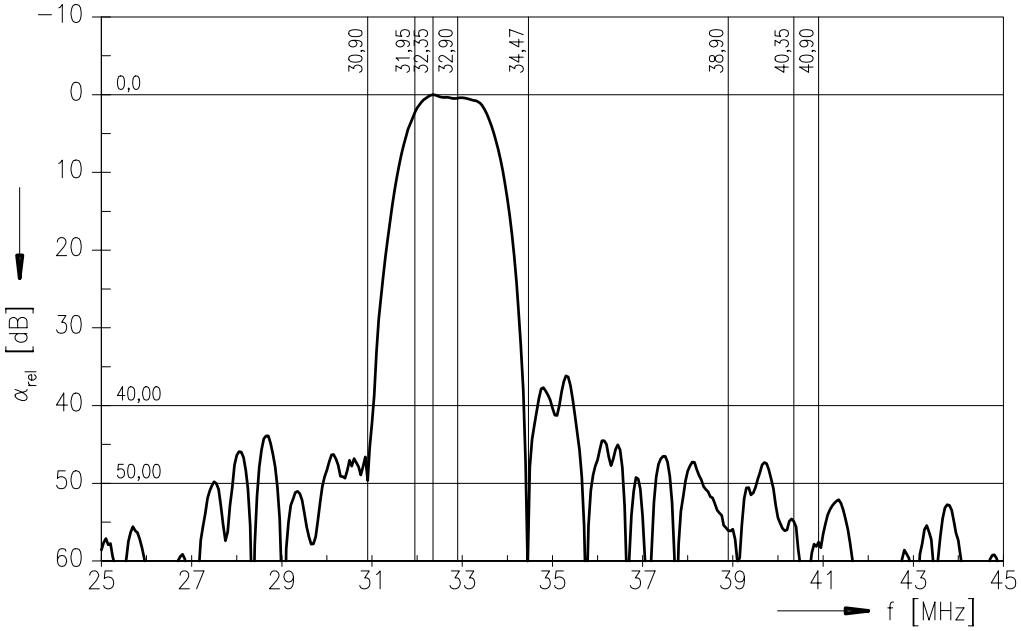
Frequency response of picture channel



Time domain response of picture channel



Frequency response of sound channel



Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW CE MM PD
P.O. Box 80 17 09, D-81617 München

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.
Terms of delivery and rights to change design reserved.

For questions on technology, prices and delivery please contact the sales offices of EPCOS AG or the international representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our sales offices.